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Turkish Journal of Vascular Surgery

UVECD® ULUSAL VASKÜLER VE ENDOVASKÜLER CERRAHİ DERNEĞİ

TURKISH SOCIETY of PHLEBOLOGY 1998

22st Congress of Turkish Society for Vascular and Endovascular Surgery

13th Congress of Turkish Society of Phlebology

"Strong Bonds, Common Goals in Vascular Surgery"

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SOLO event

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National Society of Vascular and Endovascular Surgery
Address: Gaziosmanpaşa Mah. Nene Hatun Cad. No: 56, 06700 Çankaya, Ankara, Türkiye
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6 NOVEMBER 2025, THURSDAY

ARTER SALONU (SALON 1)

13:30 - 15:30	**ARTER 7*7** **Oturum Başkanları:** Denyan Mansuroğlu, Mustafa Bilge Erdoğan, Mete Hıdıroğlu, Bülent Sarıtaş	
13:30 - 13:37	Multi-segmental Periferik Arter Hastalığında Sadece Semptomatik Segmentte Müdahale Yeterli mi Yoksa Tüm Lezyonlar Hedeflenmeli mi?	Volkan Burak Taban
13:37 - 13:44	Aortokluziv Hastalıkta Kaplı Stent mi yoksa Çıplak Stent mi?	Muhammed Bayram
13:44 - 13:51	Popliteal Arterdeki Kistik Adventisyal Hastalıkta Cerrahi Tedavi Alternatifi Var mı?	Hakkı Kürşat Çetin
13:51 - 13:58	Vasküler Travmada Periferik Arter Değerlendirilmesi ve Tedavisi Nasıl Olmalı?	Cemal Kemaloğlu
13:58 - 14:05	Aorto-iliak Bifurkasyo Hastalığında CERAB Tekniği mi Kissing Stent mi Tercih Edilmeli?	Fatma Akça
14:05 - 14:12	Ana Femoral Arter Tedavisinde Altın Standart Cerrahi mi?	Ayhan Müdüroğlu
14:12 - 14:19	Uzun Segment Femoro-popliteal Lezyonlarda DCB mi, Nitinol Stent mi yoksa Kombinasyon mu Tercih Edilmeli?	Kamil Boyacıoğlu
14:19 - 15:30	Tartışma	
15:00 - 16:00	**KAHVE MOLASI**	
16:00 - 18:00	**ARTERİOVENÖZ ERİŞİM 7*7** **Oturum Başkanları:** Harun Arbatlı, Özgür Dağ, Emir Cantürk, Onursal Buğra	
16:00 - 16:07	Zamanında Endovasküler Girişim Arterivenöz Greft Disfonksiyonunda Hayat Kurtarıcı Olabilir mi?	Mehmet Atay
16:07 - 16:14	''Dialysis Access Life Plan'' Nedir? Her Hastaya, Her Zaman AV Fistül mü?	Tamer Kehlibar
16:14 - 16:21	Multiple Stenozda Seri Balon Dilatasyonu Ne Kadar Sürdürürebilir, Limit Nerede?	Cemal Kocaaslan
16:21 - 16:28	Açık Cerrahiden Sonra Başarısız Fistüllerde Salvage İşlemleri Endovasküler Olarak mı Yapılmalı yoksa Yeniden AVF mi?	Ferit Kasımzade
16:28 - 16:35	Yüksek Akımlı AVF'de Kalp Yetmezliği Gelişirse Fistül Kapatılmalı mı yoksa Modifiye mi Edilmeli?	Tayfun Özdem
16:35 - 16:42	Mature Olmayan AVF'de İlk Müdahale Endovasküler mi Olmalı?	Fatma Tuğba İlal Mert
16:42 - 16:49	AVF içinde Gelişen Trombozda İlk Müdahale: Mekanik Trombektomi mi, Litik mi, Cerrahi mi?	Abdülkerim Özhan
16:49 - 18:00	Tartışma	

VEN SALONU (SALON 2)

13:30 - 15:30	**VEN 7*7** **Oturum Başkanları: Bora Farsak, Erdinç Eroğlu, Orhan Fındık**	
13:30 - 13:37	Anterior Safen Ven Ne Zaman tedavi Edilmeli?	Ali Bolat
13:37 - 13:44	Kanama Riski Yüksek Venöz Tromboemboli Hastasında Düşük Doz Lokal Tromboliz Protokolleri Yeterli mi?	Anıl Boğa
13:44 - 13:51	Stent Açıklığı Takibinde Hangi Modalite ve Hangi Sıklık? USG mi CT-MR Venografi mi yoksa Semptom Bazlı Takip mi?	Mehmet Ali Yeşiltaş
13:51 - 13:58	Hamilelikte Inguinal Hernileri Taklit Eden Round Ligamet Varislerinde Renkli Doplerin Önemi Nedir?	Işıl Dayı
13:58 - 14:05	Kanser İlişkili DVT Tedavisinde Eskiler Yeniden mi Moda Oluyor? CATTR	Demir Çetintaş
14:05 - 14:12	Post-trombotik Sendrom Gelişmiş Hastada Derin Sistem Stentleme Fonksiyonel İyileşme Sağlar mı yoksa Geç mi Kalındı?	Ufuk Sayar
14:12 - 14:19	Yüzeyel Ven Trombozu Safeno-femoral Bileşkeye 3cm'den daha Yakınsa Cerrahi/ Ablasyon Planlanmalı mı?	Kemal Eşref Erdoğan
14:19 - 15:30	Tartışma	
15:30 - 16:00	**KAHVE MOLASI**	
16:00 - 18:00	**AORT** **Oturum Başkanları: Birol Yamak, Mehmet Ali Kaygın, Fuat Büyükbayrak, Şevket Baran Uğurlu**	
16:00 - 16:07	Aortoiliak Arter Anevrizmalarında İİA Korunması Seçenekler?	Mehmet Emir Erol
16:07 - 16:14	Distal Re-entry'yi Kapatmalı mıyız yoksa Açık mı Bırakmalıyız? Remodeling'i Etkiler mi?	Aygül Melike Şenkal Zobu
16:14 - 16:21	Abdominal Aort Anevrizması POST EVAR İşlemi Sonrası SAC Pogresyonunda Takip ve Girişimler?	Eren Karpuzoğlu
16:21 - 16:28	Endoleak Tip 1: Balon Redilatasyon Yeterli mi, yoksa Cuff/Stent Greft Eklenmeli mi?	Serkan Yıldırım
16:28 - 16:35	Geniş Kapsamlı (thorakoabdominal) TEVAR'da Sol Subklavyen Arter Kapatılmalı mı, Re-implantasyon Şart mı?	Muhammed Fethi Sağlam
16:35 - 16:42	Aksiller ve Brakiyal Girişimlerde Perkütanöz mü Açık Yaklaşım daha Sağlıklı?	Ahmet Kayan
16:42 - 16:49	İnfrarenal AAA'da Kısa Boyun Durumunda Fenestre EVAR mı Yoksa Açık Cerrahi mi?	Vedat Bakuy
16:49 - 18:00	Tartışma	

HEMŞİRELİK SALONU (SALON 3)

13:30 - 15:30	**DOPPLER KURSU** **Kurs Başkanları:** Suat Doğancı, Irwin Toonder	
15:30 - 16:00	**KAHVE MOLASI**	

SALON 4

13:30 - 15:30	**KTEPH-1** **Oturum Başkanları: Ahmet Rüçhan Akar, Bahadır Gültekin, Tahir Yağdı**	
13:30 - 13:50	KTEPH ile ilgili Güncel Kılavuzlar, Değişiklikler Neler?	Özlem Erçen Diken
13:50 - 14:10	PE'den Kronik Tromboembolik Hastalık, Kronik Tromboembolik Hastalıktan KTEPH, Aynı Hastalık Farklı Fazlar mı?	Nesrin Öcal (ONLINE)
14:10 - 14:30	KTEPH Medikal Tedavi	Cihangir Kaymaz
14:30 - 14:50	KTEPH Cerrahi Tedavisi	Murat Biçer
14:50 - 15:10	KTEPH Zorlu Olgular ve Ne Zaman Opere Etmemeliyiz?	Ümit Kervan
15:10 - 15:30	Tartışma	
15:30 - 16:00	**KAHVE MOLASI**	
16:00 - 18:00	**AKUT PE** **Oturum Başkanları: Ali Gürbüz, Nesrin Öcal (ONLİNE), Ayşegül Karalezli, Levent Yazıcıoğlu**	
16:00 - 16:17	PERT (Pulmoner Emboli Response Team) Geliştirmedeki Zorluklar ve Kurulum Sırasında Alınacak Dersler	Cihangir Kaymaz
16:17 - 16:34	Akut PE'de Trombektominin Cerrahi Gelişimi	Hakkı Tankut Akay
16:34 - 16:51	PE Sistemik Trombolitik Tedavi Full Doz mu, Yarı Doz mu?	Nesrin Öcal (ONLINE)
16:51 - 17:08	Araştırmadan Pratiğe PE Tedavisinde Pulmoner Embolinin Ultrason Aracılı Tromboliz?	Mustafa Şırlak
17:08 - 17:25	Pediatrik Yaşta Pulmoner Emboli Hastasını Nasıl Tedavi Ediyorum?	Nur Dikmen
17:25 - 17:42	Pulmoner Embolide ECMO Yönetimi	Boğaçhan Akkaya
17:42 - 18:00	Tartışma	

6 NOVEMBER 2025, THURSDAY

SALON 5

13:30 - 15:30	**SÖZLÜ BİLDİRİ OTURUMU-1** **Oturum Başkanları:** İlhan Gölbaşı, Ahmet Kağan As, Kaan Kaya	
	1104 - Our Experiences With Carotid Endarterectomy With and Without Shunt	Gizem Duygu Kilicoglu
	1215 - Mid-term Outcomes of Endovascular Repair of Visceral Artery Aneurysms	İlhan Özgöl
	1380 - Single-center Surgical Outcomes of Arteriovenous Fistula Aneurysms in Patients with Chronic Renal Failure	Tarık Mehmetoğlu
	1393 - Total endovascular aortic arch reconstruction with in situ fenestrations and temporary carotid–carotid bypass in a patient with prior ascending aortic graft: a case report	Sefer Kaya
	1643 - Patients in the Gray Zone of Carotid Artery Stenosis Management	Abdurrahman Demirel
	1653 - Endovascular Treatment Approaches and Clinical Follow-up in May-Thurner Syndrome	Abdullah Doğan
	1745 - Aterectomy	Ali Aghayev
	1783 - Retrograde Popliteal Access for Endovascular Treatment of Iliac and Femoral Arterial Lesions	Güler Sezen Alptekin
	1846 - Relationship Between the Walking Impairment Questionnaire and Ankle–Brachial Index in Patients With Peripheral Arterial Disease	Emre Pınar
	1931 - Our Central Venous Port Catheter Applications	Hakan Köksal
15:00 - 16:00	**KAHVE MOLASI**	
16:00 - 18:00	**SÖZLÜ BİLDİRİ OTURUMU-2** **Oturum Başkanları:** Özer Kandemir, Ali Ümit Yener, Seyhan Babaroğlu	
	2049 - Co2 Angiography	Ali Aghayev
	2168 - Clinical Outcomes and Changes in Quality of Life Following Angiographic Embolization in the Treatment of Pelvic Congestion Syndrome	Sefer Kaya
	2422 - Effect of Postoperative Hydration Status on Early Patency of Arteriovenous Fistulas: A Prospective Observational Study	Nazenin Durak Kasap
	2490 - Role of Cardiovascular Surgery in the Management of Femoral Artery Pseudoaneurysms Following Interventional Procedures: A Single-Center Experience	Hüseyin Erdinç
	2545 - The Impact of Intraoperative Fogarty Balloon Dilation on Arteriovenous Fistula (AVF) Success: Clinical and Functional Outcomes	Güler Gülsen Ersoy
	2619 - 4-Year Long Outcome With Drug Coated Balloons For Sfa Lesions In Patients With Cli: Comparison With Conventional Bypass Surgery	Onur Selçuk Göksel
	2652 - Endovascular Treatment in Pelvic Congestion Syndrome: Visual Analog Scale Outcomes and the Prognostic Role of Multiparity	Büşra Temel Yüksel
	2681 - Does Enhanced Recovery After Surgery (ERAS) Protocol Following Open Abdominal Aortic Repair Affect the Risk of Re-admission?	Barış Gürel
	2761 - Beyond the Wavelength: Post-EVLA Pain Is Similar Between 980 nm and 1470 nm Lasers	Ahmet Okyay
	2821 - Optimal Vascular Access Based on Ejection Fraction and Fistula Location	Ahmet Barış Durukan

SALON 6

13:30 - 15:30	**SÖZLÜ BİLDİRİ OTURUMU-3** **Oturum Başkanları:** Salih Özçobanoğlu, Ahmet Hulusi Arslan, Cengiz Çolak	
	2835 - Endovascular Treatment in Femoropopliteal Artery Diseases	Serkan Ünlü
	2951 - The Ole of Plaque Morphology in Postoperative Complications After Carotid Endarterectomy: A Retrospective Analysis	Büşra Temel Yüksel
	2957 - Prevalence of Carotid Stenosis in Heart Valve Surgery and the Role of Routine Screening	Osman Fehmi Beyazal
	3021 - Evaluation of Quality of Life and Psychosocial Factors in Haemodialysis Patients: A Medical Student-Led Observational Survey Study	İlayda Danışmaz
	3101 - Surgical and Interventional Treatment Results in Late Thrombosis of Autogenous Arteriovenous Fistulas	Zerrin Pulathan
	3152 - Outcomes of Carotid Endarterectomy in Symptomatic Octogenerians	Çağla Canbay Sarılar
	3213 - Surgical and Endovascular Approaches in Peripheral Artery Dissections: A Single-Center Clinical Experience	Sefer Kaya
	3353 - Patency and Infection Outcomes of Arteriovenous Grafts in Hemodialysis Patients: A Single-Center Experience with Balloon Angioplasty for Salvage	Izatullah Jalalzai
	3443 - Surgical Approach in Vascular Ring Anomalies: Clinical Presentation and Long-Term Outcomes from a Single-Center Experience of 41 Patients	Nigar Safarli
	3524 - Endovascular Treatment of Heavily Calcified Femoropopliteal Lesions Using Uprooter Atherectomy Catheter with or without Angioplasty: Technical Description and 12-Month Results	Uğur Çetingök
15:30 - 16:00	**KAHVE MOLASI**	
16:00 - 18:00	**SÖZLÜ BİLDİRİ OTURUMU-4** **Oturum Başkanları:** Cengiz Türkay, Nurkay Katrancıoğlu, Umut Serhat Sanrı	
	3525 - Evaluation of Pulse Wave Analysis in Early Assessment of Microvascular Perfusion Following Vascular Surgery	Mustafa Selçuk Atasoy
	3579 - The Relationship Between AV Fistula Patency and Distal Vein Diameter	Bedirhan Buğra Bayıcı
	3596 - Open Repair of Popliteal Aneurysms: A Case Series	Salih Anıl Boğa
	3608 - Role of the Prognostic Nutritional Index in the Assessment of Symptomatic Carotid Stenosis	Mert Arslangilay
	3639 - Carotid endarterectomy in the octogenarian with contralateral disease: A single center experience	Çağla Canbay Sarılar
	3668 - Hybrid Surgical and Intraoperative Endovascular Strategies in Critical Limb-Threatening Ischemia without Suitable Percutaneous Access	Ali Demiray
	3756 - Vascular Tumors A deductive differential diagnosis	Halis Yılmaz
	3829 - The Effect of Atherectomy Before Balloon Angioplasty on Patency Rates in Endovascular Treatment of Heavily Calcified Peripheral Arterial Lesions	Uğur Çetingök
	3954 - In-Vivo Antioxidant Effects of Emodin on Ischemia-Reperfusion Injury of Rat's Skeletal Muscle	Dilara Yiğit
	3958 - Permanent Hemodialysis Catheters: Preference or Necessity in Chronic Renal Failure?	Demir Çetintaş
	5660	Seval Tobakçal

SALON 7

13:30 - 15:30	**ANASTOMOZ KURSU - J&J** **Kurs Başkanları:** Şeref Alp Küçüker, Nevzat Erdil **Kurs Eğitmeni:** Serdar Bademm	

07 NOVEMBER 2025, FRIDAY

ARTER SALONU (SALON 1)

08:15 - 09:00	**KONGRE AÇILIŞ KONUŞMALARI** **Konuşmacılar** **UVCD Başkanı** Prof. Dr. Nevzat Erdil **Fleboloji Dernek Başkanı** Prof. Dr. Erdal Aslım **UVCD Genel Sekreter** Doç. Dr. Emrah Uğuz **Onur Konuşmacı** Prof. Dr. Ufuk Demirkılıç	
09:00 - 10:15	**AORT OTURUMU** **Oturum Başkanları:** Serap Aka, Ömer Bayezid, Gökhan İpek, Hakkı Tankut Akay	
09:00 - 09:10	EVAR Prosedürü Sonrası Geç Dönem Komplikasyonların Yönetimi (Management of Late Complications After EVAR Procedure)	Laszlo Papp
09:10 - 09:20	Elektrik Septotomisindeki Mevcut Açmazlar: Dost mu Düşman mı? (Current Dilemmas in Electrical Septotomy: Friend or Foe?)	Mike Wyatt
09:20 - 09:30	EVAR Sırasında Viseral/Renal Arter Hastalıklarının Optimal Yönetimi İçin Kılavuzlar – Bildiklerimiz Neler? (Guidelines for Optimal Management of Visceral/Renal Artery Disease During EVAR – What Do We Know?)	Mike Wyatt
09:30 - 09:40	Diseksiyon Sonrası Torakoabdominal Aort Anevrizmalarının Endovasküler Tedavisinde Güncel Sonuçlar: Kendi Deneyimimiz ve Literatür İncelemesi (Endovascular Treatment of Thoracoabdominal Aortic Aneurysms Following Dissection: Our Experience and Literature Review)	Mauro Gargiulo (ONLİNE)
09:40 - 09:50	Fenestreli ve Dallanmış Endogreftler ile Ascendenden İnfrarenal Aortaya veya İliak Arterlere Kadar Uzanan Total Endovasküler Aort Onarımı (Total Endovascular Aortic Repair with Fenestrated and Branched Endografts Extending from the Ascending to the Infrarenal Aorta or Iliac Arteries)	Mauro Gargiulo (ONLINE)
09:50 - 10:00	Multidisipliner Ekip Toplantısı Kararları ile Uygulanan Gerçek İşlem Arasındaki Uyuşmazlıklar ve Bunun Sonuçları (Discrepancies Between Multidisciplinary Team Decisions and the Actual Procedures Performed, and Their Consequences)	Laszlo Papp
10:00 - 10:15	Tartışma	
10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 12:00	**PERİFERİK ARTER OTURUMU** **Oturum Başkanları:** Niyazi Görmüş, Mustafa Yılmaz, Haydar Yaşa, Emrah Uğuz	
10:45 - 10:55	Reküren Poplitel Entrapment Sendromu Tedavisi (Treatment of Recurrent Popliteal Entrapment Syndrome)	Thomas Hoelzenbein
10:55 - 11:05	Majör Damar Yaralanmaları: Komplikasyonlar ve Sonuçlar, TB15:B1 Bizim Tedavi Yaklaşımımız Major Vascular Injuries: Complications and Outcomes, Basic Challenges, Our Treatment Approach	Yuliia Nahaliuk
11:05 - 11:15	Torasik Outlet Cerrahisi Nasıl Yapılmamalı? How Thoracic Outlet Surgery Should Not Be Performed?	Mike Wyatt
11:15 - 11:25	Periferik Arter Hastalıkları ve Diyabet Yönetimi	İbrahim Şahin
11:25 - 11:35	Klaudikasyo Olgularında Antikoagülan Tedavinin Yükselişi	Yüksel Dereli
11:35 - 11:45	Klaudikasyo Olgularında Egzersiz Tedavisinin Yönetimi	Burak Duman
11:45 - 12:00	Tartışma	
12:00 - 12:45	**UYDU SEMPOZYUMU - PRIZMA GRUP MEDİKAL** **AORT ANEVRİZMALARI VE PERİFERİK ARTER HASTALIĞININ TEDAVİSİNDE YENİLİKÇİ ENDOVASKÜLER ÇÖZÜMLER** **Oturum Başkanı:** A. Kürşat Bozkurt	
12:00 - 12:15	Endovasküler Aort Cerrahisinde Ülkemizde Yeni Bir Soluk: Percutek®	İlker İnce
12:15 - 12:22	Wingman: İğneli Total Oklüzyon Geçiş Kateteri ile Etkin Rekanalizasyon	Selim Aydın
12:22 - 12:29	Spur: İnfrapopliteal Lezyonlarda Geri Alınabilir Scaffold Sistemi	Selim Aydın
12:29 - 12:35	ShapeMemory: İmpede Şekil Hafızalı Polimer ile Embolizasyon Alanında Güncel Teknoloji	Ali Aycan Kavala
12:35 - 12:45	Tartışma	
12:45 - 13:30	**Yapay Zeka Çağında Kalp Atışı** **Oturum Başkanları:** Adil Polat, Emrah Uğuz **Konuşmacı:** Buket Aksu	
13:30 - 14:15	**ÖĞLE YEMEĞİ**	
14:15 - 15:30	**ANEVRİZMA OTURUMU** **Oturum Başkanları:** Ahmet Sarıtaş, Kaan Kirali, Hakan Posacıoğlu	
14:15 - 14:25	EVAR VS Açık Cerrahi Seçim Kriterleri / Ülkemiz Gerçekleri	Mustafa Akbulut
14:25 - 14:35	Arkus Aorta Endovasküler ve Hibrit Yöntemler	Uğursay Kızıltepe
14:35 - 14:45	PMSG ile FEVAR/TEVAR Uygulamaları	İlker İnce
14:45 - 14:55	EVAR'da Greft Seçiminde Neler Yapıyoruz?	Ali Baran Budak
14:55 - 15:05	Aortoiliak Anevrizmalarda Endovasküler Çözümler	Ahmet Dolapoğlu
15:05 - 15:15	Klasikten Geleceğe: EVAR Tedavisinde Dönüşüm, Zorluklar ve Fırsatlar	Ertekin Utku Ünal
15:15 - 15:30	Tartışma	
15:30 - 16:00	**KAHVE MOLASI**	
16:00 - 16:45	**İNVAMED'İN BİLİMSEL KATKILARIYLA-UYDU SEMPOZYUMU** **VENÖZ HASTALIKLARDA GÜNCEL TEDAVİ YAKLAŞIMLARI** **Oturum Başkanları:** A. Kürşat Bozkurt, İbrahim Erdinç	
16:05 - 16:10	Termal Olmayan Endovenöz Ablasyon	Sinem Yiğit Uğur
16:10 - 16:15	Damar İçinde Sessiz Savaş: Dvt Ve Modern Tedavi Stratejileri	Orhan Güngör
16:15 - 16:20	Pelvik Konjesyon Sendromu : Güncel Tedavi Yöntemlerinin Geleneksel Donanımlarla Uygulanması	İbrahim Erdinç
16:20 - 16:25	Pelvik Konjesyon Sendromunda Radyolojik Algoritma Ve Doğru Hasta Seçimi	Serhat Akış
16:25 - 16:30	Endovasküler Tedavide Güncel Yaklaşımlar Ve Yenilikçi Embolizasyon Teknikleri	Mete Burak Özdemir
16:30 - 16:35	Pelvik Konjesyon Sendromunda Tedavi Yaklaşımları	Fatma Tuğba İlal Mert
16:43 - 16:40	Overian Ven Yetmezliginde Embolizasyon Stratejileri	Mustafa Bildiler
16:40 - 16:45	Varikosel Hastalıklarında Girişimsel Tedavi Metodları	Hacı Eskici
16:45 - 18:00	**DİSEKSİYON OTURUMU** **Oturum Başkanları:** Cevdet Uğur Koçoğulları, Fuat Bilgen, Cem Alhan, Ramil Aliyev	
16:45 - 16:55	Zone 0'da TEVAR: Total Endovasküler Çözümler	Evren Özçınar
16:55 - 17:05	Komplike TBAD'da Malperfüzyon Sendromlarında Yaklaşım	Kaptanı Derya Tayfur
17:05 - 17:15	Paralel Greft Teknikleri ile Aortik Endovasküler Tedavi	Emre Kaymakçı
17:15 - 17:25	Aort Diseksiyonlarında Bare Metal Stentlerin Yeri	Süleyman Yazıcı
17:25 - 17:35	PAU /IMH'da Ne Zaman Endovasküler Tedavi Yapılmalı?	Ömer Tanyeli
17:35 - 17:45	Tartışma	

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VEN SALONU (SALON 2)

09:00 - 10:15	**ESTETİK FLEBOLOJİ OTURUMU** **Oturum Başkanları:** Ufuk Demirkılıç, Emrah Oğuz, Aybanu Gökçen, Aslıhan Küçüker	
09:00 - 09:10	Estetik Flebolojide Yeni Bir Tedavi: HIFU	Gökhan Erol
09:10 - 09:20	C1 Telenjiektazilerde Transkutan Lazer Tedavisinde En Optimum Tercihler Ne Olmalı?	Dilek Erer
09:20 - 09:30	CLACS: Ağrısız Güzellik mi, Abartılmış Etki mi?	Aybanu Gökçen
09:30 - 09:40	Total EVLA: Kime Nasıl Yapılır?	İlker Kiriş
09:40 - 09:50	Skleroterapi Sonrası Cilt Lekesinden ve Telenjiektazi Matlaşmadan ve Kaçınmak için Neler Yapmalıyız?	İlknur Cihan
09:50 - 10:00	CLACS İpuçlarımız Neler Öğrendik ve Nasıl Yapıyoruz?	Hayri Fahri Atlı
10:00 - 10:15	Tartışma	
10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 12:00	**YÜZEYEL VEN OTURUMU** **Oturum Başkanları:** A. Kürşat Bozkurt, Münacettin Ceviz, Sadettin Dernek	
10:45 - 10:55	Varis Tedavisinde Açık Cerrahinin Hâlâ Yeri Var mı? (Is There Still A Place for OPEN Surgery in Varicose Veins?)	Armando Mansilha (ONLİNE)
10:55 - 11:05	Sessiz Perforanlar Gürültülü Semptomlar: C5-C6 Olgularda Asıl Suçluyu Kaçırıyor muyuz?	Fatih İslamoğlu
11:05 - 11:15	Minimal İnvazif Ama Maksimum Komplikasyon mu? Endovenöz Ablasyon Tedavilerde Beklenmeyenler	Okan Coşkun
11:15 - 11:25	C1 ve C2 Varis Tedavisinde Köpük Kalitesi Fark Ediyor mu?	A. Kürşat Bozkurt
11:25 - 11:35	Miniflebektomi'nin Hala Yeri Var mı?	Rukiye Derin Atabey
11:35 - 11:45	EVLT Komplikasyonlarından Nasıl Kaçınılır?	Aslıhan Küçüker
11:45 - 11:55	Ablasyon mu, Yapıştırıcı mı, Köpük mü, Bistüri mi: İnatçı Perforana Ne Yapmalı?	Recep Berat Çiçek
11:55 - 12:00	Tartışma	
12:00 - 12:45	**UYDU SEMPOZYUMU - SANTA FARMA** **KRONİK VENÖZ YETERSİZLİK TEDAVİSİNDE KALSİYUM DOBESİLAT** **Oturum Başkanı:** Erdal Aslım	
12:00 - 12:20	Tanıdan Tedaviye, Kılavuzlar Eşliğinde Kronik Venöz Yetersizlik	Mustafa Şırlak
12:20 - 12:40	KVY'nin Medikal Tedavisinde Kalsiyum Dobesilat	Mehmet Atay
12:40 - 12:45	Tartışma	
13:30 - 14:15	**ÖĞLE YEMEĞİ**	
14:15 - 15:30	**VASKÜLER TRAVMA OTURUMU** **Oturum Başkanları:** Kubilay Karabacak, Çağdaş Baran, Öcal Berkan, Tuğra Gençpınar	
14:15 - 14:27	Yüksek Enerjili Yaralanmalar	Murat Kadan
14:27 - 14:39	İyatrojenik Vasküler Yaralanmalar	Asım Çağrı Günaydın
14:39 - 14:51	Abdominal ve Retroperitoneal Yaralanmalarda Yaklaşım	Barış Akça
14:51 - 15:03	Penetran Travma Sonrası İskemik Extremite Yönetimi	Yusuf Kuserli
15:03 - 15:15	Baş Boyun Travmalarında Yaklaşım	Zeki Temiztürk
15:15 - 15:30	Tartışma	
15:30 - 16:00	**KAHVE MOLASI**	
16:00 - 16:45	**UYDU SEMPOZYUMU 2 - ATABAY İLAÇ** **Kronik Venöz Hastalıkta Yeni ve Yerli Güç: NEOVEN** **Oturum Başkanı:** Tanzer Çalkavur **Konuşmacılar:** Tanzer Çalkavur, Ali Aycan Kavala	
16:45 - 18:00	**LENFATİK HASTALIKLAR OTURUMU** **Oturum Başkanları:** Yiğit Akçalı, Hüseyin Okutan, Haşmet Bardakçı, Mine Demirbaş	
16:45 - 16:55	Lenfödem ve Lipödem Nedir? Gerçek Bir Ödem midir? Ayırıcı Tanı Yaklaşımları (Online)	Pınar Borman
16:55 - 17:05	Lipödemde ESWT'nin Yeri	Suat Doğancı, A. Kürşat Bozkurt
17:05 - 17:15	Lenfödem ve Lipödemde Fizyoterapinin Rolü	İlke Keser
17:15 - 17:25	Lenfödem Cerrahisinde Lenfotikovenöz Anastomoz	Deniz Çevirme (online)
17:25 - 17:35	Dolaşım Desteğinde Aromaterapinin Rolü: Lipoödem, Huzursuz Bacak, Varis	Hülya Kayhan
17:35 - 17:50	Vasküler Anomaliler: Klinik, Tanı ve Prognoz	Yiğit Akçalı
17:50 - 18:00	Tartışma	

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HEMŞİRELİK SALONU (SALON 3)

09:00 - 10:15	**Hemşirelik Oturumu -1** **Oturum Başkanları:** Ceren Sayarer, Mehmet Karahan	
09:00 - 09:05	4963 - Aorto-Bifemoral By-Pass Surgery: Nursing Care in Preoperative and Postoperative Period – Case Series	Fikriye Figen Bursa
09:05 - 09:10	2265 - Endovascular Surgery: Postoperative Respiratory Support and the Role of Nursing – Case Series	Fikriye Figen Bursa
09:10 - 09:15	3722 - Nursing Observations and Postoperative Care Approaches in Patients Undergoing Carotid Artery Surgery	Ahmet Oğuzhan Demir
09:15 - 09:20	9841 - Nursing Care and Early Complication Management in Patients Undergoing Emergency Surgery for Acute Type A Aortic Dissection	Berna Doman
09:20 - 09:25	4852 - Nursing Strategies in Pain and Mobilization Management for Patients With Peripheral Artery Disease-An İntensive Care Experience	Rahime Aktuğ
09:25 - 09:30	3282 - Nursing Follow-up of Renal Functions After EVAR: A Retrospective Study	Sadık Turgut
09:30 - 09:35	8223 - Venous Ulcer Monitoring And Current Nursing Approaches	Selda Güre
09:35 - 09:40	4864 - Analysis of Nursing Oral Presentations Presented at the National Vascular and Endovascular Surgery Congresses Between 2017 and 2023	Burcu Okyay
09:40 - 09:45	5704 - Reflections on Cardiovascular Surgery Nursing From The Ministry of Health Nursing Core Competencies Guide	Aysel Acar
10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 12:00	**Hemşirelik Oturumu - 2** **Oturum Başkanları:** Mehmet Kirişçi, Halenur Şahin	
10:45 - 10:50	9648 - Assessment of Healthy Lifestyle Behaviors in Patients Undergoing EVAR Surgery	Süheyla Karakaya
10:50 - 10:55	3711 - The Importance of Psychosocial Support in Foot Amputation Due to Peripheral Arterial Disease	İbrahim Öztürk
10:55 - 11:00	8597 - Cerebrospinal Fluid Monitoring and Nursing Care in Patients After Thoracoabdominal Aortic Aneurysm Surgery	Zeynep Çekim
11:00 - 11:05	3897 - Examination of Nurses' Knowledge, Awareness, and Symptom Management Regarding Deep Vein Thrombosis	Kaymak Gündüz
11:05 - 11:10	5515 - Examination of the Relationship Between Postoperative Pain and Quality of Life in Patients Undergoing Varisectomy	Halenur Yılmaz
11:10 - 11:15	1003 - Preventing Venous Thromboembolism in Cardiovascular Surgery Intensive Care: The Role of Nursing Interventions	Dilan Çiftçi
11:15 - 11:20	4291 - Extracorporeal Membrane Oxygenation in Cardiovascular Surgery Patients: Nursing Strategies to Prevent Vascular Complications	Dilan Çiftçi
13:30 - 14:15	**ÖĞLE YEMEĞİ**	
14:15 - 15:30	**Hemşirelik Oturumu - 3** **Oturum Başkanları:** Orçun Ünal, Özgür Akkaya	
14:15 - 14:20	8282 - The Importance of Nursing Care in Carotid Endarterectomy Surgeries	Nur Şenlik
14:20 - 14:25	7775 - The Importance of Monitoring Fibrinogen in Thrombolytic Therapy	Mine Yüksel
14:25 - 14:30	3582 - The Role of Nurses in Pain Management in Patients with Peripheral Arterial Disease	Mine Yüksel
14:30 - 14:35	4994 - Hemodynamic Effects of Early Postoperative Mobilization in Patients Undergoing TEVAR for Aortic Dissection	Perihan Gizem İlhan
14:35 - 14:40	3961 - The Impact of Nursing Interventions on Clinical Outcomes in Patients Undergoing Peripheral Arterial Surgery: A Single-Center Observational Analysis	Leyla Karakaş
14:40 - 14:45	7369 - Points to be Considered in Patients Undergoing PTA and Nursing Care	Cansu Eryıldırım
14:45 - 14:50	5840 - Endoscopic Saphenous Vein Harvesting: Feasibility, Safety, and Clinical Experience	Serkan Atay
14:50 - 14:55	5023 - Nursing Care for Patients Undergoing Peripheral Vascular Surgery: Evaluating the Clinical Appropriateness of ChatGPT Responses with Expert Opinions	İrem Akdoğan
14:55 - 15:00	5459 - Use of QR Code–Supported Digital Guide for Patient Education After EVAR–TEVAR Surgery Within the ERAS Protocol	Canan Çevik
15:00 - 15:05	7383 Periferik Arter Hastalarında Ağrı, Günlük Yaşam Aktivite Düzeyleri ve Yaşam Doyumunun İncelenmesi	Seçil Gacaner
15:30 - 16:00	**KAHVE MOLASI**	
16:45 - 18:00	**Hemşirelik Oturumu - 4** **Oturum Başkanları:** Özcan Gür, Hüseyin Kuplay, Aysel Acar	
16:45 - 16:57	Uluslararası Hemşireler Konseyi 2025 Raporu Işığında Hemşirelik	Gizem Korkmaz
16:57 - 17:09	Uluslararası Boyutuyla Vasküler Hemşirelik	Arnel Böke
17:09 - 17:21	Ülkemizde Kardiyovasküler Cerrahi Hemşireliği: Güncel Durum ve Yetkinlikler	Duygu Kayaalp Keleşoğlu
17:21 - 17:33	Sağlıkta Akreditasyon: Hemşirelik Süreçlerinde Değişim ve İyileşmeler	Hüsnüye Kaya
17:33 - 17:45	Vasküler Cerrahide ERAS Protokolü ve Hemşirelik Yaklaşımları	Canan Çevik
17:45 - 18:00	Tartışma	

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SALON 4

09:00 - 10:15	**AFET GERÇEĞİYLE YÜZLEŞME:TÜRKİYE'DE KALP VE DAMAR CERRAHİSİNİN SAHADAKİ GÜCÜ** **Oturum Başkanları:** İyad Fansa, Mehmet Ali Türkçü, Emre Külahçıoğlu, Mustafa Karaçelik	
09:00 - 09:10	Afetlerde KVC Uzmanının Rolü ve Saha Gerçekleri	Zinar Apaydın
09:10 - 09:20	Afette Damar Erişimi Cerrahi ve Perkütan Uygulamalar	Yusuf Çorbacıoğlu
09:20 - 09:30	Crush Yaralanmaları ve Amputasyon Kararı	Metin Onur Beyaz
09:30 - 09:40	Afet Sahasında Vasküler Onarım: Primer Onarım mı Geçici Şant mı?	Sabir Hasanzade
09:40 - 09:50	Gerçek Vaka Senaryolarıyla Afet Müdahalelerinde KVC Uzmanı Olmak	Sefer Kaya
09:50 - 10:00	Ekstremite kurtarıcı cerrahide çok yönlü yaklaşım: kalp damar cerrahının rolü	Hasan Murat Arslan
10:00 - 10:15	Tartışma	
10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 12:00	**KTEPH-2** **Oturum Başkanları:** Cengiz Köksal, Levent Yılık, Mustafa Bahadır İnan, Murat Kurtoğlu	
10:45 - 10:57	KTEPH İçin Balon Pulmoner Anjiyoplasti	Barış Kaya
10:57 - 11:09	Non Thrombotik Lezyonların Tedavisinde Pulmoner Endarterektomi	Mehmet Yanartaş
11:09 - 11:21	KTEPH Medikal Tedavisinde Yeni Opsiyonlar	Ebru Şengül Parlak
11:21 - 11:33	Akut PE'den KTEPH'e Radyolojik Bulgular	Koray Hekimoğlu
11:33 - 11:45	Katastrofik ve Hayatı Tehdit Eden Kteph Senaryolarında Ecmo	Barış Çaynak
11:45 - 12:00	Tartışma	
13:30 - 14:15	**ÖĞLE YEMEĞİ**	
14:15 - 15:30	**ÖDÜLLÜ SÖZLÜ BİLDİRİ OTURUMU - 1** **Oturum Başkanları:** Çağatay Engin, Esat Akıncı **Jüri Üyeleri:** Murat Özeren, Recep Oktay Peker, Erkan Kuralay, Murat Güvenli, Soner Sanioğlu, Vedat Nisanoğlu, Ali Kocailik, Abdullah Özer	
14:15 - 14:25	Kronik Venöz Yetmezliğin Yeni Biyobelirteçleri Olarak Arginin Metabolitleri: Prospektif Bir Vaka-Kontrol Çalışması	Eyüp Cihan Kaya
14:25 - 14:35	Hangi Endovenöz Teknik Daha Güvenilir? RF, EVLA ve Siyanoakrilat Yapıştırıcının Uzun Dönem Sonuçlarının Karşılaştırmalı Analizi	Ali Demiray
14:35 - 14:45	Stentlerle Perkütan Müdahale Sonrası İliak Arter Stenozu Olan Hastalarda Stent İçi Restenozun Öngörülmesinde Trigliserid-glikoz İndeksi	Necdet Kılıçaslan
14:45 - 14:55	EVAR Sonrası Tip 2 Endoleaklerin Önlenmesinde Yan Dalların Önleyici Embolizasyonunun Etkileri	Naci Cem Aydoğdu
14:55 - 15:05	Primer Yırtığın Koroner Ostiuma Kadar Uzandığı Akut Tip A Diseksiyonlarda Yeni Bir Yöntem: Neo-button Oluşturma	Şahin Şahinalp
15:05 - 15:15	In Situ Needle Fenestrasyon ve Selektif Serebral Perfüzyon Kullanılarak Total Endovasküler Aortik Ark Onarımı: Tek Merkez Sonuçları	Fatma Akça
15:15 - 15:25	Aortoiliak Oklüzif Hastalığı Olan Hastalarda Endovasküler Kissing Stent Ve Aortobifemoral Bypass'ın Karşılaştırılması	Cansu Sarıarslan
15:25 - 15:30	Tartışma	
15:30 - 16:00	**KAHVE MOLASI**	
16:45 - 18:10	**ÖDÜLLÜ SÖZLÜ BİLDİRİ OTURUMU - 2** **Oturum Başkanları:** Çağatay Engin, Esat Akıncı **Jüri Üyeleri:** Murat Özeren, Recep Oktay Peker, Erkan Kuralay, Murat Güvenli, Soner Sanioğlu, Vedat Nisanoğlu, Ali Kocailik, Abdullah Özer	
16:45 - 16:55	SFJ Çapının 10mm ve Üzerinde Olduğu Olgularda Endovenöz Radyofrekans Ablasyon ve Siyanoakrilat Ablasyonun Etkinliğinin ve Sonuçlarının Karşılaştırılması	Recep Berat Çiçek
16:55 - 17:05	Asendan Aort Anevrizması Olan Hastaların Aort Dokularında circ-KIF4a ve miR-637 Gen Ekspresyonunun Etkisi	Naci Cem Aydoğdu
17:05 - 17:15	Müdahale Endikasyonlu Alt Ekstremite Periferik Arter Hastalığı Olan Hastalarda Perfüzyon Değerlendirmesi	Oğuzhan Semercioğlu
17:15 - 17:25	Ratlarda Alt Ekstremite İskemi-reperfüzyon Yaralanması Sırasında Hidroksitirosolün Eritrosit Deformabilitesi Üzerindeki Koruyucu Etkilerinin Araştırılması	Yiğit Tokgöz
17:25 - 17:35	Femoropopliteal Lezyonlu Hastalarda Rotasyonel ve Yönlendirilmiş Aterektomi Sonuçlarının Uzun Dönemli Karşılaştırılması	Onur Emre Satılmış
17:35 - 17:45	Periferik Arter Hastalığının Biyokimyasal ve Metabolik Belirleyicileri: Amino Asitler ve İnflamasyona Odaklanma	Hakan Çomaklı
17:45 - 17:55	Derin Venöz Stent Ttakıldıktan Sonra Hastaların Takibinde Basit ve Objektif Bir Yöntem Olarak Perfüzyon İndeksi	Alperen Kutay Yıldırım
17:55 - 18:05	The Influence of Morphovolumetric Characteristics of the Aneurysm Sac on Risk Prediction and Outcomes Following EVAR	Sinan Özçelik
18:05 - 18:10	Tartışma	

SALON 5

10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 15:30	**"Vasküler Ustalık Sınıfı – 3 Aşamalı İleri Deneyim @Doğsan – Simuvasc Simülasyon Vadisi"** **Kurs Moderatörleri:** Hakkı Tankut Akay, Nevzat Erdil, Emrah Uğuz **Kurs Eğitmenleri:** Atilla Orhan, Abdullah Güner, Ümit Arslan, Başak Koçak, Dilşad Amanvermez, Serkan Yıldırım, Ahmet Hulusi Arslan, Emrah Ereren, Bülent Sarıtaş, Hüseyin Demirtaş, Burak Toprak, İsa Civelek **Oturum Başkanı:** Ömer Tanyeli	

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SÖZLÜ BİLDİRİ SALONU

09:00 - 10:15	**SÖZLÜ BİLDİRİ OTURUMU - 5** **Oturum Başkanları:** İsa Civelek, Hakan Çomaklı, Fevzi Sarper Türker	
	4017 - The aim is to compare serum IL-6, Calponin-1 (CNN-1), and Matrix Gla Protein (MGP) levels in patients operated on with a diagnosis of ascending aortic aneurysm with those of a	Ferhat Tümkaya
	4093 - Postoperative 2 Year Follow Up Results of Percutaneous Access Site in Peripheral Arterial Disease Patients	Büşra Karakoç Kaplan
	4155 - Early Outcomes of TEVAR: Spinal Cord Ischemia and Reintervention Rates in a Single-Center Study	Fatma Akça
	4173 - A Novel Approach to Percutaneous Revascularization in Critical and Complex Lower Limb Ischemia	Emced Khalil
	4174 - Comparative Analysis of Systemic Immune-Inflammation Index (SII), Neutrophil-to-Lymphocyte Ratio (NLR), and Geriatric Nutritional Risk Index (GNRI) in Predicting Late Arteriovenous Fistula Occlusion: A Retrospective Cohort Study of 750 Patients	Ferid Cereb
	4185 - Pharmacomechanical thrombolysis and aspiration in relieving early symptoms of deep vein thrombosis: our clinical results	Gencehan Kumtepe
	4500 - Clinical and Injury-Related Predictors of Mortality in Acute Vascular Trauma: A Retrospective Cohort Study	Anıl Akbaş
	4553 - When One Size Doesn't Fit All: Outcomes of Personalized Pneumatic Compression Therapy in Lipedema	Ahmet Okyay
	4640 - Two-Year Follow-Up Results of Below-the-Knee Distal Bypass in Patients with Peripheral Artery Disease	Ahmet Erkam Çevik
	4657 - Nature-Based Virtual Reality-Assisted Stress Modulation in Oncology Patients Undergoing Minor Vascular Procedures: Effects on Anxiety and Autonomic Function – A Randomized Controlled Study	Ahmet Barış Durukan
10:15 - 10:45	**KAHVE MOLASI**	
10:45 - 12:00	**SÖZLÜ BİLDİRİ OTURUMU - 6** **Oturum Başkanları:** Mete Burak Özdemir, Aydemir Koçarslan, Olcay Murat Dişli	
	4794 - Impact of Underlying Malignancy on Complications After Totally Implantable Venous Access Device Placement	Mehmet Ali Yeşiltaş
	4796 - Retrospective Evaluation of Surgical Intervention Results for Dysfunctional Arteriovenous Fistulas Created for Hemodialysis: Analysis of 896 Cases	Mehmet Aslan
	5016 - Radiation Exposure of Cardiovascular Surgeons During Endovascular Procedures: Risks and Protective Measures	Tarık Taştekin
	5097 - Two-Year Follow-Up Results of Patients Undergoing Venous Arterialization for Critical Limb Ischemia	Ceylan Gürcan
	5233 - Early Results Of Peripheral Endovascular Interventions Performed In Our Clinic: A Single Center Experience	Ersin Özer
	5240 - Comparison of high-pressure compression stockings and compression bandages for ulcer treatment in venous ulcer patients	Cansu Sarıarslan
	5261 - The Role of Intraoperative Angiography and Hybrid Procedures in Acute Limb Ischemia Surgery	Gizem Işık
	5305 - Evaluation of Cyberchondria Severity in Patients Who Underwent Surgery for Chronic Venous Insufficiency	Mustafa Enes Bostankolu
	5329 - Investigation of patients with recurrent varicose veins over the past five years in our clinic	Timuçin Sabuncu
	5338 - The Role of the Geriatric Nutritional Risk Index in Predicting Mortality in Peripheral Artery Disease Patients with Diabetic Foot Ulcers	Ahmet Çakallıoğlu
13:30 - 14:15	**ÖĞLE YEMEĞİ**	
14:15 - 15:30	**SÖZLÜ BİLDİRİ OTURUMU - 7** **Oturum Başkanları:** Adnan Yalçınkaya, Ozan Erbasan, Kıvanç Metin	
	5399 - Comparison of Inflammatory Biomarkers Between Peripheral Artery Disease Patients and Healthy Individuals	Ahmet Deniz Kaya
	5491 - Combining Flush EVLA with Targeted AGSV Ablation to Reduce Recurrence in Varicose Vein Treatment	Ali Baran Budak
	5505 - Investigation of miRNAs as Potential Biomarkers in the Diagnosis of Chronic Venous Insufficiency Disease	Hüseyin Demirtaş
	5528 - Best Practice for Sclerotherapy: Differences and Strategies for Hot and Cold Areas	Rukiye Derin Atabey
	5589 - Retrograde Type A Dissection as an Independent Predictor of Mortality in Patients Undergoing Total Debranching	Mehmet Emir Erol
	5604 - Results of Local and General Anesthesia in Patients Undergoing Elective Endovascular Abdominal Aortic Aneurysm Repair (EVAR): A Single Center Experience	Tarık Can Kaya
	5829 - Comparison of Endovascular and Open Surgical Repair in Elderly Patients with Aortic Aneurysms: A Single Center Experience	Özgür Çoban
	5840 - Endoscopic Saphenous Vein Harvesting: Feasibility, Safety, and Clinical Experience	Serkan Atay
	5876 - Co2 angiography	Ali Aghayev
	5930 - Surgical and Endovascular Approaches in Extracranial Carotid Artery Aneurysms: Single-Center Clinical Outcomes	Sefer Kaya
15:30 - 16:00	**KAHVE MOLASI**	
16:45 - 18:00	**SÖZLÜ BİLDİRİ OTURUMU - 8** **Oturum Başkanları:** Şevket Baran Uğurlu, Osman Tansel Darçın, Mehmet Karaçalılar	
	6025 - Dapagliflozin Attenuates Histopathological Alterations in a Rat Model of Abdominal Aortic Aneurysm	Mustafa Barış Kemahlı
	6079 - Can the Risk of Persistent Hyperpigmentation Following Sclerotherapy be Predicted Using Systemic Inflammatory Markers?	Büşra Karakoç Kaplan
	6127 - BioHybrid 3D Vascular Graft: Bioengineering-Based Development of Biofunctional Vascular Implants	Can Soykan Sabur
	6240 - Retrospective Analysis of Endovascular Interventions for Deep Venous Thrombosis Since 2021	Nurhayat İnci
	6421 - Effectiveness of Endovascular Interventions via the Popliteal Access in Peripheral Vascular Diseases	Mehmet Aslan
	6494 - Challenging EVAR Cases: Endovascular Approaches in Critical Patients	Ceylan Gürcan
	6500 - Comparative Analysis of Antegrade–Retrograde Manual Foam Sclerotherapy Versus Automated Microfoam System (Varixio® AMPS) in the Treatment of Great Saphenous Vein Incompetence	İlknur Cihan
	6714 - Combined Endarterectomy-Interposition Technique Using Specially Shaped Polytetrafluoroethylene Graft in the Surgical Treatment of Carotid Artery Stenosis	Kemal Uzun
	6809 - The Effect of Serum Sortilin Levels on the Development of Symptoms in Patients with Critical Carotid Artery Stenosis	Elif Yazgan
	7054 - Impact Of Peripheral Artery Disease On Mortality After Acute Type A Aortic Dissection Surgery	Ahmet İbrahim Balkaya
	4423 - Packing the chest: a useful technique for intractable bleeding after aort dissection operation	Aydemir Koçarslan

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SALON 7

10:15 - 16:30	**Boston Scientific** **Modern Endovasküler Girişimler Kursları** **Kurs Eğitmenleri:** Adil Polat, Serkan Ketenciler	
10:15 - 11:15	Endovasküler Tedavide Kalıcılığın Anahtarı: Bilimsel Damar Hazırlığı ve İlaç Salınımlı Teknolojiler	Adil Polat
11:30 - 12:30	Modern Endovasküler Girişimlerde Gelecek: IVUS Rehberliğinde Tedavi	Serkan Ketenciler
14:00 - 15:00	Modern Endovasküler Girişimlerde Gelecek: IVUS Rehberliğinde Tedavi	Serkan Ketenciler
15:30 - 16:30	Endovasküler Tedavide Kalıcılığın Anahtarı: Bilimsel Damar Hazırlığı ve İlaç Salınımlı Teknolojiler	Adil Polat

E POSTER ALANI

11:00 - 12:45	**TARTIŞMALI POSTER BİLDİRİ OTURUMU - 1** **Oturum Başkanları:** Serdar Badem, Fehim Can Sevil	
	1264 - Management of Percutaneous Transfemoral Access-Site Complications Following Transcatheter Aortic Valve Implantation and Endovascular Aneurysm Repair	Mehmet Emin Murat
	1304 - Vascular Surgical Management of Traumatic Bilateral Lower Limb Amputations: Use of the Non-Salvageable Limb as a Source of Autologous Vascular Grafts	Ömer Faruk Soydaş
	1365 - Early Patency in Peripheral Arterial Injuries: A Single-Center 20-Case Series with Extended Report of Three Cases	Murat Özeren
	1441 - We Recommend NIRS Monitoring For Safe Surgery in Carotid Endarterectomy	Ferhat Borulu
	1667 - Effect of Curcumin on TRPM2 Channel Protein in a High-Fat Diet-Induced Obesity Model with Cardiovascular Implications	Merve Durhan
	1763 - Primary and Redo EVAR outcomes in elective and ruptured abdominal aortic aneurysms: 12 months follow-up	Fatma Özkan
	1791 - Endovascular Treatment of Descending Thoracic Aortic Aneurysm with Severe Tortuosity Causing Tracheal and Esophageal Compression	Uğur Çetingök
	1841 - Anomaly or Chance? Hemodialysis Access Challenges: A Case of Persistent Left Superior Vena Cava and Arteriovenous Fistula	Ebsar Ergenç
	2239 - Life-threatening abdominal aortic rupture due to failure of ruptured valve balloon withdrawal during transcatheter aortic valve implantation in degenerated aortic root homograft	Kudret Atakan Tekin
	2294 - Failure to Remove Catheter After Endovascular Treatment and Rapidly Developing Carotid Artery Aneurysm: Surgical Repair with Sternotomy and Foreign Body Excision	Ahmet Turan İnce
	2356 - Evaluation of the Effect of Intralesional Epidermal Growth Factor Use on Wound Healing in Patients with Diabetic Foot Ulcers	Emre Dursun
	2567 - Case Report: Endovascular Mechanical Atherectomy for Recanalization of an Occluded Femoropopliteal Saphenous Vein Bypass Graft	Mustafa Enes Bostankolu
	3287 - Endovascular stent graft implantation with superior gluteal artery preservation in isolated internal iliac artery aneurysm	Cemal Kemaloğlu
	3295 - Endovascular Thoracal Aorta Injury Repair After Thoracic Pedicle Screw Placement	Ahmet Turan İnce
	3442 - Percutaneous Closure of Pseudoaneurysm of Arcus Aorta with Atrial Septal Defect Occluder Device	Muzaffer Çeliksöz
14:00 - 14:45	**TARTIŞMALI POSTER BİLDİRİ OTURUMU - 2** **Oturum Başkanları:** Nurkay Katrancıoğlu, Fevzi Sarper Türker	
	3458 - Permanent Dialysis Catheter Placement into the Right Atrium via Thoracotomy	Fatma Gül
	3765 - Multidisciplinary Management of Abdominal Neuroblastoma with Aortoiliac Involvement and Postoperative Acute Arterial Embolism: A Case Report	Elif Tuzdelen
	3890 - Surgical Management of Nutcracker Syndrome With Left Renal Vein Transposition Using Xenograft: Early Outcomes In Five Patients	Serkan Ketenciler
	3925 - A Case Report: Two-Stage Hybrid Approach For Aortic Coarctation Combined With Aortic Root Aneurysm And Aortic Valve Regurgitation	Fatma Akça
	6892 - Atypical Koebner Response: Psoriasis Remission Following Endovenous Laser Ablation for Venous Insufficiency : A Novel Case Report and Literature Review	Gökhan Arslan
	4434 - Minimally Invasive Sternotomy for Aortic Root Remodeling in a 39-Year-Old Patient with Aortic Root and Ascending Aortic Aneurysm: A Case Report of the Yacoub Procedure	Burhan Küçük
	5043 - Hydatid Cyst of the Aorta: A Rare Case Report	Soysal Turhan
	5468 - Trachea-Innominate Artery Fistula	Enes Salih Altınsoy
	5695 - Successful management of a patient with complicated type 1 aortic dissection with redo coronary bypass	Veli Burak Tackin
	5814 - Multimodal Neuromonitoring in Carotid Endarterectomy: A Five-Patient Case Series Integrating PI and PVI	Furkan Özkan
	5907 - Endovascular Aneurysm Repair (EVAR) in a Renal Transplant Recipient: A Rare Case Report	Burak Toprak
	6197 - Beyond Conventional Boundaries: TEVAR for Ascending Aortic Pseudoaneurysm Following Valve Surgery	Koray Apaydın
	6301 - When Endovascular Retrieval Fails: Open Surgical Removal of an Inferior Vena Cava Filter	Gökçe Şirin
	6817 - Endovascular Management of Iatrogenic Aortic Rupture Caused by Pedicle Screw Penetration	Ahmet Şamil Demirok

SALON 8

09:00 - 10:15	**SÖZLÜ BİLDİRİ OTURUMU - 9** **Oturum Başkanları:** Tekin Yıldırım, Burak Erdolu, Banu Akdağ	
	7095 - Venous Thromboembolism Study: Post-Varicose Vein Surgery DVT and the Wells Score	Mete Kubilay Kasap
	7138 - Outcomes of Popliteal Artery Injuries: A Retrospective Analysis of 17 Cases Operated in a Single Center	İrfan Dinler
	7145 - Retrograde pedal access in the management of chronic total occlusion in peripheral artery disease	Yakup Tire
	7258 - Intervention in Peripheral Artery Disease: A Retrospective Series of 356 Patients	Mehmet Aslan
	7325 - Results of aneurysm treatments in basilic vein transposition fistulas	Zerrin Pulathan
	7343 - Comparison of modified eversion technique with traditional techniques in carotid endarterectomy	Ejderhan Kadir Uluğ
	7477 - The Importance of Intravascular Ultrasound (IVUS) in Venous Recanalization Procedures	Rukiye Derin Atabey
	7549 - Endovascular Experience in Ruptured Abdominal Aortic Aneurysm:EVRAR	Çağla Canbay Sarılar
	7671 - Difficult Lesions in Endovascular Treatment	Uğur Çetingök
	7718 - Hybrid Approach Containing Abdominal Debranching And Thoracic Endovascular Aortic Repair (TEVAR) For Complex Aortic Diseases	İrem Özçetin

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ARTER SALONU (SALON 1)

08:30 - 09:45	**AORT OTURUMU** **Oturum Başkanları:** Sertaç Çiçek, Ali Sarıgül, Tayfun Aybek, Selim İsbir	
08:30 - 08:40	Akut Tip 1 AD'da Cerrahi Yaklaşım.. Asendan Aort Replasmanı Yeterli midir?	Ünal Aydın
08:40 - 08:50	TAAA'da Cerrahi ve Hibrit Yaklaşımlar	Mehmet Altuğ Tuncer
08:50 - 09:00	Arkus Aorta Cerrahilerinde Tedavi: Cerrahi Modifikasyonlar	Muhammed Onur Hanedan
09:00 - 09:10	AAA Tedavisinde Cerrahi Geri mi Döndü?	Ozan Onur Balkanay
09:10 - 09:20	RAAA'da Mortalite Nasıl Azaltılabilir? Teknik Yenilikler Yeterli mi?	İbrahim Duvan
09:20 - 09:30	Zor Vakalara Kolay Çözümler: Yeni Nesil Arkus Hibrid Greft ile İlk Tecrübe	Şahin Bozok
09:30 - 09:45	Tartışma	
09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**KAROTİS OTURUMU** **Oturum Başkanları:** Süha Küçükaksu, Levent Yılık, Murat Uğurlucan, Oğuz Omay	
10:15 - 10:25	Karotis Eversiyon Tekniği Her Hastaya uygun mu?	İbrahim Erdinç
10:25 - 10:35	Karotis Body Tümörlerinde Ne Zaman ve Nasıl Bir Tedavi Yaklaşımı Uygulamalıyız?	Şahin Şahinalp
10:35 - 10:45	Karotis Arter Cerrahisinde Tecrübe Pratiği Değiştiriyor mu?	Necmettin Yakut
10:45 - 10:55	Karotis Tedavisinde TCAR, Transfemoral Yaklaşım, Gelecek?	Fehim Can Sevil
10:55 - 11:05	Karotis Hastalıklarının Medikal Tedavisi Nasıl Olmalı?	Ali İhsan Hasde
11:05 - 11:15	Mandibular Subluksasyon ile Yüksek Yerleşimli Karotis Lezyonlarının Cerrahi Tedavisi	Mustafa Seren
11:15 - 11:25	ABI Nedir, Neden ve Nerede Yapılmalıdır? (What is ABI, Why and Where it should be Performed?) (UMİ Sağlık Koşulsuz Bilimsel Desteği ile)	A. Kürşat Bozkurt
11:25 - 11:30	Tartışma	
11:30 - 12:15	**UYDU SEMPOZYUMU - KoçMedical | Bıçakçılar** **Uzun Süreli Açıklık için Heparin Bağlı Endoprotezler: Propaten Özellikli Viabahn SX ve VBX'in Klinik Kullanımları** **Oturum Başkanı:** Cengiz Köksal **Konuşmacı:** Serkan Ketenciler	
12:15 - 13:00	**Damarlarında Şampiyonluk Var!** **Oturum Başkanları: Ufuk Demirkılıç, Nevzat Erdil** **Konuşmacılar:** **Akif Üstündağ (Türkiye Voleybol Federasyon Başkanı) ONLINE KATILIM** **Pelin Çelik Arlıer (Türkiye Kadın Milli Voleybol Takımı Menajeri),** **Derya Cebecioğlu (Türkiye Kadın Milli Voleybol Takımı Oyuncusu)**	
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**PERİFERİK ARTER OTURUMU** **Oturum Başkanları:** Alptekin Yasım, İbrahim Özsöyler, Ferit Çiçekçioğlu	
13:45 - 13:55	Klaudikasyo Cerrahi Planlaması Neden TASC II'den Vazgeçemiyor?	Adil Polat
13:55 - 14:05	Infrainguinal Endovasküler Tedavide Yükselen Damar Hazırlığı Kavramı?	Selami Gürkan
14:05 - 14:15	Periferik Arter Hastalıklarında Resveratrol: Küçük Bir Molekül Büyük Bir Umut mu?	Serdar Özgüç
14:15 - 14:25	PAH-METE Çalışmasının Gösterdikleri: Periferik Arter Hastalığı Ülkemizde Nasıl Tedavi Ediliyor?	Ömer Faruk Rahman
14:25 - 14:35	Nitinol Destekli Balon ile Kontrollü Lezyon Yönetimi	Selim Aydın
14:35 - 14:45	SFA Anjiyoplasti Sonrası Stentleme Kararı: DELPHI Kriterleri	Ali Aycan Kavala
14:45 - 14:55	SWEDEPAD Çalışması Günlük Pratiğimizi Etkileyecek mi?	Mustafa Etli
14:55 - 15:00	Tartışma	
15:00 - 15:30	**KAHVE MOLASI**	
15:30 - 16:15	**İNVAMED'İN BİLİMSEL KATKILARIYLA-UYDU SEMPOZYUMU** **Periferik Arter hastalıklarında Güncel yaklaşımlar: Tanı,Tedavi ve Teknolojik İnovasyonlar** **Moderator:** Turhan Yavuz, Ahmet Akgül	
15:30 - 15:36	PAH Lezyon Madifikasyonu, Cihaz seçimi ve Klinik sorular	Turhan Yavuz
15:36 - 15:42	PAH da CTO (Kronik total oklüzyon) da modern tedavi teknikleri	Ahmet Akgül
15:42 - 15:48	PAH'da ilaç kaplı balon tedavisi ve lezyon seçimi	Hamit Serdar Başbuğ
15:48 - 15:54	Pah Greft Stent Kullanımı	Metin Onur Beyaz
15:54 - 16:00	İlaç kaplı balonlar ve stet teknolojilerdeki yenilikler	Mehmet Aslan
16:00 - 16:06	Endovasküler tedavilerde güncel klavuzlar	Oğuz Arslantürk
16:15 - 17:30	**AV ERİŞİM OTURUMU** **Oturum Başkanları: Ufuk Alpagut, Hafize Yalınız, İsa Coşkun**	
16:15 - 16:25	AV Damar Yolu Erişiminde Kalıcı Kateter mi, Fistül mü?	Selim Durmaz
16:25 - 16:35	AV Greft; Hangi Hastaya, Hangi Pozisyona Uygulayalım?	Zerrin Pulathan
16:35 - 16:45	AV Fistül Yönetiminde Endovasküler Yöntemler	Cemal Kocaaslan
16:45 - 16:55	AV Fistül Komplikasyonu Kanama Tromboz	Ferit Kasımzade
16:55 - 17:05	Çocuklarda Hemofili Tedavisi için AV Fistül Oluşturulmas (Creating AV Fistula for Hemophilia Treatment in Children)	Thomas Hoelzenbein
17:05 - 17:15	AV Fistül Steal Sendromu Yönetimi	Burak Akyol
17:15 - 17:25	AV Fistül Anevrizmalarında Yaklaşım	Mehmet Işık
17:25 - 17:30	Tartışma	

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VEN SALONU (SALONU 2)

08:30 - 09:45	**DERİN VEN OTURUMU** **Oturum Başkanları:** Enver Duran, Tanzer Çalkavur, Murat Sargın, Serdar Bayrak	
08:30 - 08:40	2025'te Trombolitiklerin Yeri: Hâlâ Trombektomiye Yer Var mı, Yoksa Veda Zamanı mı? (The Role of Thrombolytics in 2025: Is There Still a Place for Thrombectomy, or Is It Time to Say Goodbye?)	Marald Wikkeling
08:40 - 08:50	Inferior Vena Cava Replasmani	Thomas Hoelzenbein
08:50 - 09:00	Giriş Akımı Önemlidir: Posttrombotik Sendromda Nasıl Değerlendirilir? (Inflow Matters: How Should Post-Thrombotic Syndrome Be Evaluated?)	Irwin Toonder
09:00 - 09:10	Giriş Akımını Artırmak: PTS'de Cerrahi ve Endovasküler Seçenekler (Enhancing Inflow: Surgical and Endovascular Options in PTS)	Houman Jalaie
09:10 - 09:20	Damar Sokağında Kâbus: Derin Ven Stentlemesindeki En Kötü Vaka Deneyimlerim	Selim Aydın
09:20 - 09:30	Stentler Başarısız Olduğunda: Tıkanmış Venöz Stentleri Yeniden Açma Stratejileri	Suat Doğancı
09:30 - 09:40	Gelecek Mekanikte: Trombolitik İçermeyen Trombektominin Kalıcı Olduğunun Kanıtı	Mert Dumantepe
09:40 - 09:45	Tartışma	
09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**PELVİK VENÖZ HASTALIK OTURUMU** **Oturum Başkanları:** Marald Wikkeling, Erdal Aslım, Cem Arıtürk, Nejat Sarıosmanoğlu	
10:15 - 10:25	Pelvik Akım ve Kompresyon: Kronik Pelvik Ağrıda Alcock Kanalının Rolünü Yeniden Düşünmek (Pelvic Flow and Compression: Rethinking the Role of the Alcock Canal in Chronic Pelvic Pain)	Irwin Toonder
10:25 - 10:35	PeVD Tedavisinde En İyi Uygulamalar: Alttan Yukarı mı, Üstten Aşağı mı Yoksa Melez Strateji mi? (Best Practices in PeVD Treatment: Bottom-Up, Top-Down, or a Hybrid" Strategy?)	Marald Wikkeling
10:35 - 10:45	Vulvar Varisler: Pelvik Semptomlara Göre Kişiselleştirilmiş Tedavi Seçenekleri (Vulvar Varices: Personalized Treatment Options Based on Pelvic Symptoms)	Aleksandra Jaworucka Kaczorowska
10:45 - 10:55	Çift Patoloji Zorluğu: NIVL ile Ovarian Ven Yetmezliğinin Birlikte Tedavisi	Suat Doğancı
10:55 - 11:05	Tekrarlayan PeVD: Yeniden Tedavide Basamaklı Yaklaşım	Serkan Ketenciler
11:05 - 11:15	Yapay Zekâ ile Venöz Hastalıklar Arasındaki İlişki (The Relationship Between Artificial Intelligence and Venous Diseases)	Marald Wikkeling
11:15 - 11:30	Tartışma	
11:30 - 12:15	**İNVAMED'İN BİLİMSEL KATKILARIYLA-UYDU SEMPOZYUMU** **AORTİK PATOLOJİLERDE ENDAVASKÜLER YAKLAŞIMLAR : AKIM YÖNLENDİRİCİ STENTLER VE ENDOLEAK YÖNETİMİ** **Oturum Başkanları:** Erdem Silistreli, Ömer Faruk Doğan, Ozan Onur Balkanay	
11:30 - 11:40	Akım Yönlendirici Stentlerin Teknik Özellikleri Ve Uygulama Stratejileri	Ömer Faruk Doğan
11:40 - 11:50	Aortik Patolorijilerde Endovasküler Tedavi	Mustafa Etli
11:50 - 12:00	Aort Patalojilerinde Akım Yönlendirici Stent Deneyimi	Yasin Kılıç
12:00 - 12:10	Kısa Segment Uygulamalarında Vaka Tecrübeleri	Erdem Silistreli
12:10 - 12:15	Aortik Akım Yönlendirici Stent Deneyimi	Murat Can Gökduman
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**DAMAR CERRAHİSİ VE MALPRAKTİS OTURUMU** **Oturum Başkanları:** Nevzat Erdil, Tahsin Keçeligil, Şenol Yavuz, Erdal Ege	
13:45 - 13:57	Hekimlerin Hukuki Sorumluluğu Kapsamında; Hasta Hekim İlişkisinin Hukuki Nitelendirilmesi	Vedat Ali Tektaş
13:57 - 14:09	Acil Hastaların Kabulü, Sevki ve Onamının Alınması	Şükrü Yorulmaz
14:09 - 14:21	Aydınlatılmış Onamın İçeriği, Şekli ve Formun Saklanması	Osman Celbiş
14:21 - 14:33	Malpraktis Olgularının Mesleki Sorumluluk Kurulu Açısından Değerlendirilme Süreci	Şehmuz Ertekin
14:33 - 14:45	Doktor Seninle Mahkemede Görüşürüz. Vasküler Cerrahide Medikolegal Problemler	Özgür Altınbaş
14:45 - 15:00	Tartışma	
15:00 - 15:30	**KAHVE MOLASI**	
15:30 - 16:15	**UYDU SEMPOZYUMU - ATT MEDİKAL** **ESTETİK FLEBOLOJİDE TRANSDERMAL LAZER UYGULAMALARI (Cutera Excel V+ 1064 & 532)** **Oturum Başkanları:** Suat Doğancı, İlker Kiriş	
15:30 - 15:45	C1 Lezyonlarda Transdermal Lazer Kullanım Prensipleri	Suat Doğancı
15:45 - 16:00	CLACS Uygulamalarında Transdermal Lazer Kullanımı	İlker Kiriş
16:00 - 16:15	Cutera Excel V+ ve Port -Wine Birthmark Deneyimleri	Sevil Özdöl
16:15 - 16:45	**Dijital Sağlık, Yapay Zekanın Sağlık Hizmetleri Üzerindeki Etkisi** **Konuşmacı:** Raşit Dinç **Oturum Başkanı:** Nevzat Erdil	
16:45 - 17:45	**YARA BAKIMI VE AMPUTASYON OTURUMU** **Oturum Başkanları:** Emre Özker, Tünay Kurtoğlu	
16:45 - 16:55	Diyabetik Ayak Yarasında Amputasyon: Kime, Ne Zaman?	Emre Özker
16:55 - 17:05	Venöz Arterializasyon Karar ve Teknik	Levent Altınay
17:05 - 17:15	İskemik Ayak Yarasına Yaklaşım: Damar Cerrahisi Gözüyle	Kemal Korkmaz
17:15 - 17:25	Ayak Yarası Hastasında Periferik Girişimlerin Planlanması	Selim Aydın
17:25 - 17:35	Son Gelişmeler Işığında İskemik Yaraların Tedavisinde Rejeneratif Tıp	Alper Erkin
17:35 - 17:45	Tartışma	

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HEMŞİRELİK SALONU (SALON 3)

08:30 - 09:45	**HEMŞİRELİK OTURUMU - 5** **Oturum Başkanları:** Özbek Oğuz, Gülcan Elma	
08:30 - 08:40	Venöz Yetmezlik ve Trombozda Risk Faktörleri: Hemşirelik Bakımı	Sevim Akbulut
08:40 - 08:50	Kronik Venöz Yetmezlikte Hemşirelik Bakımı: Multidisipliner Tedavi Sürecinde Klinik Katkılar	Pınar Demirtaş
08:50 - 09:00	Periferik Damar Cerrahisinde Ameliyat Öncesi Hasta Hazırlığı	Mehmet Ali Dönmez
09:00 - 09:10	Karotis Endarterektomi: Klinik Rehberden Kliniğe Yansımalar	Reyhan Korkmaz
09:10 - 09:20	Venöz Tromboembolinin Önlenmesi: Hemşirenin Rol ve Sorumlulukları	Burcu Okyay
09:20 - 09:30	Hasta ve Ailesinin Eğitimi, Taburculuk	Sude Karaca
09:30 - 09:40	Damar Cerrahisi Hastalarında Beslenme Yönetimi	Rabia Büşra Çelebi
09:40 - 09:45	Tartışma	
09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**HEMŞİRELİK OTURUMU - 6** **Oturum Başkanları: Levent Çetin, Mehmet Yılmaz, Sibel Alagöz**	
10:15 - 10:27	Hibrit Odada Ameliyathane Hemşireliği: Bir Günümüz	Fidan Gümüş
10:27 - 10:39	Damar Cerrahisinde Ameliyathane Hemşireliği ve Sık Yapılan Ameliyatlar	Buket Kaya
10:39 - 10:51	Varis Tedavisinde Radyofrekans Ablasyon: Hemşirelik Süreçleri	Ceren Doğan
10:51 - 11:03	Ameliyathanede Damar Cerrahisinde Komplikasyon Yönetimi	Ümmü Kalender
11:03 - 11:15	Delici-Kesici Alet Yaralanmalarının Önlenmesinde Rehberler	Buket Gümüş
11:15 - 11:30	Tartışma	
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**HEMŞİRELİK OTURUMU - 7** **Oturum Başkanları:** Özgür Barış, Hakan Güven, Ayşe Uykun	
13:45 - 13:57	Endovasküler Cerrahi Sonrası Komplikasyonlar ve Hasta Takibi	Zeynep Çekim
13:57 - 14:09	Endovasküler Cerrahide Stent Uygulamalarında Hemşirelik Bakımı	Satılmış Cebeci
14:09 - 14:21	Pulmoner Endarterektomi Sonrası Hemşirelik	Seren Altınköprü
14:21 - 14:33	KVC Yoğun Bakımda SAS Süreci (akreditasyon deneyimi)	Aysel Acar
14:33 - 14:45	Yoğun Bakımda Mentör Hemşire Olmak	Betül Turan
14:45 - 15:00	Tartışma	
15:00 - 15:30	**KAHVE MOLASI**	
16:15 - 17:15	**HEMŞİRELİK OTURUMU - 8** **Oturum Başkanları:** Ünsal Vural, Nesrin Ulueren	
16:15 - 16:27	Derinin Yapısı, Yaranın Tanımı ve Sınıflandırılması	Burcu Okyay
16:27 - 16:39	Yara İyileşme Süreci ve Yara İyileşmesini Etkileyen Faktörler	Gökçen Çiçek Köker
16:39 - 16:52	Venöz/Arteriyel Yaralar ve Hemşirelik Bakımı	Burcu Çelik Özarslan
16:52 - 17:03	Yara Enfeksiyonları ve Önlenmesi	Berrin Demir Mentaş
17:03 - 17:15	Tartışma	

SALON 4

08:30 - 09:45	**KALP VE DAMAR CERRAHLARI İÇİN KİŞİSEL MARKALAŞMA VE SOSYAL MEDYA KULLANIMI** **Oturum Başkanları:** Serkan Durdu, İlker Kiriş, Dilek Erer	
08:30 - 08:45	Doktorlar için Kişisel Markalaşma: Neden? Ne? Nasıl?	İlker Kiriş
08:45 - 09:00	Kalp ve Damar Cerrahı Gözüyle İdeal Sosyal Medya Yönetimi: Öneriler ve İpuçları	Ertekin Utku Ünal
09:00 - 09:15	Sosyal Medya Ajansı Gözüyle İdeal Sosyal Medya Yönetimi	Ozan Kaya
09:15 - 09:30	Sağlık Bakanlığının Doktorlar için Sosyal Medya Kullanımına Yönelik Yasal Düzenlemeleri	Gülce Candemir
09:30 - 09:45	Tartışma	

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09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**TIBBİ MAKALE HAZIRLAMA VE SUNUM TEKNİKLERİ** **Oturum Başkanları:** Fehmi Katırcıoğlu, Erkan Kuralay, Erkan İriz, Murat Bülent Rabuş	
10:15 - 10:25	Bilimsel Makale Yazımında Temel İlkeler (yapı, akış, doğru dil kullanımı)	Oğuz Karahan
10:25 - 10:35	Araştırma Tasarım, Verilerin Toplanması ve Sunumu, Doğru İstatistik Dili	Gökhan Karakoç
10:35 - 10:45	Editör ve Hakem Açısından Bakış: Kabul Sürecinde Kritik Noktalar	Adem İlkay Diken
10:45 - 10:55	Dergi Seçimi, Dergi Faktörü ve İndeksler	Soner Sanioğlu
10:55 - 11:05	Makaleniz Neden Editöre Ulaşamıyor? Hakemlik Öncesi Ön İnceleme Raporu ve Kaçınılmaz Red Nedenleri	Özden Keser
11:05 - 11:15	Dinleyici Etkileme Sanatı: Anlatımdan Görselliğe Etkili Sunum Stratejileri	Buket Aksu
11:15 - 11:30	Tartışma	
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**İSKEMİ REPERFÜZYON VE DENEYSEL ALT EKSTREMİTE İSKEMİ REPERFÜZYON MODELLERİ** **Oturum Başkanları:** Hikmet Koçak, Binali Mavitaş, Mustafa Aslan, Abdullah Özer	
13:45 - 13:57	İskemi Reperfüzyonun Moleküler Mekanizması	Ayşegül Küçük
13:57 - 14:09	Deneysel İskemi Reperfüzyon Modellerinde Dikkat Edilecek Hususlar	Mustafa Aslan
14:09 - 14:21	Deneysel Alt Ekstremite İskemi Reperfüzyon Modelleri	Hüseyin Demirtaş
14:21 - 14:33	Deneysel Alt Ekstremite İskemi Reperfüzyon Modelinde Dikkat Edilecek Teknik Hususlar	Başak Koçak
14:33 - 14:45	Kişiselleştirilmiş Lipid Yönetimi	Bahar Nalbant
14:45 - 15:00	Tartışma	
15:00 - 15:30	**KAHVE MOLASI**	
16:15 - 17:30	**ASİSTAN ve GENÇ UZMAN OTURUMU** **Oturum Başkanları:** Nevzat Erdil, Şahin Bozok, Tarık Taştekin	
16:15 - 16:20	Açılış	Nevzat Erdil
16:20 - 16:30	Cerrahi Disiplin Çatısı Altında Sağlık Çalışanları Arasında Doğru İletişim ve Huzurlu Çalışma Ortamı Nasıl Mümkün?	Cemal Kocaaslan
16:30 - 16:40	Poliklinik Sorunu: Yanlış Başvurulara Yaklaşım, Ne Yapalım - Ne Yapmayalım ?	Fevzi Ayyıldız
16:40 - 16:50	Yeni Bir Klinikte Operasyonlara Sıfırdan Başlamak: Endişeler ve Cerrahi Set Seçimi	Cemal Kemaloğlu
16:50 - 17:00	Periferde Vaka Seçimi: Ne Yapılır, Ne Yapılmaz? Hasta Sevk Süreci ve Yaşanan Zorluklar	İbrahim Demir
17:00 - 17:10	Devlet Hizmeti Yükümlülüğü Bitti. Şimdi Ne Olacak?	Ömer Faruk Rahman
17:10 - 17:20	Avrupa Damar Cerrahisinde Türkiye: ESVT Üyeliği, Eğitim Olanakları ve Board'a Giden Yol	Mert Meriç
17:20 - 17:30	Tartışma	
SALON 5		
09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**PEDİATRİK DAMAR OTURUMU** **Oturum Başkanları:** Ali Kutsal, Atıf Akçevin, Kanat Özışık, Murat Güvener	
10:15 - 10:30	Yenidoğandan Erişkinliğe Aorta ve Aortik Arkta Oluşan Anatomik ve Fizyolojik Değişiklikler ve Cerrahi Sonuçlar Üzerine Etkisi	Ali Kutsal
10:30 - 10:45	Yenidoğan ve Çocuklarda Torakal Aorta Cerrahisi: Ne Zaman ve Nasıl Tedavi Edilmelidir?	Hakan Akıntürk
10:45 - 11:00	Erişkinlerde Torakal Aorta Cerrahisinde Açık, Hibrid ve Ekstra Anatomik Yöntemler	Murat Songur
11:00 - 11:15	Erişkinlerde Aortik Arkus Cerrahisinde Nöromonitoring ve Serebral, Spinal ve Organ Koruma Yöntemleri, Korunmada Kullanılan Farmakolojik Ajanlar	Şeref Alp Küçüker
11:15 - 11:30	Tartışma	

08 NOVEMBER 2025, SATURDAY		
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**MEDI WORKSHOP**	
16:15 - 17:30	**ESTETİK FLEBOLOJİ KURSU** **Oturum Başkanları:** Dilek Erer, İlker Kiriş, Aybanu Gökçen, Hayri Fahri Atlı	
SÖZLÜ BİLDİRİ SALONU		
08:30 - 09:45	**SÖZLÜ BİLDİRİ OTURUMU - 10** **Oturum Başkanları: Adnan Taner Kurdal, Mehmet Acıpayam, Habib Çakır**	
	7783 - Protective Role of Bromelain's Antioxidant and Anti-Inflammatory Effects in Experimental Lower Limb Ischemia-Reperfusion Injur	Alperen Kutay Yıldırım
	7834 - 2-Year Results of Percutaneous Balloon Angioplasty for Santral Venous Stenosis in Hemodialysis Patients: Our Clinical Outcomes	Hüseyin Bilal Aydın
	7843 - Endovascular Intervention in Patients with Blunt Traumatic Thoracic Aortic Injury: Early results	Zakir İbrahim Kılınç
	7865 - Clinical Outcomes of Open Abdominal Surgery After Endovascular Abdominal Aneurysm Repair	Emine Turhan
	7923 - Effectiveness of Calcium Dobesilate Versus Rusci Radix et Rhizoma on Pain, Edema, and Quality of Life Following EVLA	Mehmet Ali Yeşiltaş
	8018 - Impact of Postoperative Anemia on the Risk of Cerebrovascular Events Following Carotico-Subclavian Bypass	Mehmet Emir Erol
	8063 - The Contribution of Vascular Surgery in The Treatment of Diabetic Foot Ulcers	Sabahattin Göksel
	8247 - Sac Remodeling after EVAR: The Paradoxical Impact of Diabetes Mellitus and Predictors of Reintervention	Ali Demiray
	8395 - Pseudoaneurysm Following Percutaneous Interventions: Incidence, Clinical Characteristics, and Treatment Approaches	Fatih Kızılyel
	8428 - One-Year Primary Patency After Drug-Coated Balloon Angioplasty in Patients With Critical Limb Ischemia: A Single-Center Experience	Necdet Kılıçaslan

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09:45 - 10:15	**KAHVE MOLASI**	
10:15 - 11:30	**SÖZLÜ BİLDİRİ OTURUMU - 11** **Oturum Başkanları:** Ferşat Kolbakır, Hasan Berat Cihan, Ömer Faruk Çiçek	
	8445 - One-Year Outcomes of Chocolate Balloon Angioplasty in Peripheral Artery Disease: A Single-Center Retrospective Study	Mehmet Kürşat Kurt
	8477 - Lymphorrhea: The Silent Threat of Minimally Invasive Cardiac Surgery	Tayfun Özdem
	8483 - Behind the Knee or at the Groin? A Comparative Analysis of Popliteal and Femoral Access in Peripheral Interventions	Emre Can Mermi
	8610 - Mid-Term Clinical Outcomes in Patients Treated with CO_2-Assisted EVAR	Mehmet Emir Erol
	8715 - A New Approach to Telangiectasias and Feeder Veins, Experiences of A New Clinic That Has Just Started CLaCS treatment	Hayri Fahri Atlı
	8718 - Kronik Venöz Yetmezlikte Endovenöz Radyofrekans Ablasyon ve Cerrahi Ligasyon/Stripping'in Karşılaştırılması: Retrospektif Bir Çalışma	Zakir İbrahim Kılınç
	8719 - Analysis of Risk Factors in Patients with Abdominal Aortic Aneurysms Undergoing EVAR	Abdülselam Karaduman
	8726 - Third-Year Single Center Results of CERAB	Fatma Akça
	8786 - The Impact of "Flush" Endovenous Laser Ablation on Thromboembolic Risk: A Retrospective Safety Analysis	Zahir Kılıç
	8864 - Central Venous Stenosis in Hemodialysis Patients: Lessons from 10 Cases	Ahmet Ozan Koyuncu
13:00 - 13:45	**ÖĞLE YEMEĞİ**	
13:45 - 15:00	**SÖZLÜ BİLDİRİ OTURUMU - 12** **Oturum Başkanları:** Sefa Usta, Mehmet Salih Aydın, Ferhat Borulu	
	9026 - TEVAR for Blunt Thoracic Aortic Injury	Halil Demren
	9126 - Surgical versus Endovascular Management of Peripheral Artery Pseudoaneurysms: A Single-Center Experience	Sefer Kaya
	9141 - Our 10-Year Results of Ekos in Pulmonary Embolism	Turhan Yavuz
	9169 - Surgical Treatment of Popliteal Artery Aneurysms: A Single-Centre Experience	Arda Sezen
	9228 - Single center experience in endovascular aortic repair: review of technical and clinical aspects	Yasin Saraç
	9277 - Results of Two-Year Follow-Up of Patients Undergoing Endovascular and Surgical Revascularization for Peripheral Artery Disease	Mustafa Enes Bostankolu
	9432 - Kayseri City Hospital's Approach To Carotid Stenosis Patients	Mahmut Biçer
	9534 -The Impact of Diabetes on Procedural Success, Morbidity, and Mortality in Paients Undergoing Isolated Infrapopliteal Endovascular Intervention (Prospective Single Centre Study)	Ramazan Akal
	9545 - Management of Ascending Aortic Graft İnfections: Single-Center Experience	Anıl Güzeloğlu
	9549 - Single-Center Experience: Comparison of Outcomes Between Modified and Conventional Carotid Endarterectomy	Muhittin Zafer Samsa
15:00 - 15:30	**KAHVE MOLASI**	
16:15 - 17:30	**SÖZLÜ BİLDİRİ OTURUMU - 13** **Oturum Başkanları:** Şah Topçuoğlu, Sadi Kaplan, Anıl Özen	
	9562 - Retroperitoneal Aortobifemoral Bypass Surgery: Single-Center Experience Highlighting ICU and Hospital Stay Advantages	Hakan Güven
	9633 - Evaluation of Early Postoperative Lower Extremity Reperfusion With İschemia Modified Albumin İn Patients Undergoing Endovascular Or Open Surgical Procedure Due To Peripheral Artery Disease	Salih Tüysüz
	7522 - Protective Role of Vaccinium Myrtillus's (Bilberry) Antioxidant and Anti-Inflammatory Effects in Experimental Lower Limb Ischemia-Reperfusion Injury	Alperen Kutay Yıldırım
	7615 - Current Treatment Strategies for Nutcracker Syndrome	Muhammed Ali Durmuş
	8638 - The forgotten type of vascular entrapment:Nutcracker syndrome	Onur Işık
	9499 - Protective Effects of BPC 157 in Rats with Experimentally Induced Lower Extremity Ischemia-Reperfusion Injury	Alperen Kutay Yıldırım
	9555 - Non-Contrast Surgery and Acute Kidney Injury: Single-Center Results from Carotid Endarterectomy	Ali Demiray
	9570 - Anatomical Severity, Sarcopenia and Nutritional Status as Predictors of Amputation and Mortality After Lower Extremity Revascularization	Senanur Duymaz
	9661 - Relationship Between Foot Ulcer Development and Tibiale Artery Score in Diabetic Patients	Özlem Çakırköse
	9903 - Thrombotic Versus Embolic Upper Extremity Arterial Occlusion: A Comparative Analysis of Clinical Profiles, Treatments, and Outcomes	Pınar Köksal Coşkun
E POSTER ALANI		
11:00 - 11:45	**TARTIŞMALI POSTER BİLDİRİ OTURUMU - 3** **Oturum Başkanları:** Barış Akça, Mehmet Ali Yeşiltaş	
	7239 - Treatment of Massive Pulmonary Thrombosis After Recovery from COVID-19 Infection with the EkoSonic™ Endovascular System (EKOS®)	Uğur Çetingök
	7428 - Coil Embolization in a Warfarın-User With Mechanical Aortic Valve Following Vascular Trauma	Büşra Karakoç Kaplan
	7492 - Carotid Web Syndrome: An Overlooked Anatomical Risk in Ischemic Stroke Etiology	Hakan Güven
	7518 - Effect of Caffeic Acid Phenethyl Ester in Doxorubicin Induced Descending Aorta Damage	Olcay Murat Dişli
	7669 - Chronic Leg Ischemia Caused by Arterial Bullet Embolization	Furkan Burak Akyol
	7696 - Anterior Saphenous Vein Evaluation in Preventing Recurrence after Great Saphenous Vein Ablation: A Retrospective Analysis of 389 Patients	Mehmet Cahit Sarıcaoğlu
	8357 - Complex Aortic Reoperation with Hybrid Total Arch Replacement Following Previous Ascending Aortic Replacement for Type 1 Dissection: A Giant Aneurysm Case	Mert Arslangilay
	8433 - Closing the Gap: A Single-Center Comparison of Percutaneous vs. Surgical Femoral Cannulation In Minimally Invasive Mitral Valve Surgery	Alihan Baştan
	8631 - One Pathology, Multiple Sides: Midaortic Syndrome	Osman Eren Karpuzoğlu
	8767 - A Rare Longterm Complication of Evar: Detached Graft	Gökhan Kıral
	9088 - Creation of Arteriovenous Fistula By Forearm Endoscopic Basilic Vein Transposition	Mustafa Barış Kemahlı
	9492 - Aneurysm Formation After Femoropopliteal Bypass with Biological Grafts	Onur Emre Satılmış
	9722 - Endovascular Strategies for Long Total Iliac Artery Occlusions: Early Experience from a Newly Established Angiography Center	Tarık Taştekin
	9765 - First Hybrid Frozen Elephant Trunk (FET) Surgery in Turkey: A Case Presentation	Yusuf Çorbacıoğlu
	9811 - Post-TEVAR Aorto-Esophageal Fistula: A Rare Case Presenting with an Atypical Clinical Picture	Serkan Dönmez

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SALON 8

09:50 - 15:20	**MEDTRONİC**	
09:50 - 10:10	AV Fistül Tedavilerinde Endovascular Yöntemler	Cemal Kocaaslan
11:45 - 12:05	DVT Çözümlemelerinde Venöz Stent – Abre	Evren Özçınar
15:00 - 15:15	Chocolate PTA Balon Kateteri Tecrübeleri	Serkan Ketenciler

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ARTER SALONU (SALON 1)

09:30 - 10:30	**ZORLU VAKALAR / ZORLU KARARLAR** **Oturum Başkanları: Gökhan Özerdem, Şadan Yavuz, Ahmet Kırbaş**	
09:30 - 09:40	Tip-B Diseksiyon İşlemi Sırasında Retrograd Tip-A Diseksiyon Yönetimi	Mehmet Adnan Celkan
09:40 - 09:50	Abdominal Aort Anevrizması EVAR Tedavisinde İliak Arter Rüptürüne Yaklaşım	Ozan Karakişi
09:50 - 10:00	EVAR Sonrası Açık Operasyona Dönüş Kararı	Abdülkadir Bilgiç
10:00 - 10:10	Aorto İliak Okluziv Hastalıkta Kaplı Stentler Hayat Kurtarıcı mı?	Emre Selçuk
10:10 - 10:20	10 Fr Ve Üzeri Vasküler Girişimlerde Kapama Cihazı Seçimi Ve Sınır Ne Olmalı ?	Ertekin Utku Ünal
10:20 - 10:30	Endovasküler Girişim Yeri Kompliksyonunda Tedavi Yönetimi	Ferid Cereb
10:30 - 11:00	**KAHVE MOLASI**	
11:00 - 12:00	**KONGREDEN AKLIMIZDA KALANLAR** **Panelistler:** Nevzat Erdil, Erdal Aslım, Dilek Erer, Suat Doğancı, Emrah Uğuz, Ali Aycan Kavala	
12:00 - 12:30	**Akılcı İlaç Kullanımı** **Konuşmacı:** Emrah Uğuz	

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Oral Presentations

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OP-01

Comparison of endovenous radiofrequency ablation and surgical ligation/stripping in chronic venous insufficiency: A retrospective study

Zakir Ibrahim Kilinc, Necdet Kilincaslan, Hasan Toz

Bakırköy Dr. Sadi Konuk Eğitim ve Araştırma Hastanesi, İstanbul, Türkiye

Abstract

Aim: This study aimed to retrospectively compare the clinical outcomes of ultrasound-guided radiofrequency ablation (RFA) and standard surgical treatment in patients with great saphenous vein insufficiency over a 12-month follow-up period.

Material and Methods: One hundred patients with saphenofemoral junction and great saphenous vein reflux were analyzed retrospectively. Fifty underwent ultrasound-guided RFA (group A) and 50 standard surgery (group B). Clinical outcomes, complications, hospital stay and recurrence were evaluated.

Results: The primary occlusion rate was 91% in group A and 100% in group B. RFA was associated with fewer complications and shorter hospital stay. Recurrence rates at 12 months were similar between groups.

Conclusion: In this retrospective study, RFA was found to be an effective and safe treatment option for great saphenous vein insufficiency, offering advantages such as fewer complications and shorter hospital stay compared to standard surgery.

Keywords: Chronic venous insufficiency, RF ablation, stripping

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OP-02

Mid-term outcomes of endovascular repair of visceral artery aneurysms

Ilhan Ozgol, Serkan Ketenciler

İstanbul Prof. Dr. Cemil Taşcıoglu City Hospital, İstanbul, Türkiye

Abstract

Aim: Visceral aneurysms account for approximately 5% of all intra-abdominal aneurysms. They are most often detected incidentally. Although their natural course is usually silent, rupture carries a fatal risk. The underlying etiology is most commonly degenerative or atherosclerotic, but less frequently they may be associated with fibromuscular dysplasia, collagen vascular diseases, inflammatory conditions, or connective tissue disorders such as Ehlers-Danlos syndrome. This study aims to evaluate the mid-term outcomes of visceral artery aneurysms treated endovascularly, with particular emphasis on the techniques employed.

Material and Methods: Between 2018 and 2024, a total of 12 patients who underwent endovascular repair for visceral aneurysms at İstanbul Prof. Dr. Cemil Taşcıoglu City Hospital and had a minimum follow-up of 12 months were included in the study.

Results: Of the patients, 4 (33.3%) were male and 8 (66.6%) were female, with a mean age of 47 ± 12.9 years. Eight patients (75%) were asymptomatic and diagnosed incidentally, while 4 (25%) presented primarily with nonspecific abdominal pain. The most frequently detected aneurysm was splenic artery aneurysm in 8 patients (66.6%), followed by renal artery aneurysm in 4 patients (33.3%). Morphologically, 4 patients (33.3%) had true aneurysms, whereas 8 patients (66.6%) had pseudoaneurysms. All patients were treated using endovascular techniques (Table 1). Treatment techniques of the patients; coil embolization alone 5 (41.6%), covered stent alone 4 (33.3%), flow-diverting stent (16.6%) and coil + stent combination 1 (8.3%). The mean follow-up period was 24.08 ± 10.6 months. Technical success was 100%, and no in-hospital mortality occurred. However, one patient who underwent covered stent placement for a splenic artery aneurysm developed acute stent thrombosis on postoperative day 33 (secondary to discontinuation of antiplatelet therapy), requiring splenectomy. Another patient treated with a covered stent for a splenic artery aneurysm developed abdominal pain due to splenic infarctions, which did not necessitate further intervention.

Conclusion: Endovascular treatment of visceral aneurysms is technically feasible with high success rates. However, patients should be closely monitored due to the risk of procedure-related complications.

Keywords: Visceral artery aneurysm, endovascular repair, mid-term outcomes

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OP-03

Single-center surgical outcomes of arteriovenous fistula aneurysms in patients with chronic renal failure

Hasan Toz[1], Yusuf Kuserli[1], Gulsum TurkYilmaz[1], Saygin Turkyilmaz[2], Hakan Bahadir[3], Ali Aycan Kavala[1], Tarik Mehmetoglu[1]

[1]Bakırköy Dr. Sadi Konuk Training and Research Hospital, İstanbul, Türkiye
[2]Medipol Mega University Hospital, İstanbul, Türkiye
[3]Private Practice, İstanbul, Türkiye

Abstract

Aim: To evaluate the surgical outcomes of arteriovenous fistula (AVF) aneurysm repair in patients with chronic renal failure (CRF) at a single center.

Material and Methods: This retrospective study included 87 patients with CRF and AVF aneurysms treated between January 2012 and January 2023. Data on demographic characteristics, comorbid conditions, aneurysm characteristics, surgical procedures, and postoperative outcomes were collected. The primary endpoints were early (0-48 hours) and late (> 48 h) complications, in-hospital mortality, and length of hospital stay.

Results: The mean age of the participants was 53.2±10.1 years, with 60.9% being male. The mean AVF flow rate was 897.6±328.9 ml/min. True aneurysms constituted 83.9% of the cases, with a mean diameter of 41.9±3.9 mm. The most common types of AVF aneurysm were radiocephalic (69.0%) and brachiocephalic (25.3%). Surgical indications included hand edema/skin laceration (41.4%), asymptomatic (26.1%), and extremely threatening ischemia (7.2%). No mortality was observed, and the average length of hospital stay was 2.4±0.9 days. Early complications included hematoma (2.3%) and bleeding (2.3%), whereas late complications included stenosis/thrombosis (4.6%), high-flow (2.3%), arterial steal syndrome (2.3%), and infection (3.4%).

Conclusion: Surgical treatment of AVF aneurysms in patients with CRF is effective and safe, with low complication rates and no in-hospital mortality. The most common types of AVF aneurysm were radiocephalic and brachiocephalic. Further multicenter prospective studies are needed to validate these findings and explore their long-term outcomes.

Keywords: Arteriovenous fistula aneurysm, chronic renal failure, hemodialysis access, postoperative complications, surgical outcomes

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OP-04

Total endovascular aortic arch reconstruction with in situ fenestrations and temporary carotid–carotid bypass in a patient with prior ascending aortic graft: A case report

Metin Onur Beyaz[1], Sefer Kaya[1], Meryem Ridvanogullari[1], Iyad Fansa[1], Omer Tanyeli[2]

[1]Hatay Mustafa Kemal University, Faculty of Medicine, Department of Cardiovascular Surgery, Hatay, Türkiye
[2]Necmeddin Erbakan University, Faculty of Medicine, Department of Cardiovascular Surgery, Konya, Türkiye

Abstract

Aim: Reoperation for arch pathology in patients with a history of open heart surgery carries substantial peri operative risk; in carefully selected cases, endovascular strategies may offer a viable alternative to open repair

Material and Methods: A 55 year old man with hypertension presented with several days of non exertional dyspnea and chest–back pain. Vitals were stable; exam and basic tests were unremarkable. CT angiography demonstrated a dissection flap with aneurysmal degeneration at the inferior aortic arch adjacent to the supra aortic branches. The patient declined total arch replacement with ascending graft revision owing to high perceived risk.A single stage Zone 0 TEVAR was undertaken. The proximal seal was achieved inside the existing ascending Dacron graft. Continuous cerebral perfusion was provided via a temporary 8 mm PTFE right to left carotid–carotid crossover bypass. A parallel covered stent to the brachiocephalic artery was deployed simultaneously with the aortic endograft. In situ fenestrations were created for the left common carotid and left subclavian arteries, each relined with covered stents. The temporary bypass was removed and the carotids were repaired; flow was confirmed in the aorta and all 3 arch branches, completing a 3 branch reconstruction.

Results: The patient was extubated at 4 hours with no neurologic deficit; peripheral pulses were palpable. He was discharged from the ICU on post operative day 3.

Conclusion: In selected patients who are unsuitable for or decline open surgery, Zone 0 TEVAR anchored in a prior graft, combined with temporary carotid crossover and parallel/in situ branch revascularization, can enable 3 branch, single stage total arch reconstruction with favorable early outcomes. Structured imaging surveillance remains essential.

Keywords: Aortic arch, thoracic endovascular aortic repair, in situ fenestration, chimney/parallel stent, carotid–carotid bypass

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OP-05

Patients in the gray zone of carotid artery stenosis management

Abdurrahman Demirel[1], Alper Selim Kocaoglu[2], Yildirim Gultekin[2], Merih Ozbayburtlu[1], Ibrahim Cagri Kaya[2]

[1]Eskisehir City Hospital, Department of Cardiovascular Surgery, Eskişehir, Türkiye
[2]Health Science University Eskisehir Health Practice and Research Hospital, Department of Cardiovascular Surgery, Eskişehir, Türkiye

Abstract

Aim: The role and effect of perforator vein reflux treatment on ulcer healing is still a matter of debate. Current treatment options for perforator vein closure include the more popular minimally invasive techniques such as open perforator surgical repair, subfascial endoscopic perforator surgery (SEPS), radiofrequency ablation (RFA), and cyanoacrylate embolization (CE). The aim of this study was to investigate the effects of RFA and CE used in the treatment of perforating venous insufficiency.

Material and Methods: From January 2018 to June 2023, 118 patients with active ulcers (Clinical, Etiology, Anatomy, Physiology-CEAP clinical class 6) were retrospectively reviewed and analyzed with the leg. This retrospective analysis included 55 and 63 patients who underwent CE (group 1) and RFA (group 2), respectively. Duplex scanning for venous ulcer and perforating insufficiency was performed in all patients, and it was used to calculate healing rates at 1 month, 1 year and 2 year controls.

Results: At 1 month, occlusion rates were significantly lower for cyanoacrylate (CE) compared to 85% radiofrequency ablation (RFA) 90% (P=0.05). When the first and second year closure rates were examined, no significant difference was found as 81%, 76% in CE and 84% and 78% in RFA, respectively. However, deep vein thrombosis was detected in 5 patients who underwent CE (Group 1) and did not cause pulmonary embolism. Thrombus resolved in these patients after 3 months of anticoagulant therapy. All ulcers healed completely within three months.

Conclusion: Closure of perforator veins using minimally invasive techniques seems to predict wound healing with minimal morbidity. Radiofrequency ablation and cyanoacrylate embolization are increasingly used for perforating vein failure in venous ulcer healing. In terms of deep vein thrombosis, RFA is safer and one step ahead of CE.

Keywords: Perforator vein insufficiency, radiofrequency ablation, cyanoacrylate embolization

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OP-06

Endovascular treatment approaches and clinical follow-up in May-Thurner Syndrome

Vusal Mahmudov[1], Abdullah Dogan[1], Ahmet Arnaz[2]

[1]Department of Cardiovascular Surgery, Acibadem Bakirkoy Hospital, İstanbul, Türkiye
[2]Department of Cardiovascular Surgery, Acibadem Bakirkoy Hospital, Acibadem Mehmet Ali Aydinlar University, İstanbul, Türkiye

Abstract

Aim: May-Thurner syndrome (MTS), which develops due to compression of the left common iliac vein between the right common iliac artery and the spine, is an important pathology that affects venous circulation and increases the risk of deep vein thrombosis (DVT). This study aimed to retrospectively analyze the clinical characteristics, endovascular interventions, and outcomes of patients diagnosed with MTS in our institution.

Material and Methods: Between January 2020 and September 2025, the data of patients diagnosed with thrombotic and non-thrombotic iliac vein compression were retrospectively reviewed. Patient demographics, clinical presentation, radiologic findings, and details of endovascular treatment were collected. Clinical outcomes and follow-up results were also evaluated.

Results: A total of 46 patients (40 females, 6 males; mean age 44.3 years) were diagnosed with left iliac vein compression. The mean time from symptom onset to diagnosis was 40 months. Six patients presented with left-sided and one with acute right-sided lower extremity DVT, of whom six underwent stent implantation. Six patients developed post-thrombotic syndrome after a previous DVT, and two of them underwent stent implantation. Overall, iliac stent placement was performed in 15 patients, including seven with non-thrombotic iliac vein lesions. No perioperative complications or early stent thrombosis occurred. All patients received antiplatelet and anticoagulant therapy after stenting. In the RDUS evaluation, left deep venous insufficiency was observed in 6 patients (13.0%), right in 3 (6.5%), bilateral in 12 (26.0%), and no insufficiency in 25 patients (54.5%). The mean GSV diameter was 5.3 mm on the left and 4.6 mm on the right. Clinically, pain and edema were reported in 27 patients (58.7%) on the left, in 2 patients (4.3%) on the right, and bilaterally in 17 patients (37.0%).

Conclusion: In patients with limb swelling, venous claudication, or a history of DVT, MTS should be investigated using contrast-enhanced MR venography or CT venography. Timely diagnosis and appropriate therapeutic strategies are critical for improving long-term clinical outcomes.

Keywords: May-thurner syndrome, deep vein thrombosis, stents, post-thrombotic syndrome

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OP-07

Aterectomy

Ali Aghayev[1], Medine Sarac[1], Ceyran Gurcan[1], Mustafa Enes Bostankolu[1], Busra Karakoc Kaplan[1], Ahmet Erkam Cevik[1], Ilker Ince[1], Ayse Kabacalioglu[1], Levent Altinay[1]

[1]Ankara Etlik City Hospital Ankara, Türkiye

Abstract

Aim: To present the two-year follow-up results of patients who underwent atherectomy in our clinic due to peripheral artery disease (PAD).

Material and Methods: This study included patients who underwent endovascular procedures in our clinic due to PAD. Data were retrospectively collected from the hospital records. Preoperative demographic data, lesion lengths, and postoperative follow-up results of the patients were recorded. Postoperative follow-ups were performed with arterial Doppler USG during outpatient visits. CTA was performed in patients with detected occlusion and active clinical complaints. In cases where the atherosclerotic lesion could not be crossed with a guidewire and an endovascular procedure could not be performed, the procedure was considered unsuccessful.

Results: Between January 2023 and August 2025, 406 patients underwent peripheral vascular intervention due to PAD at the Cardiovascular Surgery Clinic of Ankara Etlik City Hospital, of which 29 (7.14%) underwent atherectomy. The demographic characteristics of the patients are summarized in Table 1. The postoperative data of the patients are summarized in Table 2.Table 1. Demographic CharacteristicsCharacteristicn (%)Gender (Male)20 (68.96)Age (mean ± SD)65.92 ± 11.42Smoking20 (68.96%) Coronary artery disease9 (31.03%)Diabetes16 (55.17%)Hypertension17 (58.62%)Table 2. Postoperative CharacteristicsCharacteristicn (%)Lesion length (mean ± SD)90.6 ±Follow-up period (mean ± SD, days)158 ±Drug-eluting PTA10 (34.48)Plain PTA12 (41.38) Drug-eluting + plain PTA4 (13.79)Atherectomy only3 (10.34)Atherectomy Locations•SFA: 11 (37.93%)•ATA: 3 (10.34%)•Popliteal artery: 3 (10.34%)•SFA + ATA: 2 (6.9%)•SFA + Popliteal artery: 2 (6.9%)•ATA + Peroneal artery: 2 (6.9%)•SFA + Popliteal + Peroneal artery: 1 (3.45%)•SFA + Peroneal artery: 3 (10.34%)•ATA + Popliteal artery: 1 (3.45%)•Femoropopliteal synthetic graft: 1 (3.25%).

Conclusion: We believe that atherectomy increases the success rate of endovascular treatment methods in patients with advanced calcified peripheral arterial lesions.

Keywords: Peripherial artery disease, aterectomy, percutaneous transluminal angioplasty

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OP-08

Retrograde popliteal access for endovascular treatment of iliac and femoral arterial lesions

Gulen Sezer Alptekin[1], Enes Pervane[1], Cihad Sen[1]

[1]Kütahya University of Health Sciences, Department of Cardiovascular Surgery, Kütahya, Türkiye

Abstract

Aim: The access site planning is considered to be one of the most important issues for a successful endovascular procedure. The challenging lesions and anatomies lead the clinicians to investigate for miscellaneous methods for access. Herein we aimed to search for our mid term results of endovascular approach via retrograde popliteal access which we have been utilizing for appropriate patients currently in our clinic.

Material and Methods: All patients were assessed with computed tomography angiography preoperatively between July 2022 and August 2025. The patients who were involved as Fontaine IIb, III and IV with documented lesions were enrolled for an endovascular first approach. The clinical status of the patient for a prone positioning and the popliteal arterial stump more than 10 cm which refers to a sheath length were evaluated for preference of retrograde popliteal access. Doppler ultrasonography was utilized for punction. All patients were followed with a gradual compression application cautiously after the procedure.

Results: Of all, 17 patients underwent 19 endovascular approaches via retrograde popliteal access. The mean follow up period was 12.6 +22.3 months. The lesions were isolated iliac in 6, iliac concomitant with femoral artery with/ without bifurcation lesion in 7, previous graft or stent occlusion in 6 cases. Bilateral access was performed in 3 patients resulting in kissing bifurcation iliac stenting, atherectomy was utilized in one with common femoral artery lesion and catheter directed thrombolysis was applied to 3 patients. One patient with previous superficial femoral artery stent required re-intervention in 12 months. There have been swelling in cruris in 3 patients and all regressed with elevation. No mortality, amputation, rupture or pseudoaneurysm wa sobserved during the follow-up period.

Conclusion: Popliteal access may be considered as a safe and feasible novel method for endovascular approaches particularly for iliac and proximal superficial and common femoral artery lesions with bifurcation involvement. This approach enables to perform many endovascular procedures at present such as stent insertion, atherectomy and thrombolytic therapy besides avoiding the contralateral cross procedures which maylead to catastrophic complications in case.

Keywords: Endovascular, retrograde popliteal access, lower extremity artery disease, popliteal access

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OP-09

Relationship between the walking impairment questionnaire and ankle–brachial index in patients with peripheral arterial disease

Omer Faruk Rahman[1], Emre Pinar[2], Tunay Kurtoglu[2]

[1]İzmir Bakırçay University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye
[2]Aydın Adnan Menderes University, Faculty of Medicine, Department of Cardiovascular Surgery, Aydın, Türkiye

Abstract

Aim: The Walking Impairment Questionnaire (WIQ) is a self-reported tool that evaluates walking distance, walking speed, and stair-climbing ability in patients with peripheral arterial disease (PAD). Its validity and reliability have been demonstrated in the Turkish population. Previous studies have examined the relationship between the ankle–brachial index (ABI) and WIQ by categorically comparing patients with and without PAD. This study aimed to assess the relationship between ABI and the total and subscale scores of the WIQ exclusively in patients diagnosed with PAD who presented with claudication but without rest pain.

Material and Methods: Between February 2022 and December 2024, patients who presented to the outpatient clinic and were diagnosed with PAD using contrast-enhanced computed tomography were included in the study. After obtaining informed consent, the WIQ was administered. Demographic data and ABI measurements were retrieved from electronic medical records. Patients with limb prostheses or rest pain were excluded. The relationship between WIQ scores and ABI was analyzed using correlation analysis, with statistical significance set at $p < 0.05$.

Results: A total of 53 patients were initially evaluated; 12 patients were excluded due to invalid ABI measurements, leaving 41 patients for analysis. The mean age was 64.66 ± 11.03 years, and 95.1% (n=39) were male. The smoking rate was 90.2%. The most common comorbidities were diabetes mellitus (53.7%) and hyperlipidemia (70.7%). Contralateral PAD was present in 41.5% (n=17) of patients. The median Rutherford category was 2. The mean ABI was 0.58 ± 0.20.The median scores for the WIQ subscales were 5.18 for distance, 21.74 for speed, and 9.72 for stairs, with a median total score of 13.04. Correlation analysis revealed a significant positive relationship between ABI and the distance subscale (r=0.315, p=0.045). No significant correlation was found between ABI and the other subscales or the total score.

Conclusion: This study demonstrated that, among PAD patients without rest pain, the WIQ distance subscale is positively correlated with ABI. This finding suggests that the distance subscale may serve as a practical tool for functional assessment in primary care. However, larger multicenter studies are warranted to further clarify the diagnostic and prognostic value of the WIQ in PAD.

Keywords: Peripheral arterial disease, intermittent claudication, ankle brachial index, walking impairment questionnaire

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OP-010

Our central venous port catheter applications

Hakan Koksal[1]

[1]İzmir Bayraklı City Hospital, İzmir, Türkiye

Abstract

Aim: Central venous port catheters are highly beneficial for patients requiring long-term parenteral therapy and for oncology patients. In this study, we aimed to present our clinic's experience with port catheter applications.

Material and Methods: Our hospital's local operating room records were reviewed to investigate central venous port catheter placement procedures performed by our clinic between July 2024 and June 2025. All procedures were performed with monitoring. Local anesthesia or a combination of local anesthesia and sedation was used as the anesthesia method. An 8F port catheter was used as the catheter.

Results: Between July 2024 and June 2025, our clinic underwent central venous port catheter placement in 457 patients. The patients ranged in age from 24 to 77 years, with 211 females (46.2%) and 246 males (53.8%). The mean age was 54.1 years. The right jugular vein was used in 419 patients (91.6%), the left jugular vein in 38 patients (8.4%), the right subclavian vein in 3 patients, and the right femoral vein in 1 patient. Bradycardia and hypotension due to vagal inhibition developed in 21 patients (4.5%), and these patients were treated with atropine and ephedrine. Pneumothorax developed in 7 patients (1.5%), and tube thoracostomy was performed in 6 patients. One patient's pneumothorax was minimal and was followed up.

Conclusion: Central venous port catheters are of great importance for patients who require long-term parenteral therapy, patients who need frequent blood draws, cancer patients who will receive chemotherapy, and patients for whom vascular access is difficult to find.

Keywords: port catheter, vascular access, result

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OP-011

Co2 angiography

Ali Aghayev, Medine Sarac, Ceylan Gurcan, Mustafa Enes Bostankolu, Busra Karakoc Kaplan, Ahmet Erkam Cevik, Mehmet Emir Erol, Hasan Karayaka, Levent Altinay

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Two-Year Follow-Up Results of Patients Undergoing Intervention with Carbon Dioxide Angiography Due to Peripheral Arterial DiseaseIntroductionCarbon dioxide angiography (CA) stands out in high-risk patient groups due to its low viscosity, low cost, and lack of risk for nephrotoxicity and allergic reactions.

Material and Methods: This study included patients with peripheral arterial disease who underwent procedures with CA in our clinic. Patient data were retrospectively obtained from the hospital records system. Preoperative demographic data, laboratory values, and postoperative follow-up results were recorded. In patients where the atherosclerotic vascular lesion could not be passed with a guidewire and no procedure could be performed, the endovascular procedure was considered unsuccessful.

Results: Between January 2023 and August 2025, a total of 406 peripheral vascular interventions were performed in our clinic, 27 of which (6.65%) were conducted using carbon dioxide angiography. The demographic data of the patients are summarized in Table 1.Variablen (%) / Mean ± SDAge (mean ± standard deviation) 67.6±8.4 Gender (Male) 23(85.2) Smoking 20(74.07) Coronary artery disease 18(66.67) Diabetes mellitus 17(62.96) Hypertension 20(74.07) Contrast agent allergy 2(7.41) Chronic kidney disease (non-dialysis) 25(92.59) Chronic renal failure (hemodialysis) 4 (14.8) Among the patients who underwent CA, 25 (92.59%) had impaired renal function tests, and 2(7.41%) had contrast agent allergy.The procedure was successful in 21 (77.8%) patients, while it failed in 6(22.2%) patients, 3(11.1%) of which were due to patient non-compliance. In 12 (44.4%) patients, a low dose of contrast agent was used. The average amount of contrast used was 7.71 ml.Pre-procedure mean biochemical values: Creatinine 1.83 mg/dl, Urea 69.1 mg/dl, eGFR 42.63 ml/min/1.73m². Post-procedure mean biochemical values: Creatinine 1.77 mg/dl, Urea 62.5 mg/dl, eGFR 47.6 ml/min/1.73m².

Conclusion: As an alternative imaging method, carbon dioxide angiography is successfully used in our clinic for the diagnosis and treatment of peripheral arterial diseases.

Keywords: Peripherial artery disease, carbon dioxite angiography, cronich kidney disease

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OP-012

Clinical outcomes and changes in quality of life following angiographic embolization in the treatment of pelvic congestion syndrome

Sefer Kaya, Metin Onur Beyaz, Iyad Fansa

Hatay Mustafa Kemal University, Hatay, Türkiye

Abstract

Aim: This study aimed to evaluate the clinical outcomes and changes in quality of life following angiographic embolization in the treatment of pelvic congestion syndrome (PCS).

Material and Methods: This prospective study was conducted at Hatay Mustafa Kemal University Health Practice and Research Hospital. A total of 67 female patients diagnosed with PCS Score is more than 5 with pelvic pain for more than 3 months (+3), vulvar veins (+2), Varicose veins in the lower extremities (+2), Increase of pain e.g. due to upright body position, sexual intercourse or menstruation (+1), One or more births given (+1), Disorders of the uterus, ovaries, bladder and intestine unlikely (+1) . and treated with angiographic embolization were included. Demographic data such as age, gravida, parity, and birth weight were recorded along with clinical features including family history, duration of pelvic pain, and presence of genital varices.

Results: The mean age of participants was 40.2±5.5 years, mean gravida was 2.9±0.8, mean parity was 2.7±0.8, and mean birth weight was 3528.2±422.0 grams. Family history was positive in 61.3% of patients, chronic pelvic pain (> 3 months) was present in 91.0%, and genital varices were observed in 57.5%. The mean preoperative Short Form 36(SF-36) score was 87.0±10.2, which significantly increased to 97.4±11.8 at the third postoperative month.

Conclusion: Angiographic embolization significantly improved quality of life in patients with PCS according to SF-36 score. Clinical variables such as pelvic pain duration and genital varices had limited impact on postoperative quality of life outcomes.

Keywords: Pelvic congestion syndrome, angiographic embolization, quality of life, short form 36, pelvic pain

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OP-013

Role of cardiovascular surgery in the management of femoral artery pseudoaneurysms following interventional procedures: A single-center experience

Huseyin Erdinc, Ismail Yurekli, Habib Cakir, Banu Bahriye Akdag, Ogulcan Ozdemir, Mustafa Simsek, Anil Sarioglu, Eda Ozan

İzmir City Hospital, İzmir, Türkiye

Abstract

Aim: Femoral artery pseudoaneurysm is a significant vascular complication that can occur following invasive cardiology procedures, with an incidence reported between 0.1% and 2.0% in the literature. Treatment modalities range from conservative management to surgical repair. Among these, percutaneous thrombin injection is one of the most commonly preferred methods, with high success rates (90–95%). However, in certain cases, surgical intervention may be required. This study aimed to retrospectively evaluate the role of the Cardiovascular Surgery team and the clinical outcomes in the management of pseudoaneurysms that developed in our institution.

Material and Methods: Between October 2023 and June 2025, a total of 48 patients who developed femoral pseudoaneurysm following a cardiology intervention were retrospectively analyzed. Patient type of procedure causing the pseudoaneurysm, pseudoaneurysm volume, and treatment modality were recorded. Pseudoaneurysms were categorized into conservative follow-up (spontaneous closure), percutaneous thrombin injection, surgical repair, or no intervention (observation until death). Pseudoaneurysm volumes were analyzed according to treatment groups.

Results: Of the 48 patients, 44 developed pseudoaneurysms after coronary angiography, 3 after transcatheter aortic valve implantation (TAVI), and 1 after ablation. The distribution of closure methods was as follows:- Spontaneous closure: 10 patients, median volume 4.06 cm^3 (0.50–14.10)- Thrombin injection: 31 patients, median volume 4.60 cm^3 (0.25–53.83)- Surgical repair: 6 patients, median volume 10.58 cm^3 (3.26–48.75)- No intervention, death: 1 patientPseudoaneurysm volumes were relatively lower in cases of spontaneous closure and thrombin injection, whereas larger volumes were observed in patients undergoing surgical repair. This suggests that pseudoaneurysm volume may be an important parameter influencing treatment decisions.

Conclusion: Thrombin injection is an effective and safe treatment modality for most patients with femoral pseudoaneurysms. However, in cases with large pseudoaneurysm volumes or complications, surgical intervention may be necessary. The median pseudoaneurysm volume in patients treated with thrombin injection was similar to those with spontaneous closure, suggesting that in small-volume and asymptomatic cases, conservative methods such as local compression or clinical observation may be considered before invasive treatment. Similar findings in the literature indicate that approximately 30–40% of small-volume pseudoaneurysms can close spontaneously, supporting the preference for conservative management as the first-line approach in these cases. Therefore, treatment algorithms should take into account both pseudoaneurysm volume and clinical presentation, and in low-volume lesions, less invasive methods may be an appropriate initial strategy.

Keywords: Femoral artery pseudoaneurysm, thrombin injection, surgical repair, conservative management

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OP-014

The impact of intraoperative fogarty balloon dilation on arteriovenous fistula (AVF) success: Clinical and functional outcomes

Guler Gulsen Ersoy

Kastamonu University, Department of Cardiovascular Surgery, Ağrı, Türkiye

Abstract

Aim: An effectively functioning arteriovenous fistula (AVF) is vital for end-stage renal disease patients. This study aims to evaluate the effects of Fogarty® balloon catheter dilation on creating an effectively functioning AVF.

Material and Methods: This retrospective cohort study was conducted at our clinic between 2020 and 2022. A total of 120 patients underwent arteriovenous fistula (AVF) creation with intraoperative Fogarty® balloon catheter dilation. Inclusion criteria required the presence of a palpable radial artery and superficial vein in the non-dominant arm, which was confirmed via Doppler ultrasound when necessary. The surgical approach involved side-to-side anastomosis between the radial artery and cephalic vein, followed by intraoperative dilation of the artery, vein, and anastomotic area using a Fogarty® balloon catheter after completion of the anastomosis.

Results: The study included 120 patients aged between 26 and 89 years, with a nearly equal gender distribution (57 females, 47.5%; and 63 males, 52.5%). The success rate of arteriovenous fistulas (AVFs) was evaluated according to the number of patients who were able to start adequate hemodialysis 6 weeks after surgery. At 6-week follow-up, 114 patients successfully started hemodialysis through these AVFs. In contrast, six patients could not obtain an adequate AVF for effective hemodialysis. As a result, the overall success rate was calculated as 95%.

Conclusion: This study suggests that intraoperative Fogarty balloon dilatation may contribute positively to the success rate of AVF creation. The findings indicate that this technique could be considered as a potential intraoperative strategy to optimize AVF outcomes, especially in patients with challenging vascular anatomy or a history of AVF failure.

Keywords: Hemodialysis, vascular, patency, catheter

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OP-015

4-Year long outcome with drug coated balloons for sfa lesions in patients with CLI: Comparison with conventional bypass surgery

Onur Selcuk Goksel[1], Cagla Canbay Sarilar[1], Bayar Cinar[2]

[1]İstanbul University, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]Medical Park Bahçelievler Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Endovascular treatment of symptomatic peripheral artery disease has gained widespread acceptance. The efficacy and safety of drug coated balloon angioplasty in the setting of critical limb ischemia in comparison to conventional surgery was previously demonstrated with favorable 1-year outcomes. Evidence however remains limited on the durability of the treatment in the longer term. We have compared our 4-year long results with DCB angioplasty to conventional bypass surgery in patients with critical limb ischemia.

Material and Methods: A total of 187 patients with CLI treated over a 6-year period between 2006 and 2012 by a single operative team constituted the study population. Between 2006 and 2009, all patients underwent conventional surgery. Between 2009 and 2012, the investigators adopted endovascular approach with the use of IN.PACT Admiral (Medtronic Inc., Santa Rosa, CA, USA). Data collection was achieved prospectively.

Results: A total 210 procedures (100 surgery, 110 endovascular) were preformed over a 6 year-period. A 72% of all bypasses were performed using saphenous vein grafts with above-knee bypass as the technique of choice in 80% of the cases. 6-mm DCB was used in 41% of the patients. Procedural success rates (98% vs 99%, NS) as well as clinical success rates (99% vs 99%, NS) and operative mortality (3.7% vs 2%, NS) was similar in both groups. Primary Patency for DCB vs. bypass groups 91.8% vs. 88.9%, respectively (P=0.31) at 12 months; 82.7% vs. 82.8% at 24 months, (P=0.28) and remained similar at 4 years (66.4% vs.68.8, P=0.08), respectively. Freedom from clinically-driven TLR at 12 months was similar in both groups (87.6% vs. 85%, P=0.33). The rates of clinically driven target lesion revascularization were 29.2% and 26.1% (P=0.07) for the DCB and surgery groups, respectively.

Conclusion: Drug coated balloon angioplasty yields comparable results to surgery in the setting of critical ischemia even at 4 years. The efficacy and the safety of DCB's in more complex lesions is to be investigated with randomized trials.

Keywords: Limb ischemia, peripheral arterial disease, drug coated balloons

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OP-016

Endovascular treatment in pelvic congestion syndrome: Visual analog scale outcomes and the prognostic role of multiparity

Busra Temel Yuksel[1], Yalcin Gunerhan[2], Elif Nur Bal[2], Omer Tanyeli[2], Yuksel Dereli[2], Niyazi Gormus[2]

[1]Ağrı Training and Research Hospital, Department of Cardiovascular Surgery, Ağrı, Türkiye
[2]Necmettin Erbakan University, Faculty of Medicine, Department of Cardiovascular Surgery, Konya, Türkiye

Abstract

Aim: Pelvic congestion syndrome (PCS) causes chronic pelvic pain in women, seen in 10–30% of cases, though its prevalence is unknown. Endovascular embolization is effective. Multiparity is a risk factor, but its impact on treatment success is unclear. This study aims to evaluate Visual Analog Scale (VAS) changes at 1 and 6 months post-endovascular treatment and the multiparity's prognostic role in women with PCS.

Material and Methods: From January 2023 to December 2024, 56 women with PCS were studied. Pregnant women, those with malignancy, or pelvic infections were excluded. Primary complaint was abdominal and/or leg pain lasting > 6 months. PCS was considered after relevant specialties excluded endometriosis, adenomyosis, fibroids, and gastrointestinal or urinary causes of pelvic pain. Diagnosis was based on clinical examination, Doppler ultrasound (ovarian vein > 6 mm with retrograde flow), and CT/MR venography. Age and parity were noted; ≥3 births defined multiparity. Lower extremity venous insufficiency was assessed by CEAP and VCSS. General anesthesia was used for PCS and varicose vein surgery, local anesthesia for PCS alone. Diagnosis was confirmed by selective ovarian venography, followed by unilateral coil or vascular plug embolization via right femoral access. Of 44 patients with venous insufficiency, 37 had venous surgery. VAS scores were measured preoperatively, at 1 and 6 months. Success was ≥50% VAS reduction. No complications occurred. Data came from hospital records and imaging.

Results: Mean patient age was 42.1±8.4 years, with an average parity of 2.75±0.81. Lower extremity venous insufficiency was present in 78.6% of patients. Preoperative VAS averaged 6.54±1.98, with significant improvement post-endovascular treatment ($p < 0.001$, Cohen's d:2.4). VAS scores were 1.82±1.80 at 1 month and 0.88±1.32 at 6 months ($p < 0.001$). Treatment success was 92.86% overall, 97.30% in multiparous group (n=37), and 84.21% in low-parity group (n=19), with no significant difference (p=0.426). No correlation was found between multiparity and 6-month VAS change (r=0.089, p=0.516). Mean VCSS was 4.00±2.15, with CEAP mostly C2-C3. Age, venous insufficiency, and VCSS were not associated with treatment success.

Conclusion: Endovascular treatment for PCS significantly reduced pain, with a 92.9% success rate, consistent with existing literature. Although multiparity is a risk factor, it did not influence treatment response, suggesting a predisposing rather than prognostic role. The lack of association with VCSS and venous insufficiency supports pelvic venous stasis as the main pain mechanism. Limitations include the retrospective design, small sample size, and absence of recurrence data. Larger prospective studies are warranted to confirm these findings.

Keywords: Pelvic congestion syndrome, multiparity, endovascular treatment, visual analog scale, ovarian vein

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OP-017

Does Enhanced Recovery After Surgery (ERAS) protocol following open abdominal aortic repair affect the risk of re-admission?

Kudret Atakan Tekin, Fatih Yigit, Baris Gurel, Mustafa Akbulut

Koşuyolu High Specialization Education And Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Enhanced Recovery After Surgery (ERAS) is a multimodal, multidisciplinary care and recovery protocol designed to facilitate faster recovery for patients undergoing surgery during the perioperative period. The aim of this study was to investigate whether ERAS protocols following open abdominal aortic aneurysm repair reduce re-admissions.

Material and Methods: This retrospective cohort study included consecutive adults who underwent isolated open aortic at our centre between February 2018 and July 2025. While a standard perioperative protocol was previously applied for open abdominal aortic repair surgery in our center, a program developed in accordance with the ERAS protocol has been implemented in recent years. The program allowed for early extubation, early mobilization, early analgesic/antiemetic therapy, early nasogastric tube removal, and early discharge. The study population was divided into the ERAS protocol (EP) group and the standard perioperative protocol (SP) group. The primary endpoint was length of intensive care unit (ICU) stay and hospital stay. The secondary endpoint was hospital re-admission for any cause within 30 days of discharge.

Results: A total of 74 patients were enrolled: 39 (%52.7) in the EP group and 35 in the SP group. The mean age of all patients was 67.4±7.9 years. The length of stay in the ICU was significantly shorter in the EP group (1 vs. 2 days, $p < 0.001$; respectively). The length of hospital stay was shorter in the EP group than in the control group, but there was no statistically significant difference between the groups (5 vs. 6 days, $p=0.132$; respectively). 30-day hospital re-admission rate was higher in the EP group compared to the control group, but this difference was not statistically significant (15% vs. 6%, $p=0.267$; respectively).

Conclusion: This program, based on the ERAS protocol, can be considered a safe and feasible method for open abdominal aortic repair compared to the standard method, reducing the length of intensive care unit and hospital stay. However, more comprehensive studies are needed.

Keywords: Open abdominal aortic repair, enhanced recovery after surgery, re-admission, hospital stay

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OP-018

Beyond the wavelength: Post-EVLA pain is similar between 980 nm and 1470 nm lasers

Ahmet Okyay

VIP Clinic Edirne - A Private Cardiovascular Clinic, Edirne, Türkiye

Abstract

Aim: In endovenous laser ablation (EVLA), the growing use of 1470 nm diode lasers is frequently predicated on the promise of better clinical results, especially less pain following surgery. Nevertheless, there is still a dearth of clinical data demonstrating a meaningful difference in patient comfort. In this study, patients between the ages of 28 and 65 who had EVLA for lower extremity varicose veins using either 980 nm or 1470 nm laser systems had their intraoperative and postoperative pain levels retrospectively compared.

Material and Methods: Sixty patients treated at one vascular surgery center between January and April 2025 had their charts reviewed retrospectively. A 980 nm diode laser was used to perform EVLA on Group A (n = 30), while a 1470 nm diode laser was used to treat Group B (n = 30). The patients were split into two equal groups. Tumor-inducing local anesthesia was used for all procedures, and postoperative care was standardized. Six time points were used to measure pain: intraoperative, postoperative day 1, week 1, week 2, month 1, and month 3. The Visual Analog Scale (VAS) was used for this purpose. Over the course of the observation period, no extra analgesics were permitted.

Results: Both groups demonstrated low overall pain scores throughout the follow-up. The mean VAS score intraoperatively was 2.1 ± 0.6 in Group A and 1.9 ± 0.5 in Group B ($p = 0.14$). On postoperative day 1, the average VAS scores were 2.6 ± 0.8 for Group A and 2.4 ± 0.7 for Group B ($p = 0.18$). At later intervals, including week 1 through month 3, pain levels continued to decline in both groups and remained statistically comparable (all $p > 0.05$). No patients required additional analgesia, and no major complications were observed. The findings support that EVLA, regardless of wavelength, is a well-tolerated and nearly painless procedure.

Conclusion: No statistically significant difference in intraoperative or postoperative pain was observed between 980 nm and 1470 nm EVLA procedures in this retrospective study ($p > 0.05$). Although marketing claims favored lasers with a wavelength of 1470 nm, both wavelengths produced similarly low pain and high patient tolerability. Consequently, it seems that the clinical superiority of 1470 nm in pain reduction has been exaggerated.

Keywords: Varicose veins, endovenous laser ablation, diode laser, postoperative pain, visual analog scale

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OP-019

Endovascular treatment in femoropopliteal artery Diseases

Serkan Unlu, Fehim Can Sevil, Mehmet Tort , Serkan Gume, Necip Becit

Afyonkarahisar Health Sciences University Hospital, Cardiovascular Surgery Clinic, Afyonkarahisar, Türkiye

Abstract

Aim: Femoropopliteal artery diseases are progressive and limb-threatening conditions. Treatment options include medical and surgical approaches. In addition to bypass surgery as a surgical method, endovascular treatment is also available. Endovascular treatment has proven itself in the literature and is widely used as a treatment option.

Material and Methods: Between January 2022 and August 2025, a total of 125 patients underwent peripheral vascular interventions in our clinic. Among these, 70 patients (58.33%) had femoropopliteal artery disease. The median age was 61 years (60.4 ± 23.5). Of these, 15 patients (21.5%) were female and 55 (78.5%) were male. Critical limb ischemia (ankle-brachial index < 0.5) was present in 18 patients (25.71%), while intermittent claudication under 100 meters was observed in 40 patients (57.14%). Chronic total occlusion of the superficial femoral artery was seen in 14 patients (20%). Additional iliac artery pathology causing ≥50% stenosis was present in 25 patients (35.71%), and below-knee arterial disease with ≥50% stenosis was detected in 24 patients (34.28%). Stent occlusion of the superficial femoral artery occurred in 3 patients (4.28%), and pseudoaneurysm in 1 patient (1.42%).

Results: Atherectomy was performed in 47 patients (67.14%), and balloon angioplasty for predilatation in 60 patients (85.70%). Drug-eluting stents were implanted in 55 patients (78.57%). In 3 patients (4.28%), stents were additionally placed due to flow-limiting dissection. The procedure was terminated when sufficient vascular lumen patency was achieved. Post-procedural follow-up showed significant improvement in symptoms and findings. Patients were treated with dual antiplatelet and hyperlipidemia therapy. During follow-up, hematoma not requiring surgery occurred in 2 patients (2.80%), and re-occlusion in 3 patients (4.28%). Femoropopliteal bypass surgery was successfully performed in two of the re-occlusion patients, while one patient (1.42%) underwent embolectomy and complete patency was achieved. Major amputation occurred in one patient (1.42%) during follow-up.

Conclusion: Endovascular treatment is a safe and effective option for the management of femoropopliteal artery disease. Due to its advantages in reducing morbidity and mortality, enabling early mobilization, improving limb survival, and increasing walking distance, endovascular interventions are preferred for both patients and surgeons.

Keywords: Atherectomy, balloon angioplasty, endovascular, femoropopliteal artery

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OP-020

The role of plaque morphology in postoperative complications after carotid endarterectomy: A Retrospective analysis

Busra Temel Yuksel[1], Niyazi Gormus[2], Omer Tanyeli[2], Yuksel Dereli[2], Yalcin Gunerhan[2], Hanefi Furkan Oz[2]

[1] Ağrı Training and Research Hospital, Ağrı, Türkiye
[2]Necmettin Erbakan University Meram Medical Faculty Hospital, Konya, Türkiye

Abstract

Aim: Carotid endarterectomy (CEA) effectively reduces stroke risk in patients with advanced or symptomatic carotid artery stenosis. However, perioperative complications impact treatment success. Literature suggests plaque morphology (stability, calcification, ulceration) influences complication rates. Thus, preoperative plaque assessment is vital for risk prediction and personalized treatment planning. This study investigates the association between preoperative plaque morphology and postoperative complications in CEA patients.

Material and Methods: This single-center, retrospective study included 176 patients aged ≥50 years undergoing CEA for carotid artery stenosis between January 2019 and December 2024. All procedures were performed under general anesthesia. Postoperatively, patients received dual antiplatelet therapy (acetylsalicylic acid 100 mg, clopidogrel 75 mg) and atorvastatin 20 mg. Demographics, comorbidities, preoperative neurological status, plaque morphology, and mortality were analyzed. Plaques were assessed using Doppler ultrasound, CT angiography, and, when necessary, conventional angiography, classified as calcified or non-calcified (thrombotic, ulcerative, or combined). Postoperative 30-day complications, including stroke, hematoma, major hemorrhage (> 300 mL), wound infection, cranial nerve injury (facial paralysis, hoarseness, dysphagia), and acute coronary syndrome (ACS), were recorded and categorized as neurological or non-neurological. One-year mortality data were reviewed.

Results: CEA was performed on 176 patients (mean age 69.6±8.1 years; 76.7% male). The 1-year mortality rate was 8.4%. The overall complication rate was 19.9%, with 7.4% neurological and 8.5% non-neurological complications. Non-neurological complications included hematoma (2.8%), major hemorrhage (1.7%), cranial nerve injury (3.4%), and ACS (0.6%). No significant association was found between comorbidities and complication rates ($p > 0.05$). Plaque morphology was the primary determinant of postoperative neurological complications: stroke rates were 15.5% in non-calcified plaques versus 3.4% in calcified plaques (OR, 5.24; $P = 0.004$). This difference remained significant after adjusting for age and symptomatic status. Increased age (OR 1.06; $p=0.002$) and preoperative symptomatic status ($p=0.001$) heightened complication risk.

Conclusion: This study demonstrates that plaque morphology is significantly associated with complication risk following CEA. Non-calcified plaques are linked to higher stroke incidence, consistent with existing literature. Non-neurological complications, such as hematoma and cranial nerve injuries, were procedure-related and typically resolved rapidly. Advanced age and symptomatic status were associated with increased complication risk, whereas no association was found with comorbidities. Our findings emphasize that detailed preoperative plaque evaluation is critical for predicting neurological complications and guiding treatment planning. These findings necessitate further validation through larger-scale, prospective national studies.

Keywords: Carotid endarterectomy, plaque morphology, postoperative complications

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OP-021

Prevalence of carotid stenosis in heart valve surgery and the role of routine screening

Osman Fehmi Beyazal

Basaksehir Cam and Sakura City Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to determine the prevalence of carotid stenosis (CS) in isolated coronary artery bypass grafting (CABG) and isolated heart valve surgery in our population, identify associated risk factors, and discuss the necessity of routine screening.

Material and Methods: Between 2020 and 2023, a total of 834 patients who had undergone isolated CABG and heart valve surgery were included in the study. The patients were divided into two groups: Group A (n=640, isolated CABG) and Group B (n=194, isolated valvular surgery). Subgroups were then created based on age. Group 1 (n=431, ≥ 60 years), Group 2 (n=371, 40-60 years) and Group 3 (n=32, < 40 years). Prevalence of CS, preoperative and postoperative outcomes were compared between groups.

Results: The prevalence of CS ≥mild, ≥moderate, and ≥severe were all higher in Group A than in Group B (150 (23.4%) vs. 20 (10.3%), p=0.001, 107 (16.7%) vs. 16 (8.2%), p=0.004, and 46 (7.2%) vs. 4 (2.1%), p=0.008, respectively). XCL and CPB times were longer in Group B than in Group A. No significant difference was found between the groups in terms of near infrared spectroscopy (NIRS) values before XCL and after XCL at 30 min. There was no significant difference in cerebrovascular accident (CVA) between Groups A and B (9 (1.4%) vs. 1 (0.5%), respectively, p=0.28). Total mortality rates were similar between the groups (Group A: 19 (3%) vs. Group B: 8 (4.1%), p=0.42). A positive significant association was found between advanced age (≥60 years), CABG, and CS (p < 0.001, OR=2.105 [95% CI, 1.390–3.186] and p=0.03, OR=1.899 [95% CI, 1.046–3.449], respectively. We did not found CS in any patients under the age of 40. In isolated heart valve surgery patients aged 60 and over, the prevalence of mild or higher CS was 15 (16.9%), moderate or higher CS was 13 (14.6%), and severe or higher CS was 2 (2.2%). In isolated valvular surgery patients aged 40-60, the prevalence of mild or above CS was 5 (6.3%), moderate or above CS was 3 (3.8%), and severe or above CS was 2 (2.5%).

Conclusion: We found a significant prevalence of CS in patients over the age of 60 undergoing isolated heart valve surgery. Screening for CS should be conducted in this patient population, especially in individuals over 60. Screening could also be beneficial for patients over 40, while routine screening is likely unnecessary for those under 40 without CVRFs.

Keywords: Carotid stenosis, prevalence, heart valve, stroke, screening

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OP-022

Evaluation of quality of life and psychosocial factors in haemodialysis patients: A medical student-led observational survey study

Emrah Ereren, Ilker Hasan Karal, Askin Kilic, Ilayda Danismaz

Samsun University Faculty of Medicine, Department of Cardiovascular Surgery, Samsun, Türkiye

Abstract

Aim: Haemodialysis sustains life in end-stage renal disease but often imposes considerable physical and psychological burdens. Fatigue, pain, and depressive symptoms are prevalent, yet their combined impact on health-related quality of life (HRQoL) is understudied in middle-income countries like Türkiye.

Material and Methods: We conducted a cross-sectional, medical student-led survey between January and April 2025 at Samsun University Training and Research Hospital. Using a structured questionnaire based on the culturally adapted SF-36, six trained second-year medical students interviewed 64 adult haemodialysis patients face-to-face during dialysis sessions. The survey explored fatigue, pain, mood, and their effects on daily function. Clinically relevant depressive symptoms were identified using predefined criteria. Data were analysed using chi-square tests; $p < 0.05$ was considered statistically significant.

Results: Of 64 participants (60.9% male), 75.0% were on a thrice-weekly dialysis schedule. Postdialysis fatigue was common: 29.7% reported severe, 35.9% moderate, and 25.0% mild fatigue. Twelve patients (18.8%) met criteria for clinically significant depressive mood. Pain affected 43.8% of patients, and 28.1% reported that pain significantly limited daily activities. Pain severity was strongly associated with functional limitation ($\chi^2 = 58.3$, $p < 0.001$). No significant associations were found between depressive symptoms and age, sex, or dialysis frequency. Depressed patients more frequently reported severe fatigue, though this did not reach statistical significance ($p = 0.309$).

Conclusion: Symptom burden, particularly pain and fatigue, was a stronger determinant of impaired HRQoL than demographic or treatment-related factors. Our findings highlight the need for routine psychosocial screening and integrated symptom management in haemodialysis care. Supervised medical students proved effective in administering PROMs, suggesting a scalable, low-cost model for enhancing patient-centered care, especially in resource-limited settings.

Keywords: Haemodialysis, quality of life, patient-reported outcome measures

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OP-023

Surgical and interventional treatment results in late thrombosis of autogenous arteriovenous fistulas

Zerrin Pulathan[1], Mehmet Ali Yuruk[1], Onur Bektas[2], Bunyamin Mutlu[1], Samed Uyan[1], Yunus Emre Gursoy[1]

[1]Karadeniz Technical University, Faculty of Medicine, Department of Cardiovascular Surgery, Trabzon, Türkiye
[2]Karadeniz Technical University, Faculty of Medicine, Department of Radiology, Trabzon, Türkiye

Abstract

Aim: The most crucial cause of fistula loss in late follow-up of arteriovenous fistulas in hemodialysis patients is thrombosis. The presence of stenotic or aneurysmatic areas usually causes fistula thrombosis. Treatment is endovascular, surgical, or a combination of both. This study aims to examine the results of late thrombosis treatments and compare them with the literature.

Material and Methods: Hospital records of 35 AVF thrombosis cases treated at our clinic between January 2022 and January 2025 were retrospectively examined from the clinical database. The cases were monitored with routine Doppler USG in the preoperative and postoperative periods, and with fistulogram in selected cases. Prosthetic graft thrombosis, early thrombosis that developed within the first 30 days, and cases that were taken more proximally in the wrist area were not included in the study. Data are presented as mean ± standard error, and the primary endpoint was the functional patency of the fistula. Primary patency rates were calculated at 6 months using the Kaplan-Meier method.

Results: Average age of thrombosed fistula patients: 53±8. 40% of the fistulas were in the wrist region (11 cases), 60% were in the antecubital region (21 cases). Endovascular treatment was performed in 5 of the wrist area fistulas, surgical treatment was performed in 6 cases, and combined treatment was performed in 3 cases. The etiology of most of these fistulas was an aneurysm. Endovascular treatment was performed in 4 of the antecubital fistulas, surgical treatment was performed in 10 cases, and combined treatment was performed in 7 cases. These patients most commonly had central stenosis (71%) and drainage vein stenosis, and all of them underwent balloon angioplasty. Thrombectomy, aneurysmoplasty, and patch plasty were the most commonly applied surgical methods. Fistula functionality was achieved in 57% of thrombosis in the wrist region and 85% in the antecubital region. The 6-month primary patency rates for functional fistulas were 75% in the wrist and 82% in the antecubital region.

Conclusion: Due to high functionality and patency rates, every effort should be made to refunctionalize the thrombosed fistula and preserve potential AVF sites for future access.

Keywords: Arteriovenous fistulas, thrombosis, surgery, endovascular

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OP-024

Outcomes of carotid endarterectomy in symptomatic octogenerians

Cagla Canbay Sarilar[1], Ilke Keles Selek[2], Birol Akdogan[1], Merve Dogru[1], Burak Tavsanoglu[1], Muhammed Emir Sahin[1], Onur Selcuk Goksel[1]

[1]İstanbul University Faculty of Medicine Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]Çorlu State Hospital Department of Cardiovascular Surgery, TekirDag, Türkiye

Abstract

Aim: Carotid endarterectomy is proved surgical intervention for reducing the risk of stroke in patients with carotid artery stenosis. Carotid endarterectomy decreases recurrent stroke rates in symptomatic patients. As the growing proportion of octogenarians in the ageing population may lead to a dramatic increase in cerebrovascular disease, preventing and treating stroke will be a serious challenge in the octogenarian. We reviewed the outcome of carotid endarterectomy in the octogenarians with or without contralateral carotid stenosis or occlusion and compared the results with a similar cohort of younger age.

Material and Methods: From 2005 to 2025, 440 CEAs were performed by a single surgical team on 360 patients were reviewed for early outcome with regards to hospital mortality and stroke.

Results: Among 360 patients, 78 patients were 80-years old or older (62 males; mean 82.5±9.3 years-old) underwent bilateral CEAs. Active smoking was significantly higher in the male octogenarians (6.2% vs. 21.8%, $P < 0.05$). Preoperative history of non-debilitating stroke was the most common scenario in all patients. Preoperative history of transient ischemic events was the most commonscenario in both octogenarians and the younger patients although preoperative transient neurologic defi cits were more prominent in the non-octogenarians (50% vs. 71%, $P < 0.05$). 12 patients were presented with ipsilateral retinal artery occlusion. Contralateral carotid artery occlusion was seen in a total of 40 patients. Only one patient in the octogenarian group experienced a lateralizing stroke due to ipsilateral CEA with contralateral occlusion group in contrast to 3 patients (lateralizing stroke in 3 patients, lacunar state in one patient) in the contralateral stenosis group.

Conclusion: Carotid endarterectomy, despite the general perception, is a viable option for patients with CCO or bilateral disease even in the octogenarian group.

Keywords: Symptomatic carotid artery stenosis, octogenarian, stroke

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OP-025

Surgical and endovascular approaches in peripheral artery dissections: A single-center clinical experience

Sefer Kaya, Meryem Ridvanogullari, Metin Onur Beyaz, Iyad Fansa

Hatay Mustafa Kemal University, Cardiovascular Surgery Clinic, Hatay, Türkiye

Abstract

Aim: Peripheral artery dissections are rare vascular pathologies with variable presentations. Evidence guiding their management remains limited. This study presents the original clinical experience of a single center, focusing on early and mid-term results of different treatment strategies.

Material and Methods: Between January 2018 and December 2024, 19 patients diagnosed with peripheral artery dissection were managed in our vascular surgery department. Demographics, comorbidities, risk factors, clinical features, and therapeutic approaches (endovascular, hybrid, open surgery, conservative) were systematically documented. Outcomes included technical success, perioperative complications, in-hospital mortality, primary patency, and limb salvage. The mean follow-up period was 12 months.

Results: The mean patient age was 58±8 years, with 63% male. Common risk factors were hypertension (68%), smoking (63%), hyperlipidemia (47%), and diabetes mellitus (42%). Presentations included acute limb ischemia (45%), claudication (30%), rest pain (15%), and asymptomatic cases (10%). Treatments consisted of endovascular procedures (n=11), hybrid interventions (n=6), open surgery (n=1), and conservative management (n=1). Technical success was achieved in 95% of revascularizations. Thirty-day complications occurred in 30% (10% major, 20% minor), with one in-hospital death (3%). At one year, primary patency was 90% and limb salvage 95%.

Conclusion: This single-center experience demonstrates that endovascular and hybrid approaches provide high technical success and favorable mid-term durability. Open surgery remains necessary for selected complex cases, while conservative follow-up may be safe in stable, asymptomatic patients. Our findings contribute original evidence supporting individualized management of peripheral artery dissections.

Keywords: Peripheral artery dissection, endovascular treatment, hybrid surgery, limb salvage, acute limb ischemia

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OP-026

Patency and infection outcomes of arteriovenous grafts in hemodialysis patients: A single-center experience with balloon angioplasty for salvage

Izatullah Jalalzai[1], Yasin Kilic[1], Ebubekir Sonmez[2], Muhammed Cagri Aykut[1], Bilgehan Erkut[1]

[1]Ataturk University Research Hospital, Erzurum, Türkiye
[2]Kütahya City Hospital, Kütahya, Türkiye

Abstract

Aim: Arteriovenous grafts (AVGs) are a vital option for hemodialysis (HD) access, particularly in patients with unsuitable anatomy for fistula creation. Although AVFs are typically preferred due to longer durability, AVGs are often necessary in older or comorbid patients. This study aimed to evaluate AVG patency, infection rates, and the role of balloon angioplasty for post-thrombosis salvage.

Material and Methods: We retrospectively evaluated 124 patients who underwent AVG placement at our center. Fifty-nine percent were male, 81% had diabetes mellitus, and the median age was 63 years. We assessed primary and secondary patency rates at 6 and 12 months. In 29 patients, balloon angioplasty was performed after AVG thrombosis to restore function. Infection rates and the need for reintervention were also recorded.

Results: The 6-month primary patency rate was 58%, and the 12-month primary patency rate was 44%. Secondary patency rates were 51% at 6 months and 39% at 12 months. Infection occurred in 10% of patients and was not significantly associated with age or diabetic status. Among the 29 patients who underwent balloon angioplasty after thrombosis, flow was successfully restored in 72%, contributing to extended graft usability. The mean number of interventions in this subgroup was 1.6 per year to maintain functional access.

Conclusion: This single-center study demonstrates that AVGs provide moderate patency and acceptable infection rates, even in a high-risk cohort. While primary patency remains limited, secondary patency can be extended through timely interventions such as balloon angioplasty. These findings support the continued use of AVGs in patients with poor vascular anatomy and highlight the importance of proactive access management strategies.

Keywords: Arteriovenous fistulas, thrombosis, graft patency

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OP-027

Surgical approach in vascular ring anomalies: Clinical presentation and long-term outcomes from a single-center experience of 41 patients

Mahsati Akhundova, Nigar Safarli, Emine Ece Pala, Osman Nuri Tuncer, Yuksel Atay

Ege University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Vascular ring anomalies are rare congenital malformations that cause compression of the trachea and esophagus, leading to significant respiratory and feeding difficulties. This study aims to evaluate the clinical and surgical characteristics, as well as early and long-term outcomes, of patients who underwent surgical treatment for vascular rings at our center over a 23-year period.

Material and Methods: Between 2002 and 2025, a total of 41 patients with a diagnosis of vascular ring anomaly underwent surgical repair at our institution. A retrospective review was performed, including data on demographics (age, sex, weight), presenting symptoms, diagnostic modalities, anatomical subtypes, surgical techniques, complications, and follow-up. Diagnosis was confirmed using high-resolution imaging such as computed tomography angiography (CTA), magnetic resonance imaging (MRI), and endoscopy. Surgical approach was selected based on the ring type.

Results: The median age at operation was 24 months (range: 1 months to 40 years), and median weight was 11 kg (range: 1.8–59 kg). The mean follow-up duration was 1,445 days (approximately 48.1 months, range: 8 days to 5,700 days [15.6 years]). Twenty-four patients (58.5%) were male. The most common presenting symptoms were dysphagia in 15 patients (36.6%), dyspnea in 13 (31.7%), both in 5 (12.2%), and recurrent respiratory tract infections in 2 (4.9%).Anatomical subtypes included aberrant right subclavian artery (ARSA) in 14 patients (34.1%), double aortic arch in 13 (31.7%), and right aortic arch with left ligamentum arteriosum in 5 (12.2%). Four patients (9.8%) had syndromic associations (Down syndrome, CHARGE, or VACTERL), and 9 patients (22%) had additional congenital heart defects (e.g., ASD, VSD, PDA). Two patients (4.9%) had previously undergone cardiac surgery, one patient (2.4%) had prior esophageal atresia repair. All patients underwent surgery under general anesthesia. The most common surgical approach was left thoracotomy. No early mortality occurred. Postoperative complications included chylothorax in 3 patients (7.3%), pneumothorax in 2 (4.9%), and reintubation in 2 (4.9%). In the late period, one patient with VACTERL syndrome died due to causes unrelated to the vascular ring. One patient had persistent dysphagia due to compression from a residual ARSA stump, confirmed by both CT and endoscopy; reoperation was offered but declined.

Conclusion: High-resolution imaging and endoscopic evaluation are essential in diagnosing vascular ring anomalies. Surgical correction provides symptomatic relief in the majority of cases. However, anatomical variants and syndromic associations may lead to late complications and mortality. Our findings are consistent with existing literature and confirm the high success rate of surgical intervention in this population.

Keywords: Vascular ring, double aortic arc, aberrant right subclavian artery, congenital heart disease

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OP-028

Endovascular treatment of heavily calcified femoropopliteal lesions using uprooter atherectomy catheter with or without angioplasty: Technical description and 12-month results

Ugur Cetingok, Mustafa Enes Bostankolu

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: To investigate 1-year outcomes after atherectomy using Uprooter atherectomy catheter in patients with heavily calcified femoropopliteal stenotic lesions.

Material and Methods: Fourty-seven patients (mean age, 67 ± 9 years; 36 men; TransAtlantic Inter-Society Consensus B–D disease; mean lesion length, 14 ± 7 cm with PAD (Rutherford score of 2-5) were included in this prospective study. In total, 61 calcified lesions of the superficial femoral artery (SFA) or popliteal artery were treated with the Uprooter atherectomy device. Thirty-six lesions were located in the proximal or distal 3 cm of the SFA or in the popliteal artery, which were considered segments exposed to high biomechanical stress. Patients were followed up after 9 and 18 months. Clinical reevaluation included measurement of ankle-brachial index (ABI) and duplex sonography.

Results: The primary success rate of the procedure was 47%. In 25 cases (53%), additional balloon angioplasty and in 7 cases (15%) stent implantation was necessary. Procedure-related embolization was not occurred.The mean Rutherford score decreased significantly from 4.0 ± 1.0 to 1.0 ± 1.2 after 12 months. At the same time, the ABI increased significantly from 0.6 ± 0.2 to 0.9 ± 0.4. The primary patency rate was 82% after 1 year.

Conclusion: Atherectomy might be considered as an alternative approach in patients with femoropopliteal arterial disease who have heavily calcified stenotic lesions, especially in areas where biomechanical stress is high and stent implantation is undesirable. If atherectomy fails to provide adequate patency, additional balloon angioplasty may be necessary. In a small number of cases, stent implantation may be necessary.Results after 1 year demonstrated a significant decrease of the Rutherford score, an increase in ABI, and a reasonable patency rate.

Keywords: Atherectomy, peripheral arterial stenosis, femoropopliteal disease

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OP-029

Evaluation of pulse wave analysis in early assessment of microvascular perfusion following vascular surgery

Mustafa Selcuk Atasoy

Bursa City Hospital, Bursa, Türkiye

Abstract

Aim: Microvascular perfusion issues post-vascular surgery (e.g., femoropopliteal bypass) occur in 10-20% of patients, impacting wound healing and graft success. Pulse wave analysis (PW), a non-invasive method measuring arterial stiffness (pulse wave velocity, PWV) and waveform characteristics, may enable early detection of perfusion deficits. We evaluated the diagnostic accuracy of PW analysis in assessing microvascular perfusion within 30 days post-vascular surgery and its prognostic value for clinical outcomes.

Material and Methods: In a single-center prospective cohort study, 42 patients (aged 35-80 years) undergoing elective vascular surgery (femoropopliteal/distal bypass) were enrolled. PW analysis (PWV, augmentation index) was performed using the ELCAT Vasolab 3000 device on postoperative days 1, 3, 7, and 30. Microvascular perfusion was confirmed via clinical assessment and intraoperative findings during revisions. Primary outcome: correlation of PW parameters with perfusion status (Pearson $r > 0.60$) and diagnostic performance (ROC AUC > 0.80). Secondary outcomes: wound healing time, graft patency, revision rates. Statistical analyses included t-tests, Cox regression, and Kaplan-Meier curves (R software).

Results: Microvascular perfusion impairment occurred in 6 patients (14.3%). PWV was significantly higher in the impaired group (12.2 ± 1.9 m/s vs. 8.1 ± 1.6 m/s, $p < 0.001$). At a PWV threshold of 10.5 m/s, sensitivity was 66.7%, specificity 86.1%, positive predictive value (PPV) 40.0%, negative predictive value (NPV) 93.9%, and AUC 0.831 (95% CI: 0.73-0.91). Augmentation index correlated strongly with wound healing score ($r=0.652$, $p < 0.001$). Wound healing time was shorter in the low PWV group (14.2 ± 3.1 vs. 17.8 ± 4.0 days, $p=0.04$). Graft patency was 98.0%; revision rate was 2.4%. PW measurements took ~5.2 minutes. PWV was an independent predictor of complications (HR 1.42, $p=0.03$).

Conclusion: PW analysis offers high specificity (86.1%) and moderate sensitivity (66.7%) with AUC 0.831 for early microvascular perfusion assessment post-vascular surgery, supporting its role as a non-invasive tool. Strong correlation with wound healing and high graft patency (98%) suggest clinical utility. Machine learning integration could further enhance accuracy.

Keywords: Vascular surgery, pulse wave analysis, pulse wave velocity, non-invasive monitoring, microvascular perfusion

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OP-030

The relationship between AV fistula patency and distal vein diameter

Bedirhan Bugra Bayici

Koşuyolu High Specialization Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Arteriovenous (AV) fistulas are considered the preferred vascular access for chronic hemodialysis because of their superior patency and lower complication rates compared with grafts or catheters. Nevertheless, early thrombosis and primary failure remain significant challenges.Preoperative vessel diameter, particularly venous size, has been consistently identified as a key determinant of fistula maturation. Guidelines such as KDOQI recommend a minimum venous diameter of 2.0 mm for optimal outcomes. However, clinical evidence across different populations remains variable, and the influence of comorbidities such as diabetes, hypertension, COPD, and smoking is not fully established.This study aimed to evaluate the relationship between distal vein diameter and AV fistula patency, and to explore the role of common comorbidities in fistula outcomes.

Material and Methods: This retrospective study included 302 patients who underwent distal arteriovenous (AV) fistula creation for hemodialysis access between 2013 and 2017. Demographic data and comorbidities (diabetes, hypertension, COPD, smoking) were obtained from medical records.Fistula patency at the second follow-up was classified as patent (1) or occluded (0) based on clinical and Doppler ultrasound findings. Distal vein diameter was measured preoperatively by duplex ultrasound.Group comparisons were performed using independent samples t-test for continuous variables and chi-square test for categorical variables. A p-value < 0.05 was considered statistically significant.

Results: The mean distal vein diameter was 2.38 ± 0.60 mm in the patent group (n=156) compared with 2.08 ± 0.63 mm in the occluded group (n=38), and this difference was statistically significant (p=0.013). Larger distal vein diameters were therefore associated with improved fistula patency.Regarding comorbidities, hypertension was significantly more prevalent among patients with patent fistulas (88.8% vs. 80.6%, p=0.017). In contrast, diabetes mellitus (59.2% vs. 47.4%), COPD (34.8% vs. 16.7%), and smoking history (45.7% vs. 33.3%) showed higher proportions in the patent group, but these differences did not reach statistical significance.

Conclusion: Distal vein diameter emerged as a significant predictor of arteriovenous fistula (AVF) patency, highlighting its importance in preoperative vascular assessment. Additionally, hypertension did not demonstrate a negative impact on fistula outcomes in our cohort. These findings suggest that while systemic comorbidities should not be overlooked, the anatomical characteristics of the access vein—particularly distal vein diameter—remain the most decisive factor in predicting AVF success. Therefore, preoperative vascular mapping should prioritize accurate measurement of vein caliber to optimize patient selection, improve surgical planning, and maximize long-term fistula patency and hemodialysis adequacy.

Keywords: Hemodialysis, chronic kidney failure, arteriovenous fistula

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OP-031

Open repair of popliteal aneurysms: A case series

Salih Anil Boga, Ismet Onur Taniyan, Ummu Nur Var, Mehmet Cahit Saricaoglu, Ahmet Kayan, Mizgin Tapkan, Evren Ozcinar, Sadik Eryilmaz, Levent Yazicioglu, Ahmet Ruchan Akar

Ankara University, Ankara, Türkiye

Abstract

Aim: Popliteal artery aneurysms (PAA) are the most common form of peripheral arterial aneurysms. At the time of diagnosis, most patients are asymptomatic. When symptoms occur, they are usually related to acute or chronic limb ischemia caused by distal embolization to the crural arteries. In such patients, rapid diagnosis and treatment are crucial to prevent limb loss. This study aimed to evaluate the short- and long-term outcomes of patients who underwent open surgical repair for popliteal artery aneurysms.

Material and Methods: Popliteal artery aneurysms (PAA) are the most common form of peripheral arterial aneurysms. At the time of diagnosis, most patients are asymptomatic. When symptoms occur, they are usually related to acute or chronic limb ischemia caused by distal embolization to the crural arteries. In such patients, rapid diagnosis and treatment are crucial to prevent limb loss. This study aimed to evaluate the short- and long-term outcomes of patients who underwent open surgical repair for popliteal artery aneurysms.

Results: A total of 14 patients (11 men, 2 women; mean age 68 ± 13 years) underwent open surgical repair of 14 popliteal artery aneurysms. At presentation, 28.5% of patients were asymptomatic, while 14.2% presented with ruptured aneurysms and signs of distal ischemia. Crural vessel assessment revealed that 81.8% of patients had at least one patent runoff artery in the affected limb. The mean aneurysm diameter was 37 ± 20 mm. In 28.5% of cases, the great saphenous vein was used as the conduit. Postoperatively, all patients had preserved distal flow beyond the anastomosis. At 12 months, primary graft patency was 90.9%, and no limb loss was observed.

Conclusion: Although PAA is relatively uncommon in the general population, untreated cases carry a high risk of severe complications, including limb-threatening ischemia. Early diagnosis and timely surgical intervention are therefore of great importance. Open repair remains a valuable treatment option in patients without prohibitive surgical risk, offering favorable short- and long-term outcomes.

Keywords: Popliteal artery aneurysms, open repair

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OP-032

Permanent hemodialysis catheters: Preference or necessity in chronic renal failure?

Demir Cetintas

Republic of Türkiye Ministry of Health, Bursa City Hospital, Bursa, Türkiye

Abstract

Aim: The aim of this study is to compile the permanent tunneled hemodialysis catheters applied in our clinic over a certain period, to investigate morbidity and mortality, and to determine whether this treatment method is mandatory or can be left to the preference of the patient or physician.

Material and Methods: We retrospectively reviewed 1678 patients who underwent permanent hemodialysis catheters (PHC) placement at our clinic between January 2020 and August 2025. The catheter insertion sites were the right internal jugular vein (IJV) in 76%, left IJV in 15%, left subclavian vein in 1%, and femoral vein in 8% of cases. The mean follow-up period was 14 months. All catheter placements were performed under ultrasound guidance.

Results: Early complications included arterial puncture in 220 cases (13.1%), hematoma in 751 cases (44.7%), bleeding in 235 cases (14%), catheter malposition in 50 cases (2.9%), pneumothorax in 7 cases (0.41%), hemothorax in 2 cases (0.11%), and early catheter thrombosis in 132 cases (7.8%). Late complications were catheter thrombosis in 281 cases (16.7%), infection in 332 cases (19.7%), and mechanical complications in 302 cases (18%).The use of PHCs is associated with high morbidity and mortality. Vascular access-related infections constitute the majority of hospitalizations in catheterized patients. Thrombosis and infection were the most common causes of morbidity in our cohort. Treatment of catheter-related infections included excision, insertion of a new catheter via an alternative access site during the same session, and appropriate antibiotic therapy targeting sepsis.The overall catheter-related thrombosis rate was calculated as 24% across all venous access routes. The right IJV was preferred primarily for treatment; if not feasible, a new tunnel was created in the same region, and catheter exchange was performed over a guidewire. Each new PHC insertion was associated with an increased risk of complications. Additionally, in approximately 15% of patients, the preference of the patient or dialysis center to use PHCs as the final treatment delayed AVF creation, leading to increased catheter-related complications.

Conclusion: The overall early or late complication rate in patients followed with PHCs was 71.4%. These findings suggest that permanent tunneled catheters are far from being a definitive solution in the treatment of patients, and persistence in creating the ideal access method, AVF, is essential.

Keywords: Hemodialysis, catheter, safety, dysfunction

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OP-033

Hybrid surgical and intraoperative endovascular strategies in critical limb-threatening ischemia without suitable percutaneous access

Ali Demiray, Sukru Serhat Kara, Yalcın Gunerhan, Omer Tanyeli, Niyazi Gormus

Necmettin Erbakan University, Faculty of Medicine, Konya, Türkiye

Abstract

Aim: In patients with critical limb-threatening ischemia (CLTI) where percutaneous vascular access is not feasible, treatment options are limited and prognosis is generally poor. Surgical revascularization alone often provides insufficient distal runoff, while isolated endovascular procedures may be technically restricted in this group. This study aimed to evaluate the feasibility and early outcomes of femoral bifurcation-focused surgery combined with intraoperative angiography-guided endovascular adjuncts.

Material and Methods: Between January 2023 and June 2025, sixteen consecutive patients presenting emergently with CLTI were retrospectively analyzed (9 females, 7 males; mean age 68.6 years). Comorbidities included diabetes mellitus in 13 (81%), hypertension in 9 (56%), and smoking history in 6 (37%). Inclusion criteria were Rutherford stage IV–VI and WIfI stage ≥3. Accordingly, 9 patients were stage IV, 6 stage V, and 1 stage VI; WIfI staging identified 10 patients at stage 3 and 6 at stage 4. Surgical interventions included CFA endarterectomy with patch plasty in 12 patients (75%) and limited plaque excision in 4, with additional DFA orifice procedures in 5 cases. Intraoperative angiography was performed in all patients to evaluate distal runoff. Adjunctive endovascular interventions included SFA and below-knee balloon angioplasty in all cases, along with atherectomy (n=8), embolectomy up to the popliteal level (n=8), and distal SFA stenting (n=2). Technical success was defined as contrast passage into the ankle through at least one patent infrapopliteal artery.

Results: Tissue loss was present in 7 patients (6 Rutherford V, 1 Rutherford VI), with concomitant infection in 2. Within the first 30 days, 1 major amputation occurred and 3 patients required reintervention. At the fourth month, 1 patient underwent reintervention due to stent occlusion, totaling 4 secondary procedures. During a mean follow-up of 14 months (range 2–30), there were 2 major and 4 minor amputations. Limb salvage was achieved in 14 of 16 patients (87.5%). No perioperative mortality was observed.

Conclusion: In CLTI patients without suitable percutaneous access, a hybrid approach combining femoral bifurcation surgery with intraoperative endovascular interventions appears technically feasible and safe. Although reintervention rates were notable, early limb salvage outcomes were encouraging. These preliminary findings are limited by the small sample size and heterogeneous follow-up, and should be confirmed in larger, comparative studies.

Keywords: Critical limb-threatening ischemia, hybrid surgery, endovascular therapy, limb salvage, common femoral endarterectomy

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OP-034

The effect of atherectomy before balloon angioplasty on patency rates in endovascular treatment of heavily calcified peripheral arterial lesions

Ugur Cetingok, Mustafa Enes Bostankolu

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: The role of atherectomy in treating heavily calcified femoropopliteal disease has been evolving rapidly. However, the clinical efficacy and safety of adjunctive atherectomy to percutaneous balloon angioplasty remains controversial. We sought to perform comparing atherectomy plus balloon angioplasty versus only balloon angioplasty in treating heavily calcified femoropopliteal disease.

Material and Methods: One hundred and fifty-eight patients (mean age, 62 ± 9 years; 116 men; TransAtlantic Inter-Society Consensus B–D disease; mean lesion length, 9 ± 7 cm with PAD (Rutherford score of 2-5) were included in this prospective study. In total, 202 calcified lesions of the superficial femoral artery (SFA) or popliteal artery were treated with only balloon angioplasty (111 patients), only atherectomy (22 patients), atherectomy plus balloon angioplasty (25 patients). Patients were followed up 9 and 36 months. Clinical reevaluation included measurement of ankle-brachial index (ABI) and duplex sonography. Target lesion revascularization (TLR), primary patency, and bailout stenting were the primary outcomes.

Results: Compared to only percutaneous balloon angioplasty, the atherectomy plus balloon angioplasty group showed a significant decrease in TLR and bailout stenting. There was no significant difference in the primary patency between the 3 groups. Procedure-related embolization was not occurred.

Conclusion: Compared with only percutaneous balloon angioplasty, the combination of atherectomy and balloon angioplasty showed no difference in TLR or primary patency. TLR and bailout stenting were reduced in the atherectomy plus balloon angioplasty group but there was no difference in primary patency. Further studies are needed to investigate the clinical outcomes of atherectomy combined with balloon angioplasty in femoropopliteal lesions compared with balloon angioplasty alone.

Keywords: Atherectomy, balloon angioplasty, femoropopliteal disease, heavily calcified lesions

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OP-035

In-vivo antioxidant effects of emodin on ischemia-reperfusion injury of rat's skeletal muscle

Dilara Yigit[1], Gursel Levent Oktar[1], Huseyin Demirtas[1], Abdullah Ozer[1], Aysegul Kucuk[2], Zeynep Yigman[3], Esra Tekin[4], Mustafa Arslan[4]

[1]Gazi University, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Kütahya Health Sciences University, Faculty of Medicine, Department of Physiology, Kütahya, Türkiye
[3]Gazi University, Faculty of Medicine, Department of Histology and Embryology, Ankara, Türkiye
[4]Gazi University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Ankara, Türkiye

Abstract

Aim: Skeletal muscle ischemia–reperfusion (I/R) injury is a clinically significant condition that often complicates vascular surgery, trauma, and acute arterial occlusion. It results in oxidative stress, inflammation, and irreversible structural damage. Emodin, a natural anthraquinone derivative, has previously demonstrated antioxidant, anti-inflammatory, and anti-apoptotic properties in various organs such as the liver, kidneys, heart, and nervous tissue. However, its efficacy in skeletal muscle I/R injury has not been clarified. This study aimed to investigate the in-vivo protective role of emodin in a rat model of skeletal muscle I/R injury using both biochemical and histopathological evaluations.

Material and Methods: Twenty-four male Wistar rats were randomly assigned to four groups (n=6 each): Sham, Emodin (20 mg/kg intraperitoneal), I/R, and I/R + Emodin. I/R was induced by infrarenal aortic clamping for 45 minutes followed by 120 minutes of reperfusion. Muscle tissues were analyzed for malondialdehyde (MDA) as a marker of lipid peroxidation, catalase (CAT), superoxide dismutase (SOD), and glutathione (GSH). Histopathological changes including muscle fiber disorganization, neutrophil infiltration, interstitial edema, and hemorrhage were graded semi-quantitatively by blinded observers.

Results: The I/R group exhibited significantly increased MDA levels and decreased CAT activity compared with controls ($p < 0.05$). Emodin administration markedly reduced MDA levels and provided partial recovery of CAT activity. No significant differences were observed in SOD or GSH. Histopathological analysis revealed that I/R caused severe myofiber degeneration, intense neutrophil infiltration, and prominent edema. In contrast, the I/R + Emodin group demonstrated attenuated but not fully normalized tissue injury scores. Hemorrhage did not differ significantly between groups. Overall injury scores were significantly reduced in the I/R + Emodin group compared with untreated I/R animals.

Conclusion: Emodin conferred partial protection against skeletal muscle I/R injury, primarily through inhibition of lipid peroxidation and partial restoration of catalase activity. While its effects were insufficient to fully prevent histological damage, these results represent the first in-vivo demonstration of emodin's protective action in skeletal muscle. Given the consistency of MDA reduction across organ systems, emodin may represent a promising candidate for tissue-specific antioxidant therapy. Further studies with extended reperfusion times, different dosing strategies, and molecular pathway analyses are warranted to clarify its pharmacodynamics and optimize its clinical potential.This study was supported by the Gazi University Scientific Research Projects Coordination Unit under project code TTU-2024-9231.

Keywords: Ischemia-reperfusion injury, emodin, skeletal muscle, oxidative stress

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OP-036

Pharmacomechanical thrombolysis and aspiration in relieving early symptoms of deep vein thrombosis: Our clinical results

Gencehan Kumtepe

Isparta City Hospital, Isparta, Türkiye

Abstract

Aim: This study aims to report the early outcomes of patients who underwent pharmacomechanical thrombolysis and aspiration, followed by thrombolytic infusion.

Material and Methods: Data from 16 patients who underwent pharmacomechanical thrombolysis and aspiration for acute ilio-femoral DVT in our clinic between March 2024 and August 2025 and subsequently received thrombolytic infusion were retrospectively analyzed. All patients underwent pharmacomechanical rheological thrombolysis and aspiration, and 0.15 mg/kg alteplase infusion was administered during the procedure. Patients were then admitted to the intensive care unit and received 1 mg/kg alteplase infusion. Direct oral anticoagulants were started on the first day after the procedure. Preoperative data, peroperative percutaneous transluminal angioplasty (PTA), and patients who developed postoperative bleeding and retrombosis were recorded.

Results: Eleven patients were female and five were male, and the mean age was 58.43 (21-82). Deep vein thrombosis was on the left side in 12 (75%) patients. PTA was performed in 4 (25%) patients during the procedure. No stents were placed in any patient. Regression in early symptoms (severe tension and pain) was detected in 13 (81%) patients. All patients developed hematuria after the procedure. No major bleeding occurred. Three patients developed a mild subcutaneous hematoma at the sheath site. No perioperative or postoperative pulmonary embolism was observed. No mortality was observed.

Conclusion: In conclusion, pharmacomechanical thrombolysis and aspiration to reduce thrombus burden in acute iliofemoral deep vein thrombosis is safely applied in the early stages and appears to help relieve patients' acute complaints.

Keywords: Pharmacomechanical thrombolysis, venous thromboembolism, thrombolytic infusion, proximal deep vein thrombosis

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OP-037

Clinical and injury-related predictors of mortality in acute vascular trauma: A retrospective cohort study

Anil Akbas

Batman Training and Research Hospital, Batman, Türkiye

Abstract

Aim: This study aimed to identify clinical, injury-related, and biochemical factors associated with mortality in patients with acute vascular trauma.

Material and Methods: This retrospective cohort study included 59 consecutive patients diagnosed with acute vascular trauma and treated at a tertiary care center. The primary outcome was in-hospital mortality (yes/no). Independent variables were age, injury site (hand or foot), type of injury (sharp object, blunt trauma, or firearm), type of vessel involved (artery, vein, or both), as well as lactate and C-reactive protein (CRP) levels. Logistic regression analysis was performed to calculate odds ratios (OR), 95% confidence intervals (CI), and p values. Model performance was evaluated by receiver operating characteristic (ROC) analysis and area under the curve (AUC).

Results: Firearm-related injuries (OR=2.1; p=0.04), foot injuries (OR=1.8; p=0.03), and combined arterial and venous involvement (OR=2.3; p=0.02) were independently associated with mortality. Elevated lactate level was a strong biochemical predictor of mortality (OR=1.57; p=0.002), whereas CRP did not show a significant correlation. Age and injury type other than firearm trauma demonstrated limited predictive value. The overall predictive accuracy of the model was 84%, with an AUC of 0.84, indicating good discriminative capacity.

Conclusion: This study demonstrates that firearm injuries, foot involvement, and combined arterial and venous damage are strong predictors of mortality in acute vascular trauma. Lactate level emerged as a reliable laboratory marker of adverse outcome. These findings underscore the importance of integrating both clinical and laboratory parameters in the early management of vascular trauma patients. Incorporating such predictors into trauma assessment protocols may facilitate timely interventions, optimize resource allocation, and improve patient survival. Future prospective studies with larger sample sizes are warranted to validate these results and to develop standardized mortality risk models in vascular trauma.

Keywords: Vascular trauma, mortality, lactate, risk factors, logistic regression

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OP-038

When one size doesn't fit all: Outcomes of personalized pneumatic compression therapy in lipedema

Ahmet Okyay

VIP Clinic A Private Cardiovascular Surgery Clinic, Edirne, Türkiye

Abstract

Aim: Lipedema is a chronic connective tissue disorder characterized by painful and disproportionate adipose tissue, primarily affecting women. Its resistance to diet, exercise, and bariatric interventions makes conservative treatment modalities particularly relevant. Compression therapy is widely recognized as a cornerstone of conservative management; however, standardized protocols remain limited, and many patients struggle with adherence due to discomfort or insufficient personalization. This study aimed to assess the outcomes of external pneumatic compression therapy in lipedema patients, where treatment pressure was individualized according to each patient's diastolic blood pressure.

Material and Methods: Between January 2025 and June 2025, a retrospective review was conducted of 28 female patients diagnosed with lipedema in a single vascular clinic. The mean age of participants was 42.5 ± 8.7 years.All patients underwent external pneumatic compression therapy delivered via medical-grade devices. Sessions were applied every other day, lasting 1 hour each. Compression pressure was personalized, set at 20 mmHg below the patient's diastolic blood pressure at the beginning of each session. Standard conservative care measures, including dietary advice and skin care, were maintained for all patients. Outcomes included pain levels assessed by the Visual Analog Scale (VAS), limb circumference measurements to monitor edema, and subjective reporting of mobility and functional activities. Assessments were conducted at baseline and at the 3-month follow-up.

Results: Treatment was well tolerated across the cohort. Pain levels improved significantly, with mean VAS scores declining from 6.1 ± 1.2 at baseline to 2.9 ± 0.9 after 3 months ($p < 0.01$). Edema reduction, defined as a measurable decrease in limb circumference, was achieved in 71% of patients. Among the 15 patients who initially reported mobility restrictions, 11 experienced functional improvement, enabling greater ease in walking and daily activities. Adherence to therapy was 75%, with the main barrier being discomfort associated with immobility during sessions. Three patients experienced mild, transient skin irritation,which resolved spontaneously. No major adverse events occurred.

Conclusion: External pneumatic compression therapy, individualized to diastolic blood pressure, represents a safe, practical, and effective conservative option for lipedema management.It provides substantial reductions in pain and edema while improving mobility and quality of life. Importantly, this tailored approach addresses one of the key challenges of compression therapy—patient comfort and adherence—by optimizing therapeutic pressure. These findings align with existing guidelines emphasizing compression in conservative lipedema care, while also contributing a novel individualized protocol. Larger prospective studies are warranted to validate these results and further establish diastolic pressure–based compression as a standard therapeutic option.

Keywords: Lipedema, external compression therapy, pneumatic compression device, pain management, edema reduction

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OP-039

Two-year follow-up results of below-the-knee distal bypass in patients with peripheral artery disease

Ahmet Erkam Cevik, Omer Cagatay Duman, Medine Sarac, Ceylan Gurcan, Busra Karakoc Kaplan, Ali Aghayev, Levent Altinay

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Below-the-knee peripheral arterial lesions are more challenging to treat and have a slightly lower success rate compared to above-the-knee lesions. These patients usually present with symptoms of critical ischemia such as non-healing chronic ulcers or rest pain in the distal lower extremity. In this study, we present the two-year follow-up results of patients who underwent distal bypass with open surgical techniques due to below-the-knee peripheral arterial disease (PAD) in our clinic.

Material and Methods: Patients who underwent open surgical treatment for below-the-knee PAD in our clinic were included in this study. Patient data were retrospectively reviewed from the hospital database. Preoperative demographic data, vascular imaging results, and medication history were recorded. Postoperative follow-ups were performed in the outpatient setting using Doppler ultrasonography (USG), and computed tomographic angiography (CTA) was obtained in cases where Doppler revealed occlusion. Postoperative imaging results, ulcer healing status (if present), and postoperative medication data were documented. All patients were operated on with open surgical techniques.

Results: Between August 2023 and September 2025, a total of 406 patients underwent surgery for peripheral artery disease at the Department of Cardiovascular Surgery, Etlik City Hospital. Of these, 12 patients (2.96%) who underwent distal bypass grafting were included in the study. The study group consists of 100% males with a mean age of 62.10 ± 14.26 years, where 11(91.6%) are smokers, 6(50%) have diabetes, 3 (25%) have hypertension, 5(41.6%) have coronary artery disease, and 4(33.3%) have hyperlipidemia. The mean follow-up duration was 150 ± 91.2 days, and the average length of hospital stay was 4 days. One patient required revision surgery due to bleeding. Autologous saphenous vein was used in 9 patients (75%), while ringed PTFE grafts were used in 3 patients (25%).Follow-up imaging revealed occlusion in 4 patients (33.3%), three of which were ringed PTFE grafts. The mean graft patency duration was calculated as 115 ± 97.5 days. Two patients (16.6%) underwent amputation during follow-up.

Conclusion: The overall incidence of below-the-knee lesions among all PAD patients was 17%, with endovascular interventions being the preferred treatment option. In our clinic, autologous saphenous vein grafts are prioritized for distal bypass due to their resistance to infection, lower bleeding risk, and higher patency rates. However, in patients with poor-quality or previously used saphenous veins, synthetic grafts were chosen.In PAD patients presenting with distal arterial disease, open surgical distal bypass is a successfully applied technique that improves patients' quality of life.

Keywords: Below-the-knee distal bypass, peripheral artery disease

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OP-040

Impact of underlying malignancy on complications after totally implantable venous access device placement

Mehmet Ali Yesiltas[1], Ahmet Ozan Koyuncu[2]

[1]Sisli Kolan International Hospital, İstanbul, Türkiye
[2]Şırnak State Hospital, Şırnak, Türkiye

Abstract

Aim: Totally implantable venous access devices (ports) are essential for patients requiring long-term chemotherapy. Although generally safe, complication rates may vary according to the underlying malignancy. Patients with hematological malignancies may be at higher risk for infection and early complications, whereas thrombosis is more frequently observed in patients with gastrointestinal cancers. This study aimed to evaluate port-related complications across different oncological diagnoses, with a particular focus on hematological malignancies.

Material and Methods: We retrospectively analyzed 83 patients who underwent port implantation between 2024 and 2025, including 37 with hematological malignancies and 46 with solid organ tumors. The oncology group consisted of 26 colon cancer, 6 gastric cancer, 4 pancreatic cancer, 2 vulvar cancer, and 3 rectal cancer patients. The hematology group included 1 Burkitt lymphoma, 5 follicular lymphoma, 11 diffuse large B-cell lymphoma, 7 CLL, 7 ALL, and 6 non-Hodgkin lymphoma cases. Ports were primarily placed in the left internal jugular vein; in one patient, the port extended to the right subclavian vein but was left in place due to active use. Early and late complications (infection, thrombosis, mechanical dysfunction, malposition) and port survival were recorded.

Results: All procedures were technically successful. Rates of port-related infection, thrombosis, mechanical dysfunction, and malposition will be calculated and compared among groups. One hematology patient developed early fat necrosis at the third week, necessitating port relocation from the right to the left internal jugular vein; subcutaneous medication had been administered. There was no difference in infection or port use in hematologic oncology or solid organ oncology.

Conclusion: Complication risks following port implantation vary according to the underlying malignancy. Patients with hematological cancers may have a higher risk of infection and early complications, whereas thrombosis is more frequent in gastrointestinal cancer patients. Careful monitoring, patient education, and early wound management are essential to minimize complications.

Keywords: Venous access devices, port, malignancies

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OP-041

Retrospective evaluation of surgical intervention results for dysfunctional arteriovenous fistulas created for hemodialysis: Analysis of 896 cases

Mehmet Aslan[1], Mahmut Kis[2], Ferruh Elbir[3], Ilker Dal[2]

[1]Alanya Education and Research Hospital, Antalya, Türkiye
[2]Hatay Education and Research Hospital, Hatay, Türkiye
[3]Mersin City Hospital, Mersin, Türkiye

Abstract

Aim: This study aims to retrospectively evaluate the efficacy of surgical interventions performed following functional loss of arteriovenous fistulas created for hemodialysis, due to complications such as aneurysm, venous stenosis, venous thrombosis, and arterial or venous aneurysms.

Material and Methods: A total of 896 patients who developed arteriovenous fistula dysfunction between 2015 and 2022 at Hatay Education and Research Hospital were retrospectively analyzed. Indications for surgical intervention included primary venous thrombosis, aneurysm, low flow rate (< 600 mL/min), infection, hemorrhage, arterial aneurysm, and cephalic vein obliteration. Ultrasound-guided catheter-directed mechanical thrombectomy was performed in 114 patients. Cases with arterial stenosis, arterial thrombosis, or graft thrombosis were excluded from the study.

Results: The most common reason for surgical intervention was thrombosis, which included patients who underwent surgical thrombectomy or catheter-directed thrombectomy for primary venous thrombosis. Among 542 patients operated for thrombosis, one-year patency was achieved in 437 cases, while 37 required reoperation. Of the 212 patients who underwent surgery due to low flow rate, patency was maintained in 169, and 46 required reoperation. Among 89 patients operated for infection and hemorrhage, patency was achieved in 46, with 13 requiring reoperation. In 39 patients operated for short-segment cephalic vein obliteration, patency was preserved in 38 cases with no need for reintervention. All four patients who underwent surgery for arterial aneurysm, achieved patency without requiring further surgical procedures.

Conclusion: Surgical interventions for arteriovenous fistula dysfunctions yield successful results with high patency rates, particularly in cases of primary venous thrombosis and low flow rates. Targeted approaches such as catheter-directed thrombectomy and venous aneurysmectomy contribute to prolonged fistula lifespan and continuity of hemodialysis. The findings indicate that, surgical revision has variable success rates in arteriovenous fistulas created for hemodialysis.

Keywords: Arteriovenous fistula, venous thrombosis, thrombectomy, aneurysm

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OP-042

Radiation exposure of cardiovascular surgeons during endovascular procedures: Risks and protective measures

Tarik Tastekin

İstanbul Prof. Dr. Cemil Taşcıoglu City Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: This study aimed to evaluate the radiation exposure of cardiovascular surgeons during peripheral endovascular interventions, to assess differences according to procedure type and lesion complexity, and to compare these findings with values reported in the literature.

Material and Methods: A retrospective single-center study was conducted on 26 consecutive cases performed by a single cardiovascular surgeon between January and July 2025. Recorded data included procedure type (balloon angioplasty, stent implantation, atherectomy), lesion characteristics (total vs partial occlusion), and anatomical site (aorta–iliac vs superficial femoral artery/below-the-knee). Fluoroscopy time (minutes) and radiation dose (mGy) were extracted from procedural records. Descriptive statistics were calculated, and subgroup comparisons were performed using the Mann–Whitney U test. Results were compared with published national and international series.

Results: The mean fluoroscopy time was 13.87 ± 12.15 minutes (median 9.05), and the mean radiation dose was 247.68 ± 687.19 mGy (median 44.9). Balloon angioplasty was performed in 92.3% of patients, atherectomy in 65.4%, and stent implantation in 53.8%. Patients who underwent iliac artery interventions were shown to have significantly higher radiation doses (p=0.016). Patients who underwent unilateral interventions were exposed to significantly higher radiation doses compared with those who underwent bilateral interventions (p=0.008). Lesion-based comparisons demonstrated that patients with total occlusions had longer fluoroscopy times (p=0.041). Furthermore, a moderate positive correlation was observed between fluoroscopy time and radiation dose during the interventions (r=0.426, p=0.03).

Conclusion: Cardiovascular surgeons are subject to measurable radiation exposure during peripheral endovascular interventions. Higher exposure levels were observed during complex procedures, particularly in cases of total occlusions and aorto–iliac interventions, and a positive correlation with fluoroscopy time was demonstrated. Although cumulative doses remained below current international occupational limits, repeated procedures over the course of a surgical career may represent a significant long-term risk. These findings highlight the importance of consistent use of protective equipment, procedure optimization, and regular monitoring of occupational doses. Strict adherence to the As Low As Reasonably Achievable (ALARA) principle is essential to safeguard both patient and operator safety.

Keywords: Radiation exposure, endovascular procedures, fluoroscopy, radiation protection

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OP-043

Two-year follow-up results of patients undergoing venous arterialization for critical limb ischemia

Ceylan Gurcan, Busra Karakoc Kaplan, , Mustafa Enes Bostankolu, Ali Aghayev, Ahmet Erkam Cevik, Medine Sarac, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Critical limb ischemia is a severe clinical condition characterized by absent distal arterial circulation, rest pain, and non-healing chronic ulcers, which may ultimately lead to major amputation. In patients where arterial revascularization is not feasible, venous arterialization can be applied as a last resort to promote wound healing and prevent limb loss. Reported success rates in the literature range between 40–60%.

Material and Methods: Between January 2023 and July 2025, venous arterialization was performed in 7 patients (mean age: 59.4 ± 16.6 years; 5 males) with no option for arterial revascularization. Comorbidities included diabetes mellitus (57.1%), hypertension (42.9%), hyperlipidemia (42.9%), and smoking (71.4%). Autologous saphenous vein was used as the graft, and distal anastomosis was performed to the posterior tibial vein using an open technique. In some cases, additional endovascular procedures were performed to improve proximal inflow

Results: During postoperative follow-up, 1 patient underwent major amputation, and 1 patient died due to non-vascular causes. Doppler measurements obtained from 3 of the remaining 5 patients showed a mean graft flow velocity of 45 ± 12 cm/s. Posterior tibial and superficial femoral artery flows were consistent with the literature, anterior tibial artery flow was elevated, while popliteal artery flow was borderline low. A mean graft flow velocity ≥40 cm/s indicated hemodynamically sufficient perfusion.

Conclusion: Limb salvage was achieved in 5 of 7 patients (71.4%). Doppler findings were consistent with the literature, and our results demonstrated higher success rates compared to the reported 40–60% in previous studies.Venous arterialization is a viable and effective option for patients with critical limb ischemia at high risk of limb loss when arterial revascularization is not possible.

Keywords: Venous arterialization, critical limb ischemia, limb salvage, revascularization

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OP-044

Early results of peripheral endovascular interventions performed in our clinic: A single center experience

Ersin Ozer[1], Kaptaniderya Tayfur[2], Melih Urkmez[2], Ferhat Borulu[2]

[1]Ordu University Education and Research Hospital, Ordu, Türkiye
[2]Ordu University Faculty of Medicine, Ordu, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is a significant cardiovascular condition with a high global prevalence that markedly increases the risk of major cardiovascular events and mortality. In addition to open surgical methods, minimally invasive endovascular treatments, particularly balloon angioplasty and atherectomy, have been increasingly preferred in recent years due to lower morbidity rates. This study aims to evaluate the early outcomes of peripheral endovascular interventions performed in the Department of Cardiovascular Surgery of Ordu University Education and Research Hospital, which began providing services approximately four years ago.

Material and Methods: In the Department of Cardiovascular Surgery of Ordu University Education and Research Hospital, which began providing services in December 2021, open vascular and endovascular procedures related to peripheral vascular surgery have been successfully performed alongside open heart surgery. Between December 13, 2021, and August 4, 2025, a total of 320 patients who underwent endovascular interventions for femoropopliteal and/or iliac artery lesions were retrospectively analyzed. Patient data, including age, sex, accompanying risk factors, and the type of endovascular procedures performed, were obtained from medical records. The procedures were classified as balloon angioplasty, atherectomy (combined with balloon angioplasty), and stent implantation (in cases where dissection occurred during the procedure). Following the intervention, patients routinely underwent early follow-up at the 1st and 6th months, during which vascular patency was assessed through clinical history, physical examination, Doppler ultrasonography, and computed tomography angiography.

Results: The mean age of the 320 patients included in the study was 64.8 ± 9.7 years (range: 28–92), and 72% were male. The accompanying risk factors were as follows: hypertension 62%, smoking history 58%, diabetes mellitus 36%, hyperlipidemia 41%, coronary artery disease 28%, and chronic renal failure 9%. Among the patients, 71.9% (n = 230) underwent balloon angioplasty alone. The anatomical distribution of the balloon angioplasties was as follows: SFA 40%, popliteal 10%, iliac 6.6%, and multivessel/other 15.3%. Atherectomy, combined with balloon angioplasty, was performed in 84 patients (26.3%). Due to dissection occurring during the procedure, stent implantation was required in 6 patients (1.9%).

Conclusion: Endovascular methods are increasingly preferred in the treatment of peripheral arterial disease because of their minimally invasive nature. In this study, balloon angioplasty was the most frequently performed procedure, particularly for SFA lesions. Our demographic data show that peripheral arterial disease occurs predominantly in elderly men, with smoking and hypertension as the main risk factors. These findings indicate that endovascular treatments can be safely performed and yield effective outcomes in clinical practice.

Keywords: Atherectomy, balloon angioplasty, endovascular intervention, peripheral artery disease

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OP-045

The role of intraoperative angiography and hybrid procedures in acute limb ischemia surgery

Fevzi Ayyildiz, Gizem Isik, Oznur Demirpence Duman

Afyonkarahisar State Hospital, Department of Cardiovascular Surgery, Afyonkarahisar, Türkiye

Abstract

Aim: Acute limb ischemia (ALI) may develop due to arterial embolism, advanced peripheral arterial disease and in situ thrombosis. Accordingly, hybrid procedures combining open and endovascular treatments have gained importance in ALI management. Considering preoperative imaging and the risk of reperfusion syndrome, patient selection for intraoperative angiography has become a critical issue. This study aimed to investigate the role of intraoperative angiography and hybrid procedures in the surgical treatment of ALI.

Material and Methods: Between November 2021 and July 2025, 26 consecutive patients who underwent emergency surgery for ALI were retrospectively reviewed. Three patients with acute upper limb ischemia and two patients with bilateral acute lower limb ischemia (ALLI) were excluded. Patient characteristics, operative data, and mortality rates were obtained from archive records. Patients were divided into two groups according to whether intraoperative angiography was performed. In our clinic, following femoral exploration and heparinization, the need for intraoperative angiography is evaluated during thrombus removal with a Fogarty catheter. In cases where the catheter cannot be advanced, resistance is encountered during manipulation, or inadequate backflow is observed, the arteriotomy is closed to restore reperfusion, after which a vascular sheath is inserted by direct puncture of the exposed artery and intraoperative angiography is performed. If a significant stenosis is detected, endovascular intervention is performed and the procedure is completed as a hybrid approach. All intraoperative imaging was performed with a mobile C-arm fluoroscopy unit.

Results: A total of 21 patients who underwent emergency surgery for ALLI were included. The mean age was 74.48±12.01 years; 52.4% were female and 47.6% male. All patients were categorized as Rutherford Class 2. Fourteen patients (66.6%) did not undergo intraoperative angiography, whereas seven (33.3%) did. Among those who underwent angiography, endovascular intervention was required in three patients (42.8%), resulting in hybrid procedures. No statistically significant differences were found between the groups regarding age, sex, hypertension, diabetes mellitus, smoking, coronary artery disease, or renal replacement therapy. Atrial fibrillation was detected in 64.3% of patients without angiography and in 14.3% with angiography (p=0.063). No fasciotomy or amputation was required postoperatively in either group. In-hospital mortality rates did not differ significantly between the groups(p=1.000).

Conclusion: In ALI surgery, the need for intraoperative angiography is determined on the table. Hybrid procedures can be performed using a mobile C-arm fluoroscopy unit when hybrid operating rooms are not available. With a larger patient cohort, the relationship between intraoperative angiography, hybrid interventions, and patient characteristics could be more clearly demonstrated.

Keywords: Angiography, ischemia, lower extremity, surgery

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OP-046

Evaluation of cyberchondria severity in patients who underwent surgery for chronic venous insufficiency

Ali Bolat, Mustafa Enes Bostankolu, Busra Karakoc Kaplan, Murat Koc, Ufuk Mungan

Ankara Etlik City Hospital, Cardiovascular Surgery Clinic, Ankara, Türkiye

Abstract

Aim: This study was planned to evaluate the level of cyberchondria in patients who underwent surgery for chronic venous insufficiency (CVI) and to investigate the relationship between this level and age, gender, clinical severity (CEAP classification), and the Venous Clinical Severity Score (VCSS).

Material and Methods: The study included 132 CVI patients (80 male, 52 female; mean age: 48.7 ± 12.9). The 12-item Cyberchondria Severity Scale (CSS-12) was administered to the patients. The scale consists of four subdimensions: Compulsion, Distress, Excessiveness, and Reassurance-Seeking. The patients' demographic data, CEAP classes, and VCSS scores were recorded.

Results: The mean total CSS-12 score of the patients was found to be 25.8 ± 9.9. Analysis of the subdimension scores revealed that the highest mean score was in the Excessiveness subdimension (7.9 ± 3.2), while the lowest was in the Compulsion subdimension (5.4 ± 2.8). A statistically significant, positive, and moderate correlation was found between the VCSS and the total CSS-12 score ($r=0.38$, $p=0.03$). This correlation was more pronounced particularly in the Compulsion ($r=0.41$, $p=0.02$) and Excessiveness ($r=0.39$, $p=0.02$) subdimensions. No significant difference was found in cyberchondria levels between genders ($p > 0.05$). When the patients were grouped into low (C2-C3) and high (C4-C6) CEAP classes, the total CSS-12 score was found to be statistically significantly higher in the high CEAP class group ($p=0.049$).

Conclusion: It is concluded that individuals at a more advanced clinical stage may tend to exhibit obsessive and excessive health information-seeking behavior online. Therefore, providing effective patient education and guiding these patients to reliable information sources are crucial to reduce their stress levels.

Keywords: Chronic venous insufficiency, cyberchondria, cyberchondria severity scale

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OP-047

Investigation of patients with recurrent varicose veins over the past five years in our clinic

Oktay Peker, Timucin Sabuncu, Elif Tuzdelen, Mertcan Dinccag, Alper Kocak, Ahmet Aydin, Mustafa Yilmaz

Department of faculty surgery № 2, Moscow, Russia

[1]Hacettepe University Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Recurrent varicose veins represent a common challenge in venous disease management. Despite advances in surgical and minimally invasive techniques, recurrence rates remain significant, often ranging between 20–30% depending on the method used and patient-related factors. We aimed to investigate the causes of recurrent varicose veins over the past five years in our patients and choose the optimum treatment modality.

Material and Methods: Fifty-three patients who underwent procedures for recurrent varicose veins in Hacettepe University Medical School Department of Cardiovascular Surgery between January 2021 and June 2025 were included in the study. Patients were evaluated with history and physical examination involving symptoms, venous severity. Usually color duplex ultrasound was performed in our Radiology Department.Endovenous thermal ablation (radiofrequency) is preferred due to reduced morbidity compared with surgery. Ultrasound-guided foam sclerotherapy also provides an effective option, especially for tortuous or residual tributaries. In selected cases, phlebectomy or redo high ligation may be required.

Results: The mean age of the patients was found to be 52.25 years. Color ultrasonography revealed recanalization in 27 patients, incompetent perforating veins in 24 patients, anterior accessory saphenous vein in 15 patients, and neovascularization in 4 patients. 39 patients had thermal ablation, 5 patients had nonthermal ablation(glue), 9 patients had ligation and striping history. Treatment included radiofrequency ablation in 36 patients, sclerotherapy in 24 patients, miniphlebectomy in 19 patients, ligation of the saphenous vein in 3 patients, and segmental stripping in 1 patient.

Conclusion: Long-term success depends not only on accurate treatment but also on lifestyle modification, compression therapy, and ongoing surveillance. Ultimately, recurrent varicose vein management requires a comprehensive, individualized strategy to optimize both functional outcomes and quality of life.

Keywords: Recurrence, venous insufficiency, rediofrequency ablation, miniphlebectomy, sclerotherapy

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OP-048

The role of the geriatric nutritional risk index in predicting mortality in peripheral artery disease patients with diabetic foot ulcers

Ahmet Cakallıoglu

Ankara City Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Peripheral artery disease (PAD), especially in the diabetic patient group, is an important health problem closely associated with mortality and morbidity. Diabetic foot ulcers increase not only the risk of limb loss but also the risk of mortality in these patients. In recent years, the negative effects of malnutrition on wound healing and immune response have attracted attention, and the prognostic significance of nutritional status has begun to be investigated. The Geriatric Nutritional Risk Index (GNRI) is used as a simple and reliable assessment tool in the elderly population. In this study, the role of the Geriatric Nutritional Risk Index in predicting mortality in patients with Peripheral Artery Disease who had diabetic foot ulcers was evaluated.

Material and Methods: A total of 168 patients who presented with diabetic foot ulcers and were diagnosed with Peripheral artery disease (PAD) between January 2020 and December 2023 were retrospectively analyzed. Patients with malignancy, active infection, immunosuppressive therapy, advanced liver or kidney failure were excluded. The Geriatric Nutritional Risk Index was calculated using serum albumin and body weight values. Patients were divided into three groups: The Geriatric Nutritional Risk Index (GNRI) ≥ 98 (low risk), 92–98 (moderate risk), and < 92 (high risk). The mean follow-up period was 24 ± 6 months, and the primary endpoint was all-cause mortality.Kaplan-Meier survival analysis and multivariate Cox regression were performed for statistical evaluation.

Results: The mean age of the patients was 71.4 ± 8.6 years, and 64% were male. The distribution of the Geriatric Nutritional Risk Index (GNRI) was: low risk 32%, moderate risk 41%, and high risk 27%. The two-year mortality rates were 18%, 34%, and 47%, respectively ($p < 0.001$). Kaplan-Meier analysis showed that survival was significantly reduced in the low Geriatric Nutritional Risk Index group. Multivariate Cox regression analysis identified Geriatric Nutritional Risk Index (GNRI) < 92 as an independent predictor of mortality.

Conclusion: The Geriatric Nutritional Risk Index (GNRI) is a strong biomarker for predicting mortality in patients with Peripheral Artery Disease (PAD) presenting with diabetic foot ulcers. Malnutrition may adversely affect wound healing and immune response, thereby increasing mortality risk. Our findings support the prognostic value of the Geriatric Nutritional Risk Index previously reported in heart failure and chronic kidney disease in the literature. These results indicate that clinicians should routinely perform nutritional assessment in diabetic foot patients. Early evaluation of nutritional status and implementation of appropriate supportive treatments may improve survival.

Keywords: Peripheral artery disease, diabetic foot, geriatric nutritional risk index

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OP-049

Comparison of inflammatory biomarkers between peripheral artery disease patients and healthy individuals

Ahmet Deniz Kaya[1], Ihsan Alur[2]

[1]S.B.Ü. Higher Specialization Training and Research Hospital, Bursa, Türkiye
[2]Private Doruk Hospital, Bursa, Türkiye

Abstract

Aim: This study aimed to compare inflammatory markers such as fibrinogen, C-reactive protein, and white blood cell countbetween patients with peripheral artery disease (PAD) and healthy individuals and investigate whether there is a relationship betweenlow-grade inflammation and PAD.

Material and Methods: This case-control study was conducted with 162 individuals (107 males, 55 females; mean age: 52.5±13.7 years; range, 24 to 87) at the Ağrı Training and Research Hospital between January 2023 to January 2024. Eighty-seven of the participants were diagnosed with PAD, and the remaining 75 were healthy individuals. Biochemical results of both groups were examined. Having symptoms resembling PAD and existence of known cardiovascular risk factors were the inclusion criteria for the patient group. The exclusion criteria were age under 18 years, morbi obesity, cancer, and chronic disease such as heart failure, kidney failure, liver failure, and rheumatologic disease. These patients were not included in the study since the inflammation present in chronic diseases increases inflammatory markers. Age, sex, DM, HT, dyslipidemia, smoking, fasting blood glucose level, creatinine, estimated glomerular filtration rate (eGFR), total cholesterol, low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, triglyceride, fibrinogen, and CRP levels and WBC, monocyte, lymphocyte, and platelet counts were recorded. Diabetes mellitus, HT, and dyslipidemia were diagnosed according to relevant guidelines.[8-10] A written informed consent was obtained from each patient. The study protocol wasapproved by the Ağrı Ibrahim Çeçen University, Ethics Committee (date: 29.03.2024, no: E-98270). The study was conducted in accordance with the principles of the Declaration of Helsinki. Peripheral artery disease was diagnosed by lower extremity color Doppler ultrasonography or computed tomography angiography.

Results: Comparing the groups, statistical significance ($p < 0.05$) was found according to sex, age, hypertension, diabetes mellitus, smoking,blood glucose levels, blood creatinine levels, estimated glomerular filtration rate, high-density lipoprotein, triglyceride, fibrinogen, whiteblood cell count, and C-reactive protein levels. In the group of PAD patients, male sex, hypertension, diabetes mellitus, and smoking weremore prevalent, along with higher levels of glucose, creatinine, triglyceride, fibrinogen, white blood cell count, and C-reactive protein.

Conclusion: Inflammation biomarkers, such as fibrinogen and C-reactive protein, were found to be significantly higher in the PAD group,indicating that the low-grade inflammation hypothesis may play a role in PAD. Large-scale, prospective, randomized controlled studieson this subject are needed.

Keywords: C-reactive protein, fibrinogen, low-grade inflammation, peripheral artery disease, white blood cells.

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OP-050

Combining flush EVLA with targeted AGSV ablation to reduce recurrence in varicose vein treatment

Ali Baran Budak[1], Alp Yildirim[2]

[1]Liv Hospital Ulus, Ankara, Türkiye
[2]Ankara Atatürk Sanaryum Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Endovenous laser ablation (EVLA) is a widely accepted treatment for great saphenous vein (GSV) or short saphenous vein (SSV) insufficiency. The Flush EVLA(fEVLA) technique, which applies ablation very close to the saphenofemoral junction (SFJ), has been shown to reduce proximal recurrence compared to standard approaches. However, in some cases, untreated accessory saphenous veins particularly the anterior great saphenous vein (AGSV) may remain patent espaccially using standat technique, leading to persistent symptoms or late recurrence. Selective cannulation and ablation of the AGSV may improve long-term outcomes. This study evaluates the efficacy and safety of combining fEVLA with targeted AGSV ablation.

Material and Methods: This retrospective study included 177 patients who underwent EVLA with a 1940-nm diode laser between 2020 and 2025 at two centres, performed by a single experienced surgeon. All refluxing veins (GSV, SSV, AGSV) were selectively cannulated and treated using the fEVLA technique. Postoperative outcomes, including endothermal heat-induced thrombosis (EHIT) , deep vein thrombosis (DVT) , local skin changes, and occlusion rates, were recorded. Data were analysed using SPSS version 27.0. Categorical variables were compared with the chi-square test; continuous variables were analysed using the Student's t-test or Mann–Whitney U test, as appropriate. A p-value < 0.05 was considered statistically significant.

Results: The most common vascular access pattern was dual access (35.6%), followed by triple access (26.6%). Median LEED values were 42 J/cm for GSV, 35 J/cm for SSV, and 28.7 J/cm for AGSV. All refluxing veins and AGSV were selectively cannulated and ablated.The most frequent complication was ecchymosis (0.5%), followed by hematoma (1.1%). No cases of EHIT, DVT, paresthesia, or thrombophlebitis were observed in this group. Duplex ultrasonography demonstrated 100% early occlusion. Over a mean follow-up of 28.3 ± 8.6 months, only one patient developed AGSV recanalization due to suboptimal energy delivery caused by device malfunction. No reflux was observed at the SFJ in any patient.

Conclusion: The combination of Flush EVLA with selective AGSV ablation using a 1940-nm laser appears to be a safe and effective strategy for improving anatomical success and minimising recurrence. Although fEVLA alone may be expected to eliminate AGSV reflux, anatomical variations can result in persistent insufficiency. Selective cannulation and ablation of the AGSV in such cases effectively prevent early and mid-term recurrence, as supported by the low complication rates, high early occlusion, and absence of SFJ reflux observed in this series.

Keywords: Flush endovenous laser ablation, anterior accessory saphenous vein, 1940-nm diode laser

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OP-051

Investigation of MiRNAs as potential biomarkers in the diagnosis of chronic venous insufficiency disease

Huseyin Demirtas[1], Duygu Deniz Usta Salimi[2], Mehmet Niyaz, Issa Aden Ahmed Shide[3], Gursel Levent Oktar[1], Asiye Ugras Dikmen[4], Hikmet Selcuk Gedik[1], Atiye Seda Yar Saglam[2]

[1]Gazi University, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Gazi University, Faculty of Medicine, Department of Medical Biology and Genetics, Ankara, Türkiye
[3]Amasya University, Faculty of Medicine, Department of Cardiovascular Surgery, Amasya, Türkiye
[4]Gazi University, Faculty of Medicine, Department of Public Health, Ankara, Türkiye

Abstract

Aim: Chronic venous insufficiency (CVI) is a common vascular disorder affecting the lower limbs. It is characterised by dysfunction of the venous valves, reflux, and tissue remodelling. MicroRNAs (miRNAs), which are small non-coding RNAs that regulate gene expression, have been associated with vascular pathophysiology and could be used as new diagnostic and prognostic biomarkers. The aim of this study was to investigate circulating miRNA expression profiles in CVI patients and to assess their potential clinical utility.

Material and Methods: A total of 51 patients with CVI (Clinical, Etiological, Anatomical, Pathophysiological [CEAP] classification C2–C3) and 51 healthy controls were enrolled in this study. Total RNA was extracted. and complementary DNA was synthesised using reverse transcription, and a quantitative real-time polymerase chain reaction (qPCR) was performed to evaluate the expression of 22 target miRNAs. Expression levels were normaliszed to U6 small nuclear RNA and calculated using the $2^{-\Delta\Delta Ct}$ method.

Results: Of the 22 miRNAs analyszed, 20 were significantly upregulated in CVI patients compared to controls, while miR-92a-3p and miR-202 showed no significant change. Notably, miR-21, miR-130a, and miR-155 demonstrated significant overexpression, suggesting their involvement in fibrotic, angiogenic, and inflammatory pathways central that are crucial for CVI pathogenesis. Demographic analysis revealed no significant differences in sex or body mass index between the two groups., However, age and smoking status differed, yet these factors did not explain the observed miRNA expression patterns, thereby highlighting their disease-specific nature.

Conclusion: This study demonstrates that circulating miRNAs are significantly dysregulated in chronic venous insufficiency, with miR-21, miR-130a, and miR-155 emerging as especially promising non-invasive biomarkers. Their distinct expression profiles suggest potential applications in the early diagnosis of the condition, monitoring its progression, evaluating prognosis, and developing personalised treatment strategies. While these findings are currently limited to CEAP C2–C3 stages, they provide a solid basis for larger, multicentre studies to validate and implement miRNA-based biomarkers in clinical practice. Acknowledgement: This study was supported by the Scientific Research Projects Coordination Unit of Gazi University under project number TGA-2023-8825.

Keywords: Chronic venous insufficiency, microRNAs, biomarkers, angiogenesis, inflammation

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OP-052

Best practice for sclerotherapy: Differences and strategies for hot and cold areas

Rukiye Derin Atabey

Van Yüzüncü Yıl University, Van, Türkiye

Abstract

Aim: Sclerotherapy is a widely applied technique for the treatment of telangiectasias, reticular veins, and varicose veins. However, the efficacy and safety profile of the procedure may vary depending on geographic, environmental, and cultural differences, often described as "hot" and "cold" regions. This study aimed to evaluate the practice variations and optimal strategies for maximizing outcomes in different settings.

Material and Methods: A comparative analysis was conducted between two cohorts of patients treated in a Middle East region ("hot area," n=84) and a Northern European region ("cold area," n=67) between January 2023 and June 2025. Standardized protocols of liquid and foam sclerotherapy using polidocanol were applied. Treatment outcomes, complication rates, and patient satisfaction were assessed and compared.

Results: In hot areas, the higher prevalence of telangiectasias and reticular veins was associated with increased demand for esthetic sclerotherapy. Hyperpigmentation was more frequently observed (12% vs. 6%), likely influenced by sun exposure and skin type. In contrast, in cold areas, patients presented with more advanced venous insufficiency requiring multiple sessions, with a slightly higher incidence of thrombophlebitis (5% vs. 2%). Overall patient satisfaction remained high in both groups (93% vs. 90%).

Conclusion: Regional differences significantly affect both indications and outcomes of sclerotherapy. In hot areas, preventive strategies such as sun protection and careful pigmentation management are essential, whereas in cold areas, strategies should focus on managing advanced venous disease and preventing thrombophlebitis. Tailoring treatment protocols to environmental and cultural contexts optimizes patient outcomes and satisfaction.

Keywords: Sclerotherapy, telangiectasia, reticular veins, patient satisfaction, regional differences

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OP-053

Retrograde Type A dissection as an independent predictor of mortality in patients undergoing total debranching

Mehmet Emir Erol, Medine Sarac, Sertan Ozyalcin, Ilker Ince, Emre Boysan[1]

Etlik City Hospital Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: The aim of our study is to identify the factors influencing postoperative mortality in patients undergoing total debranching.

Material and Methods: Between December 2022 and June 2025, 30 patients who underwent debranching were included in this study. The mean follow-up period was 19 ± 7.1 months. The patients had a mean age of 59.4 years (median, 61), with 16 (53.3%) males and 14 (46.6%) females. Preoperative demographic characteristics were similar across the cohort. Debranching was indicated for retrograde type A dissection in 7 patients (23.3%), acute type A dissection in 10 patients (33.3%), ascending and aortic arch aneurysms in 8 patients (26.6%), and type B dissection in 5 patients (16.6%). Rupture was observed in 9 patients (30%), including 5 of the 7 patients with retrograde type A dissection and 3 patients operated on for acute type A dissection.

Results: During the follow-up period, 10 patients (33.3%) died. Among these, 6 patients (60%) had undergone surgery for retrograde type A dissection, of whom 5 died intraoperatively. The remaining 4 patients presented with hemodynamic instability due to rupture. There were no significant differences in preoperative demographic characteristics among the patients. Among the 20 survivors, 2 experienced minor cerebrovascular events (CVEs) without any resulting sequelae.

Conclusion: One of the major challenges in proximal aortic surgery, regardless of the underlying indication, is ensuring adequate cerebral perfusion. Therefore, the interposition of the innominate and left carotid arteries is of vital importance, making debranching procedures critical for maintaining cerebral perfusion. The key findings of our study indicate that patients operated on for retrograde type A dissection have a poorer prognosis. Moreover, the presence of rupture was associated with increased mortality.

Keywords: Type A dissection, rupture, debranching

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OP-054

Results of local and general anesthesia in patients undergoing elective endovascular abdominal aortic aneurysm repair (EVAR): A single center experience

Hasan Toz[1], Yusuf Kuserli, Gulsum Turk Yilmaz[1], Saygın Turk Yilmaz[2], Ipek Bostancİ[1], Tugba Yucel Yenice[1], Ali Aycan Kavala[1], Tarik Can Kaya[1]

[1]Bakırköy Dr. Sadi Konuk Training and Research Hospital, İstanbul, Türkiye
[2]Medipol Mega University Hospital, İstanbul, Türkiye

Abstract

Aim: This study aimed to compare the perioperative and postoperative outcomes of elective endovascular abdominal aortic aneurysm repair (EVAR) under general anesthesia (GA) and local anesthesia (LA).

Material and Methods: This retrospective study included 96 patients who underwent elective EVAR at a single center. The patients were divided into two groups based on the type of anesthesia administered: 48 patients in the GA group and 48 patients in the LA group. Data on demographic characteristics, perioperative factors (such as operation time, blood loss, and contrast volume), and postoperative outcomes (including intensive care unit stay, hospital stay, and complications) were collected and compared between the two groups. The primary focus was on evaluating differences in the operative time, length of hospital stay, and incidence of postoperative complications between the GA and LA.

Results: The total operation time was shorter in the LA group (124.1±22.7 minutes) than in the GA group (136.2±35.3 minutes, p=0.041). The LA group also exhibited significantly lower blood loss (139.5±11.2 mL vs. 181.9±5.1 mL, $p < 0.001$) and used less contrast volume (86.9±19.6 mL vs. 123.0±26.6 mL, $p < 0.001$). Pulmonary complications were more frequent in the GA group (54.2% vs. 10.4%, $p < 0.001$), whereas the LA group had a higher percentage of patients with no complications (50.0% vs. 20.8%, p=0.003). The length of hospital stay was also shorter in the LA group (4.7±0.8 days) than in the GA group (8.7±4.4 days, $p < 0.001$).

Conclusion: LA during EVAR offers significant advantages over GA, including reduced pulmonary complications, shorter operation times, and a shorter length of hospital stay. These findings suggest that LA is a safer and more efficient option for patients undergoing EVAR, particularly those at high risk of pulmonary complications. Further prospective studies are necessary to confirm these results and to guide anesthesia management strategies for EVAR.

Keywords: Anesthesia, endovascular, endovascular abdominal aortic aneurysm repair (EVAR), general anesthesia, local anesthesia

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OP-055

Comparison of endovascular and open surgical repair in elderly patients with aortic aneurysms: A single center experience

Ozgur Coban

Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: This study aims to compare the perioperative outcomes, early mortality, and postoperative complication rates between endovascular aneurysm repair (EVAR) and open surgical repair (OSR) in elderly patients (≥75 years) treated for abdominal aortic aneurysms (AAA) at a single tertiary center.

Material and Methods: We retrospectively reviewed 54 patients aged 75 and older who underwent intervention for infrarenal AAA between January 2018 and May 2025. Patients were divided into two groups based on the surgical technique: Group 1 (n=32) underwent EVAR and Group 2 (n=22) underwent OSR. Demographic data, aneurysm diameter, operative time, ICU and hospital length of stay, intraoperative blood loss, postoperative complications, and 30-day mortality rates were analyzed. All patients had preoperative computed tomography angiography (CTA) for anatomical evaluation. Statistical significance was set at $p < 0.05$.

Results: The mean age was similar between groups (EVAR: 78.2±2.5 vs. OSR: 77.5±2.8 years; p=0.41). Mean aneurysm diameter was 59.8±8.1 mm in the EVAR group and 62.7±7.6 mm in the OSR group (p=0.12).EVAR was associated with significantly shorter operative time (98±17 vs. 159±29 min, $p < 0.001$), lower intraoperative blood loss (190±85 vs. 610±200 mL, $p < 0.001$), and shorter ICU stay (1.3±0.5 vs. 3.4±1.1 days, $p < 0.001$).Postoperative renal dysfunction was observed in 4 EVAR patients (12.5%) and 1 OSR patient (4.5%) (p=0.26).The 30-day mortality was 1/32 (3.1%) in the EVAR group and 2/22 (9.1%) in the OSR group (p=0.31). During 1-year follow-up, late endoleak occurred in 2 EVAR patients (6.3%).

Conclusion: In elderly patients with AAA, EVAR is associated with reduced perioperative morbidity, shorter recovery times, and acceptable early mortality compared to OSR. However, careful patient selection remains essential due to the potential for long-term complications such as endoleaks and reinterventions. While OSR may still be preferable in patients with unsuitable anatomy, EVAR offers a safe and effective alternative in high-risk elderly populations.

Keywords: Abdominal aortic aneurysm, aged, endovascular procedures, open surgical repair, treatment outcome

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OP-056

Current treatment strategies for nutcracker syndrome

Sabit Sarikaya, Ozge Altas, Muhammed Ali Durmus, Kamile Ozeren Topcu, Kaan Kirali

Koşuyolu High Specilization Education And Research Hospitall, İstanbul, Türkiye

Abstract

Aim: Nutcracker syndrome (NCS) is a rare condition that occurs as a result of compression of the left renal vein (LRV) between the aorta and the superior mesenteric artery. This study aimed to evaluate the outcomes of contemporary treatment approaches for NCS, including conservative management, surgical LRV transposition, and endovascular LRV stenting.

Material and Methods: Between July 2019 and June 2025, a total of 53 patients were analyzed. The conservative group (n=32) included young patients with mild symptoms who were managed without invasive interventions. The main approach in this group was to encourage weight gain. The surgical group (n=16) underwent LRV transposition, while the endovascular group (n=5) underwent LRV stenting.

Results: In the conservative group (mean age 24.4 years; 75% female) with a mean follow-up of 35.3 months, the main presenting symptoms were left flank pain (77%), hematuria (61%), and proteinuria (55%). During follow-up, 33% of patients showed improvement, 27% achieved complete resolution, and 40% experienced no change in symptoms. No statistically significant changes were observed in imaging parameters.In the invasive group, 21 patients (mean age 24 years; 95% female) underwent surgical or endovascular treatment. No major complications or mortality occurred. The main symptoms were flank pain (100%), proteinuria (82%), and hematuria (45%). After intervention, improvement was observed in flank pain (78%), proteinuria (55%), and hematuria (81%). Four patients required reintervention. The one-year primary patency rate was 86%, and the assisted primary patency rate was 100%.

Conclusion: Patient selection is critical in the management of NCS. Conservative therapy may contribute to spontaneous improvement in young patients with mild symptoms. Surgical and endovascular approaches provide safe and effective treatment options for patients with more significant or refractory symptoms. These findings indicate that both conservative and interventional strategies may be appropriate depending on patient characteristics.

Keywords: nutcracker syndrome, nutcracker phenomenon, vascular compression syndrome, left renal vein entrapment, pelvic congestion syndrome

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Surgical and endovascular approaches in extracranial carotid artery aneurysms: Single-center clinical outcomes

Sefer Kaya, Metin Onur Beyaz, Iyad Fansa

Hatay Mustafa Kemal University, Department of Cardiovascular Surgery, Hatay, Türkiye

Abstract

Aim: Extracranial carotid artery aneurysms (ECAA) are rare but clinically significant due to the risk of ischemic stroke, cranial nerve compression, or rupture. Both open surgical repair and endovascular techniques are used in their management, yet comparative data regarding long-term outcomes remain limited. This study aimed to retrospectively analyze patients followed at our center and compare the short- and mid-term results of surgical and endovascular approaches.

Material and Methods: Between January 2021 and June 2025, a retrospective review was conducted of 17 patients with ECAA treated at the Department of Cardiovascular Surgery, Hatay Mustafa Kemal University. Inclusion criteria were extracranial aneurysms involving the common carotid artery (CCA), carotid bifurcation, or cervical internal carotid artery (ICA). Demographics, risk factors, clinical presentation, anatomical features, and treatment strategies were recorded. Primary endpoints were 30-day stroke and all-cause mortality. Secondary endpoints included cranial nerve injury (open surgery), access site complication and endoleak (endovascular), primary patency at 12 months, and reintervention.

Results: The mean age was 68.0±8.9 years, and 76.5% of patients were male. The most common clinical presentation was asymptomatic detection (29.4%). Bifurcation aneurysms accounted for 23.5% of cases. Degenerative etiology was predominant (47.1%). Open surgical repair was performed in 7 patients (41.2%), endovascular treatment in 8 (47.1%), and 2 (11.8%) were managed conservatively. Within 30 days, stroke and mortality rates were both 5.9%. Cranial nerve injury occurred in 14.3% of open repairs. In the endovascular group, access site complications and endoleak were each observed in 12.5% of cases. At 12 months, primary patency was 85.7% for open surgery and 87.5% for endovascular treatment. Reintervention was required in 0% of open cases and 12.5% of endovascular procedures. The median follow-up was 25 months (IQR 17–36).

Conclusion: Our single-center retrospective analysis suggests that open surgical repair provides superior mid-term durability with higher patency and lower reintervention rates, whereas endovascular treatment remains a safe and feasible option in the short term, albeit with a risk of reintervention in the mid-term. Treatment selection should be individualized based on anatomical suitability, aneurysm morphology, and patient-specific risk factors.

Keywords: Carotid artery aneurysm, extracranial carotid artery aneurysm, internal carotid artery, endovascular treatment, open surgical repair

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OP-058

Dapagliflozin attenuates histopathological alterations in a rat model of abdominal aortic aneurysm

Mustafa Baris Kemahli[1], Cuneyt Narin[1], Tugra Gencpinar[2], Pinar Akokay[3], Cagatay Bilen[4], Serdar Bayrak[2], Kıvanc Metin[2]

[1]Acıbadem İzmir Kent Hospital, İzmir, Türkiye
[2]Dokuz Eylül University, İzmir, Türkiye
[3]İzmir Kavram Vocational School, İzmir, Türkiye
[4]Aydın Adnan Menderes University, Aydın, Türkiye

Abstract

Aim: Abdominal aortic aneurysm (AAA) is characterized by progressive dilatation and weakening of the aortic wall, leading to a high risk of rupture. Sodium-glucose cotransporter-2 (SGLT-2) inhibitors such as dapagliflozin have shown cardiovascular benefits beyond glycemic control. This study aimed to investigate the histopathological effects of dapagliflozin on a calcium phosphate–induced rat model of AAA.

Material and Methods: Twenty-one male Wistar albino rats (n=7 per group) were randomly assigned into three groups: sham-operated controls (Sham), AAA group (AAA), and AAA with dapagliflozin treatment (DAPA). AAA was induced by periaortic application of calcium phosphate. Dapagliflozin was administered at a dose of 1 mg/kg/day for 28 days. After sacrifice, abdominal aortic specimens were harvested for morphometric and histological analyses, including lumen area, lumen+intima area, lumen+intima+media area, elastin degradation, calcium deposition, and apoptotic markers (Caspase-3 and Caspase-9).

Results: AAA induction caused significant increases in lumen area, lumen+intima area, and lumen+intima+media area compared with sham. Dapagliflozin treatment significantly reduced these morphometric indices compared with AAA. Elastin degradation and calcium deposition were markedly increased in the AAA group but were significantly attenuated by dapagliflozin. Caspase-3 expression was elevated in the AAA group and significantly decreased with dapagliflozin treatment. Caspase-9 levels were also increased in AAA, but dapagliflozin only partially reduced this activity without a significant difference compared with AAA.

Conclusion: Dapagliflozin attenuated histopathological changes, including aortic dilatation, elastin degradation, calcium deposition, and apoptosis, in a rat model of AAA. These findings suggest a potential protective role of dapagliflozin in aneurysm progression, highlighting its therapeutic promise beyond glucose regulation.

Keywords: Abdominal aortic aneurysm, dapagliflozin, sodium-glucose transporter 2 inhibitors, apoptosis, calcium

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OP-059

Can the risk of persistent hyperpigmentation following sclerotherapy be predicted using systemic inflammatory markers?

Ali Bolat, Busra Karakoc Kaplan, Mustafa Enes Bostankolu, Murat Koc, Ufuk Mungan

Ankara Etlik City Hospital, Cardiovascular Surgery Clinic, Ankara, Türkiye

Abstract

Aim: Telangiectasias and reticular veins in the lower extremities, frequently observed in patients with chronic venous insufficiency, primarily pose a cosmetic concern. Hyperpigmentation, a complication of sclerotherapy used for treatment, is another issue that leads to cosmetic anxiety. This study was planned to predict at-risk patients using hematological indices that reflect the severity of systemic inflammatory response before the procedure.

Material and Methods: In this retrospective study, the potential relationship between persistent hyperpigmentation following sclerotherapy and hematological parameters/inflammatory indices was investigated in 166 CEAP-C1 class patients who underwent the procedure between December 2022 and June 2024. Records at 1, 3, 6 months, and 1 year after sclerotherapy were evaluated. Patients without persistent hyperpigmentation at the end of the 6th month were classified as Group 1, and those who developed persistent hyperpigmentation were classified as Group 2.

Results: In the first month, 36 patients had grade 2-3 hyperpigmentation covering 26-50% of the procedure area. At the third month, grade 2 hyperpigmentation covering 11-25% of the area was observed in 36 patients. At the sixth month, grade 2 hyperpigmentation covering 11-25% of the area was detected in 19 patients, and grade 1 hyperpigmentation covering < 10% of the area was found in 17 patients. At the end of one year, grade 2 hyperpigmentation in < 10% of the area was detected in 9 patients, and grade 1 hyperpigmentation in < 10% of the area was found in 6 patients. Analysis of complete blood count parameters revealed that Platelet Distribution Width (PDW) (p=0.017), Neutrophil-to-Lymphocyte Ratio (NLR) (p=0.002), Platelet-to-Lymphocyte Ratio (PLR) (p=0.048), and Systemic Immune-Inflammation Index (SII) (p=0.041) values were significantly higher in Group 2 patients with persistent hyperpigmentation compared to Group 1.

Conclusion: We suggest that simple, routine, and inexpensive complete blood count parameters such as PDW, NLR, PLR, and SII could be used as potential markers for the pre-procedural identification of patients at risk for developing persistent hyperpigmentation due to sclerotherapy. Further studies are needed to validate these findings in larger patient cohorts.

Keywords: Hyperpigmentation, sclerotherapy, systemic inflammatory markers

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OP-060

BioHybrid 3D vascular graft: Bioengineering-based development of biofunctional vascular implants

Can Soykan Sabur, Mervan Aydin, Osman Ture, Ebuzer Aydin

İstanbul Medeniyet University, Department of Cardiovascular Surgery, İstanbul, Türkiye
Prof.Dr.Suleyman Yalcin Hospital, İstanbul, Türkiye

Abstract

Aim: Synthetic vascular grafts remain widely used in cardiovascular surgery, however their long-term clinical performance is significantly limited due to poor patency, thrombogenicity, lack of endothelialization, and mechanical mismatch with native arteries. These shortcomings highlight the urgent need for novel vascular implants capable of combining mechanical durability with biological functionality. The aim of this project is to develop a fenestrated, multilayered, and bioactive biohybrid vascular graft that mimics the morphology and compliance of native arteries, supports endothelialization, and reduces thrombosis.

Material and Methods: A novel bio-ink was formulated using Albumin, cellulose nanocrystals (CNC), polyethylene glycol (PEG), and $CaCl_2$, crosslinked with EDC/NHS. Bio-ink viscosity optimized and extruded through a 3D bioprinter to fabricate a conical graft with proximal and distal diameters of 2.5 mm and 2.0 mm, respectively. The graft surface incorporated 25–30% hexagonal fenestrations to replicate arterial compliance and flow dynamics.The outer adventitia-like layer was constructed via electrospinning of bovine elastin dissolved in HFIP a under optimal parameters. Electrospun fibers, with optimal diameters between 500–800 nm, provided reinforcement, achieving a total coating thickness of 150–200 µm.For luminal functionality, a biologically active coating of NH_2–PEG–NH_2, Heparin, Angiopoietin-2, and Zn^{2+} was applied via perfusion/dipping and stabilized by $CaCl_2$ and EDC/NHS crosslinking. Target thickness was 15–20 µm, designed to endure 4–6 weeks under shear stress.Mechanical testing included burst pressure, tensile strength, compliance, and suture retention. Morphology was analyzed by SEM, while FTIR confirmed crosslinking and coating integrity. Biological assays involved HUVEC culture, MTT/Live-Dead viability assays, and platelet adhesion under blood incubation.

Results: Expected findings reveals that the bio-ink supported stable and reproducible 3D printing with high fidelity to CAD models. Electrospun coatings improved elasticity and mechanical stability without compromising graft compliance. The bioactive luminal coating was durable under perfusion and successfully promoted endothelial adhesion and viability. Compared with PTFE and Dacron, prototypes exhibited improved elasticity, reduced platelet adhesion, and higher endothelial coverage.As the project is currently under evaluation within the TÜSEB C3/03 framework, these results reflect the anticipated outputs targeted in the project design, demonstrating the feasibility and translational potential of the approach.

Conclusion: The presented work demonstrates the successful integration of 3D bioprinting, electrospinning, and functional bio-coatings to produce a novel biohybrid vascular graft prototype. This multilayered and fenestrated construct replicates native vessel architecture both morphologically and functionally, offering improved biocompatibility, compliance, and anti-thrombogenicity. This project reduces import dependence, drives local biomedical innovation, and offers a valuable solution for small-caliber vascular reconstruction

Keywords: Biohybrid graft, 3D bioprinting, tissue engineering, biological coating, conical graft design

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OP-061

Retrospective analysis of endovascular interventions for deep venous thrombosis since 2021

Nurhayat Inci, Mehmet Karacalilar

Dicle University, Diyarbakır, Türkiye

Abstract

Aim: Deep venous thrombosis (DVT) is a significant health concern due to its potential complications, including pulmonary embolism and post-thrombotic syndrome. Endovascular interventions, such as catheter-directed thrombolysis (CDT), mechanical thrombectomy (MT), and inferior vena cava (IVC) filter placement, have become standard treatments for acute DVT. These procedures aim to restore venous patency, alleviate symptoms, and prevent long-term sequelae. This study retrospectively evaluates the outcomes of endovascular treatments in 50 patients with DVT treated at our center since 2021.

Material and Methods: A total of 50 patients were retrospectively analyzed, including 22 females and 28 males. The age range was 17 to 93 years. Distribution of thrombus location revealed 30 cases of left leg DVT, 19 cases of right leg DVT, and 1 case of bilateral involvement. Among female patients, 4 cases were postpartum-related (2 right, 2 left). Comorbid conditions included malignancy (1 malignant melanoma), autoimmune disorders (Behçet's disease, Sjögren's syndrome, ulcerative colitis), and coagulation factor deficiency. One patient presented with concomitant pulmonary embolism and left leg DVT. Endovascular procedures included catheter-directed thrombolysis, mechanical thrombectomy, inferior vena cava (IVC) filter placement, and balloon dilatation of the iliac vein in 3 cases. IVC filters were deployed via jugular access in 2 patients and femoral access in the remaining cases.

Results: Technical success was achieved in all cases. The youngest patient was a 17-year-old male who developed left leg DVT following postoperative immobilization after rhinoplasty; the oldest patient was a 93-year-old female. The most common thrombus location was the left lower extremity. Endovascular treatment provided rapid symptom relief and vessel recanalization in the majority of patients. No major periprocedural complications were observed. Underlying risk factors were identified in several patients, including postpartum state, malignancy, autoimmune disease, and inherited thrombophilia.

Conclusion: This study demonstrates that endovascular interventions for DVT are safe and effective, offering rapid symptom relief and vessel recanalization. The identification of underlying risk factors is crucial for guiding treatment and preventing recurrence. While the study's retrospective nature and single-center design limit generalizability, the findings align with existing literature supporting the efficacy of endovascular treatments in DVT management. Further prospective, multicenter studies are needed to validate these results and establish standardized treatment protocols.

Keywords: Deep venous thrombosis (DVT), endovascular treatment

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OP-062

Effectiveness of endovascular interventions via the popliteal access in peripheral vascular diseases

Mehmet Aslan[1], Umut Serhat Sanri[2], Ozgur Akkaya[2]

[1]Alanya Education and Research Hospital, Antalya, Türkiye
[2]Alanya Alaaddin Keykubat University, Antalya, Türkiye

Abstract

Aim: This study aimed to evaluate the advantages of single and multiple vascular access strategies via the popliteal access in the treatment of peripheral arterial disease, and to demonstrate its safety and efficacy compared to conventional femoral access, particularly in interventions involving multiple vascular structures.

Material and Methods: Between January 2024 and May 2025, a total of 114 patients diagnosed with peripheral vascular disease underwent retrograde puncture of the popliteal artery under ultrasound guidance for endovascular intervention. Among them, 46 patients received treatment for multiple lesions (right and left superficial femoral arteries, right and left iliac arteries), while 68 patients had a single vascular lesion (superficial femoral artery). According to the TASC-II classification, patients were categorized as type B (5 patients, 4.3%), type C (33 patients, 29%), or type D (76 patients, 66%). All procedures were performed under potentiated local anesthesia in an outpatient setting. A 6F or 7F sheath catheter was used for access, and hemostasis was achieved via manual compression. Postoperative follow-up data at 3 months were retrospectively collected. Results were expressed as means, standard deviations, and percentages.

Results: The mean procedure time was 34 ± 31.4 minutes, and the mean fluoroscopy time was 12.4 ± 4.7 minutes. The technical success rate was 93%. Intraoperative tachycardia occurred in two patients, which was managed with beta-blockers. Popliteal arteriovenous fistula developed in two patients, one of whom was receiving hemodialysis due to chronic renal failure. All patients were mobilized within 12 hours post-procedure. Temporary unilateral infrapatellar paresthesia lasting 3-4 hours was observed in seven patients. At the end of the 3-month follow-up period, the vascular patency rate was 87.2%.

Conclusion: Despite the potential for complications, the popliteal access can be safely utilized in the endovascular treatment of peripheral arterial disease. It offers enhanced maneuverability and procedural efficiency, particularly in cases involving multiple lesions. Further studies with larger patient cohorts are warranted to validate these findings.

Keywords: Peripheral vascular disease, popliteal access, endovascular intervention

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OP-063

Challenging EVAR cases: Endovascular approaches in critical patients

Ceylan Gurcan, Ilker Ince

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Endovascular aneurysm repair (EVAR) has emerged as a life-saving alternative to open surgery, particularly in elderly patients or those at high surgical risk with abdominal aortic aneurysm (AAA). However, certain anatomical and clinical conditions make EVAR technically demanding and necessitate advanced strategies.To share our experiences, techniques, and clinical outcomes in five critical patients who underwent EVAR under challenging conditions.

Material and Methods: Methods:Between 2023 and 2025, five patients (mean age 75; 3 males, 2 females) treated in our hybrid operating room were retrospectively evaluated. All patients had high surgical risk profiles and complex anatomies such as rupture, hostile neck, or the need for branch preservation. Procedures were performed under local or general anesthesia, using femoral, brachial, or axillary access depending on the patient.Results:•Case 1: Ruptured AAA with aortocaval fistula → EVAR and ballooning achieved hemostasis without endoleak.•Case 2: 85 mm AAA with hostile neck → Post-EVAR Type 1a EL treated with Endoanchor.•Case 3: 85-year-old female, 72 mm AAA → Nosecone entrapment managed by separating stent graft components and applying the Funnel technique.•Case 4: Ruptured AAA with prior CABG → Post-EVAR Type 1a EL treated using a triple fenestrated TEVAR graft combined with the Funnel technique.•Case 5: 50 mm AAA requiring renal artery preservation → Treated with Double Chimney technique.

Results: •Case 1: Ruptured AAA with aortocaval fistula → EVAR and ballooning achieved hemostasis without endoleak.•Case 2: 85 mm AAA with hostile neck → Post-EVAR Type 1a EL treated with Endoanchor.•Case 3: 85-year-old female, 72 mm AAA → Nosecone entrapment managed by separating stent graft components and applying the Funnel technique.•Case 4: Ruptured AAA with prior CABG → Post-EVAR Type 1a EL treated using a triple fenestrated TEVAR graft combined with the Funnel technique.•Case 5: 50 mm AAA requiring renal artery preservation → Treated with Double Chimney technique.

Conclusion: In patients not suitable for IFU, advanced techniques enable successful aortic endovascular treatment. EVAR remains a safe and effective option even in the most challenging cases when performed in experienced centers.

Keywords: Abdominal aortic aneurysm EVAR, hostile neck, chimney technique, endoanchor, fenestrated thoracic endovascular aortic repair - Endovascular aneurysm repair

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OP-064

Comparative analysis of antegrade–retrograde manual foam sclerotherapy versus automated microfoam system (Varixio® AMPS) in the treatment of great saphenous vein incompetence

Ilknur Cihan

Beykoz State Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study was to compare the clinical outcomes, complication rates, and foamstability between antegrade and retrograde manual foam sclerotherapy techniques and anautomated microfoam preparation system (Varixio® AMPS) for the treatment of greatsaphenous vein (GSV) incompetence.

Material and Methods: A retrospective analysis was performed on 200 patients with GSV incompetence whounderwent either antegrade or retrograde manual foam sclerotherapy using 2%polidocanol. Outcomes were compared with published data from a prospective cohort studyinvolving 164 patients treated with Varixio® AMPS using 3% polidocanol. The mean follow-up period was 16.5 ± 3.6 months in the manual group and 36 months in the AMPS group.Primary endpoints included complete occlusion rates, partial and total recurrence, andcomplications confirmed by duplex ultrasonography.

Results: In the manual group, complete occlusion was achieved in 98.5% of treated limbs, with a1.5% partial recurrence rate. Deep vein thrombosis occurred in 1.06% of cases andpulmonary embolism in 0.5%. In the AMPS group, complete occlusion was 93.9%, partialrecurrence 26.8%, and total recurrence 6.1%, with no major complications reported. Foamstability was significantly higher in the AMPS group, while antegrade manual injectionsoffered better cosmetic outcomes in selected patients.

Conclusion: Both manual and automated foam sclerotherapy techniques are effective for the treatmentof GSV incompetence. The Varixio® AMPS system provides superior foam stability andlower complication rates, whereas manual antegrade techniques may be preferred forpatients with cosmetic concerns. Treatment choice should be individualized based onpatient profile, equipment availability, and clinical priorities.

Keywords: Saphenous vein, foam sclerotherapy, varicose veins, minimally invasive surgical procedures, endovenous treatment

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The effect of serum sortilin levels on the development of symptoms in patients with critical carotid artery stenosis

Elif Yazgan[1], Ahmet Burak Tatli[2], Mesut Engin[2], Cuneyt Eris[2], Burak Erdolu[2], Arda Aybars Pala[2], Ahmet Fatih Ozyazicioglu[2], Senol Yavuz[2], Ahmet Kagan As[2]

[1]Nevşehir State Hospital, Nevşehir, Türkiye
[2]Bursa Yuksek Ihtisas Training and Research Hospital, Bursa, Türkiye

Abstract

Aim: This study aimed to investigate whether serum sortilin levels influence the development of symptoms in patients with critical carotid artery stenosis (CAS).

Material and Methods: A prospective study was conducted at the Cardiovascular Surgery Clinic of Bursa Yüksek İhtisas Training and Research Hospital, University of Health Sciences. Patients aged 35–99 years with ≥50% internal CAS according to the NASCET criteria were enrolled. Serum sortilin levels were measured, and patients were categorized as symptomatic or asymptomatic. Demographic, clinical, and laboratory parameters were compared between groups. Total stenosis was calculated as the sum of ipsilateral and contralateral stenosis, and correlations with serum sortilin levels were analyzed.

Results: Sixty-five patients were included: 36 asymptomatic (mean age 66.6 ± 8.5 years) and 29 symptomatic (mean age 66.3 ± 9 years). No significant difference in serum sortilin levels was found between groups (p=0.807). Spearman's analysis revealed a moderate positive correlation between total stenosis and serum sortilin levels (R=0.519, $p < 0.001$). ROC analysis identified a cut-off serum sortilin level of 3.46 ng/ml for predicting ≥50% contralateral stenosis (AUC=0.768, 95% CI: 0.645–0.890; sensitivity 64%, specificity 82.5%).

Conclusion: Serum sortilin levels were not associated with symptom development in patients with severe CAS. However, elevated sortilin levels showed a moderate correlation with total stenosis and may serve as a useful biomarker for predicting contralateral carotid lesions.

Keywords: Carotid artery stenosis, sortilin, biomarker, carotid endarterectomy, vascular surgery

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OP-066

Impact of peripheral artery disease on mortality after acute type a aortic dissection surgery

Ahmet Ibrahim Balkaya, Nazmi Alperen Gul, Begum Ozuekren Kasapoglu, Mehdi Zengin, Hale Bolgi Demir, Melike Elif Teker Acikel, Helin El Kilic, Ismail Koramaz, Tolga Demir

Health Science University, Sisli Hamidiye Etfal Training and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Acute Type A Aortic Dissection (ATAAD) is an emergency cardiovascular condition associated with high mortality. Peripheral artery disease (PAD) is known to adversely affect surgical outcomes. This study aimed to evaluate the impact of PAD on mortality in patients who underwent surgery for ATAAD at our center.

Material and Methods: A total of 64 patients who underwent surgery for ATAAD at our center between 2017 and 2025 were retrospectively analyzed. Patients were grouped according to the presence of PAD. The primary endpoint was defined as in-hospital mortality.

Results: Of the 64 patients included, 75% were male (n=48) and 25% were female (n=16). The in-hospital mortality rate was 57.8% (n=37), while the discharge rate was 42.2% (n=27). PAD was present in 29.7% of cases. Although mortality was higher in patients with PAD, this difference was not statistically significant ($p > 0.05$). Advanced age was significantly associated with higher mortality ($p < 0.05$). ATAAD occurred at an older age in males, which was also statistically significant ($p < 0.05$). Patients without PAD but with coronary artery disease (CAD) had a significantly higher mortality rate (Chi-square test, $p < 0.05$). Although Fisher's Exact Test did not reach significance, given the limited sample size, the combined evaluation of both tests suggested that with a larger cohort this relationship may reach statistical significance. In addition, lower ejection fraction in patients with diabetes mellitus (DM) was also found to be statistically significant ($p < 0.05$).

Conclusion: In-hospital mortality after ATAAD surgery remains high. Although the increase in mortality in the presence of PAD did not reach statistical significance, it is anticipated that this association could be confirmed in larger series. Furthermore, advanced age, male sex, DM, and CAD may be associated with mortality. Larger, multicenter studies are required to clarify the prognostic value of comorbidities such as PAD, CAD, and DM in ATAAD surgery.

Keywords: Peripheral artery disease, acute type A aortic dissection, mortality

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OP-067

Outcomes of popliteal artery injuries: A retrospective analysis of 17 cases operated in a single center

Irfan Dinler, Mehmet Karacalilar

Dicle University Faculty of Medicine, Diyarbakır, Türkiye

Abstract

Aim: Popliteal artery injuries are associated with high rates of limb loss and mortality. Early diagnosis and prompt surgical intervention are essential to improve clinical outcomes. This study aims to evaluate the clinical characteristics, management strategies, and outcomes of patients who underwent surgery for popliteal artery injuries in our clinic.

Material and Methods: A retrospective analysis was conducted on 17 patients who underwent surgical treatment for popliteal artery injury at our institution between February 2021 and December 2024. Data collected included demographic characteristics (age, gender), mechanism of injury, time from injury to hospital admission, MESS score, type of surgical intervention, presence of associated venous and nerve injuries, as well as postoperative outcomes such as amputation and mortality.

Results: The study included 15 males (88.2%) and 2 females (11.8%) with a mean age of 29.4 years (range: 17–58). Mechanisms of injury included gunshot wounds in 9 patients (52.9%), stab wounds in 3 (17.6%), and blunt trauma in 5 (29.4%). The average time from injury to hospital admission was 6 hours (range: 1 hour–3 days). Associated venous and nerve injuries were present in 12 (70.5%) and 9 patients (52.9%), respectively. Surgical procedures included end-to-end anastomosis (n=5, 29.4%), direct repair (n=1, 5.8%), saphenous vein grafting (n=7, 41.1%), and synthetic grafting (n=4, 23.5%). The mean MESS score was 5.11 (range: 2–10). Amputation was performed in 4 patients (23.5%) and one patient (5.8%) died.

Conclusion: Popliteal artery injuries require prompt recognition and aggressive surgical management to optimize limb salvage and survival. While early intervention can reduce adverse outcomes, certain injury-related and systemic factors may still contribute to high morbidity and mortality. The MESS score is a reliable indicator of prognosis and should be considered in surgical decision-making.

Keywords: Mess score, popliteal artery injuries

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OP-068

Retrograde pedal access in the management of chronic total occlusion in peripheral artery disease

Yakup Tire[1], Bahar Temur[2], Emre Ozker[2], Ersin Erek[2], Selim Aydin[2]

[1]Private Acıbadem Atakent Hospital, İstanbul, Türkiye
[2]Acıbadem Mehmet Ali Aydınlar University, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: In this study, we aimed to present the outcomes of patients with peripheral artery disease who underwent peripheral endovascular intervention through retrograde pedal access in our clinic.

Material and Methods: This study was designed as a single-center, retrospective case series. We reviewed 118 peripheral intervention cases performed at our clinic between January 2021 and November 2024, and included 33 patients (male n: 26, 78%, mean age: 66 ±10.5 years) who underwent pedal access.

Results: Most patients (n: 24, 73%) had Rutherford chronic limb ischemia class IV and V symptoms. For retrograde pedal access, ATP access was used in 13 (40%) patients, ATA access was used in 12 (36%) patients, peroneal artery access was used in 4 (12%) patients, both ATA and peroneal artery access was used in 2 (6%) patients, and both ATA and ATP access was used in 2 (6%) patients. For superficial femoral artery lesions, 12 patients underwent isolated DCB angioplasty, while 8 patients underwent combined atherectomy and DCB angioplasty. The remaining four patients were treated with SFA stenting, either alone or in combination with DCB angioplasty, atherectomy, or both. Sixteen of the 17 popliteal artery lesions underwent interventional procedures. Nine patients underwent isolated DCB angioplasty, while six patients underwent combined rotational atherectomy and DCB angioplasty. One patient underwent combined lithotripsy and DCB angioplasty. Eleven patients with ATA disease underwent intervention: seven were revascularized with DCB angioplasty and three with isolated balloon angioplasty. One patient was treated with combined rotational atherectomy, DCB angioplasty, and drug-eluting stent (DES) implantation. Six posterior tibial artery lesions underwent intervention, four underwent balloon angioplasty, and two were treated with DCB angioplasty. In a total of 11 patients, the peroneal artery was treated with balloon angioplasty in five cases and with DCB angioplasty in five patients. Additionally, one patient underwent combined rotational atherectomy and DCB angioplasty. Across all procedures, target lesions were traversed intraluminally in 30 patients with the support of retrograde pedal access. The technical success rate was 91%. Flow-limiting dissection occurred in four patients and acute occlusion in one patient. No perforation, distal embolism, iatrogenic arteriovenous fistula, amputation, or death was observed.

Conclusion: Retrograde pedal access may serve as an initial approach for peripheral interventions, and it represents an effective alternative in challenging CTO cases where antegrade intraluminal crossing is not feasible. Retrograde pedal access is a valuable resource for all endovascular surgeons, facilitating successful revascularization in appropriately selected cases.

Keywords: Peripheral artery disease, retrograde pedal access, chronic total occlusion

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OP-069

Intervention in peripheral artery disease: A retrospective series of 356 patients

Mehmet Aslan[1], Ozgur Akkaya[2], Umut Serhat Sanrı[1]

[1]Alanya Education and Research Hospital, Antalya, Türkiye
[2]Alanya Alaaddin Keykubat University, Antalya, Türkiye

Abstract

Aim: This study aims to evaluate the pharmacological, technical, demographic, and symptomatic outcomes by retrospectively analyzing data from 356 patients who underwent endovascular treatment for peripheral artery disease.

Material and Methods: A total of 356 patients diagnosed with peripheral artery disease between 2024 and 2025 were included in the study. TASC classification, Fontaine and Rutherford staging, stent applications, and decision-making processes were analyzed.

Results: The mean age of the patients was 56.3 years. Female patients constituted 13.2%, non-smokers 25.5%, and those with chronic obstructive pulmonary disease 5.9%. Hypertension was present in 53.1%, diabetes mellitus in 26.1%, and a history of coronary artery disease in 13.2%, while 18.8% had no additional comorbidities. Compared to patients who could not tolerate cilostazol, those who received the drug post-intervention showed reductions in LDL and triglyceride levels and increases in HDL levels. Symptomatic improvement was more pronounced in the cilostazol group. Interventions were performed via the femoral route in 68% and the popliteal route in 32% of cases. According to the TASC II classification, 40 patients were classified as type A, 93 as type B, and 233 as type C/D. Vascular stents were applied in 37.6% of patients. The overall complication rate was 12.4%. Symptomatic improvement at one month was observed in 83.7% of patients. At six-month follow-up, the restenosis rate was 10.1%.

Conclusion: This retrospective analysis provides a comprehensive overview of clinical and biochemical responses in patients undergoing lower extremity arterial interventions. The majorit of patients were male, with hypertension and diabetes being common comorbidities. Cilostazol use was associated with favorable effects on lipid profiles and significant symptomatic improvement. Although most interventions were performed via the femoral route, the frequency of popliteal access was notable. The distribution of patients according to TASC II classification indicates a predominance of advanced-stage lesions, which may have contributed to the higher rate of stent application. The complication rates were within acceptable limits. These findings support the efficacy and indispensability of interventional approaches, demonstrating that combined medical therapies enhance patient recovery and overall quality of life.

Keywords: Peripheral vascular disease, endovascular access

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OP-070

Results of aneurysm treatments in basilic vein transposition fistulas

Zerrin Pulathan, Mehmet Ali Yuruk, Ali Riza Pektas, Furkan Karaca, Yunus Emre Bayraktar

KTU Faculty of Medicine, Department of Cardiovascular Surgery, Trabzon, Türkiye

Abstract

Aim: Long-term aneurysmatic degeneration is quite common in basilic vein transposition (BVT) fistulas. The most commonly applied methods include surgical procedures such as aneurysmorrhaphy, aneurysmoplasty, patch plasty, and graft interposition, which can be used alone or in combination with endovascular techniques. The purpose of this study is to examine the one- and five-year treatment results of aneurysms developing in BVT patients and compare them with the existing literature.

Material and Methods: Hospital records of 18 BVT cases who were treated for complicated fistula aneurysm between January 2010 and January 2020 at the Cardiovascular Surgery Clinic of KTU Faculty of Medicine were retrospectively examined from the clinical database. The cases were followed up with Doppler ultrasound, and if necessary, a fistulogram was performed in both the preoperative and postoperative periods. They were reviewed for complications in the early period and for 1- and 5-year primary patency rates in the late period. Fistulas that were closed due to reasons such as central stenosis that could not be resolved or infected aneurysms were not included in the study. Patients who received only interventional treatment were also excluded. Data are presented as mean ± standard error; patency rates were calculated by the Kaplan-Meier method.

Results: The patient population consisted of 56% females and 44% males, with an average age of 63.2 ± 9 years. The average time to aneurysm development was 4.7±3.8 years, and 20 aneurysms in 18 patients were intervened upon. The most common surgical indications are: Valenti Type 3 were problems such as complicated aneurysm, thrombosis, Kt/V drop, recirculation, and prolonged bleeding. Preoperative fistulogram was performed in all cases, and balloon angioplasty was performed in 61% before the surgical procedure due to central or other stenosis. In six cases (33%), patch plasty was also performed due to stenosis. In the early period, hematomas that did not require surgery developed in 3 cases. Revision was performed in 1 case due to bleeding, and dialysis was continued in none of the cases without the need for catheter insertion, as the cannulation areas were preserved. Balloon angioplasty procedures were repeated in 6 of the patients due to central stenosis. Primary patency rates were found to be 66% at 1 year and 44% at 5 years.

Conclusion: Close follow-up of aneurysmatic BVT patients, combined with surgery or interventional treatments, is a feasible treatment method to maintain fistula functionality with low complications and high patency rates.

Keywords: Basilic vein transposition (BVT), aneurysm, patency

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OP-071

Comparison of modified eversion technique with traditional techniques in carotid endarterectomy

Ejderhan Kadir Ulug, Elshad Mansimzada, Hakki Tankut Akay

Başkent University Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Stroke is one of the most important causes of morbidity and mortality worldwide. The atherosclerotic disease of the carotid artery accounts for a significant portion in the etiology of stroke. Carotid endarterectomy is a well established surgical procedure as a curative treatment for this disease. Throughout the years various different surgical techniques have emerged for carotid endarterectomy. The modified eversion carotid endarterectomy (m-ECEA) is the preferred technique in our center and in our ongoing trial at Başkent University Ankara Hospital since February 2015, we aim to compare the advantages and/or disadvantages of m-ECEA with the other conventional surgical techniques for carotid endarterectomy.

Material and Methods: In this ongoing trial since February 2015, 209 Carotid Endarterectomy procedures were done at Başkent University Ankara Hospital by the same surgical team. 144 of these were done using the m-ECEA technique. The mean age of the patients was 71.3±9.4 (41-90). 30% of the patients were female, 70% of the patients were symptomatic. 45% of the patients underwent general anesthesia while regional blockage was applied to the rest.

Results: The median operation time was 67.2 ±14.1 minutes. The median ICA clamp time was 12.2±3.6 minutes. Average time spent in the ICU was 28 ± 7.6 hours. Average hospital stay was 3.6 ± 1.1 days. Perioperative stroke/TIA incidence was %0.005 (1 patient). Perioperative restenosis incidence %0.005 (1 patient). Mean follow-up time was 14.3 ± 8.1 months.

Conclusion: We believe that Modified Eversion Carotid Endarterectomy (m-ECEA) is a safe procedure which has similar/comparable results when compared to other Carotid Endarterectomy techniques. m-ECEA has a statistically significant shorter operation and carotid clamp time. Technical challenges such as a long plaque or high bifurcation are possible disadvantages that should be considered during planning the operation.

Keywords: Modified eversion, carotid, endarterectomy

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OP-072

Protective role of vaccinium myrtillus's (Bilberry) antioxidant and anti-inflammatory effects in experimental lower limb ischemia-reperfusion injury

Ali Dogan Dursun[1], Huseyin Demirtas[2], Alperen Kutay Yildirim[3], Abdullah Ozer[2], Saban Cem Sezen[4], Aysegul Kucuk[5], Isin Gunes[6], Veli Cengiz Ozalp[7], Mustafa Arslan[8]

[1]Atılım University, Faculty of Medicine, Department of Physiology, Ankara, Türkiye
[2]Gazi University, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[3]Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[4]Kırıkkale University, Faculty of Medicine, Department of Histology and Embryology, Kırıkkale, Türkiye
[5]Kutahya Health Sciences University, Faculty of Medicine, Department of Physiology, Kutahya, Türkiye
[6]Erciyes University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Kayseri, Türkiye
[7]Atılım University, Faculty of Medicine, Department of Biology, Ankara, Türkiye
[8]Gazi University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Ankara, Türkiye

Abstract

Aim: Lower limb ischemia-reperfusion (IR) injury remains a major clinical challenge following revascularization procedures. Although reperfusion is vital for tissue salvage, it paradoxically induces excessive reactive oxygen species (ROS) production and inflammatory activation, thereby exacerbating skeletal muscle damage. Histologically, IR manifests as muscle degeneration, nuclear internalization, leukocyte infiltration, and myofiber fragmentation. Vaccinium myrtillus (bilberry), rich in anthocyanins, is recognized for potent antioxidant and anti-inflammatory properties. While its protective role has been demonstrated in hepatic, renal, cardiac, and neural IR models, evidence in skeletal muscle injury is scarce. This study aimed to evaluate the protective effects of bilberry extract on oxidative stress parameters and histopathological injury in a rat model of lower limb IR.

Material and Methods: Twenty-four male Wistar rats (270–320 g) were randomized into four groups (n=6): Sham, Bilberry (VM), Ischemia-Reperfusion (IR), and Ischemia-Reperfusion + Bilberry (IR+VM). IR injury was induced by clamping the infrarenal abdominal aorta for 45 minutes followed by 120 minutes reperfusion. Bilberry extract (100 mg/kg, intraperitoneal) was administered immediately before ischemia in VM and IR+VM groups. Gastrocnemius muscle tissues were collected for histopathological evaluation (atrophy/hypertrophy, degeneration, congestion, leukocyte infiltration, nuclear internalization, fragmentation, hyalinization) and biochemical analysis [total antioxidant status (TAS), total oxidant status (TOS), oxidative stress index (OSI), and paraoxonase-1 (PON-1) activity]. Data were analyzed with one-way ANOVA and Bonferroni post hoc testing; $p < 0.05$ was considered significant.

Results: The IR group exhibited significant histological injury, with marked muscle fiber degeneration, vascular congestion, leukocyte infiltration, and nuclear internalization compared with Sham and VM ($p < 0.05$). Bilberry treatment significantly reduced these pathological features in the IR+VM group ($p < 0.05$). Biochemically, TAS was reduced in IR, while TOS, OSI, and PON-1 activity were markedly elevated, reflecting oxidative imbalance. Bilberry administration significantly improved antioxidant capacity (increased TAS), lowered oxidative burden (decreased TOS and OSI), and normalized PON-1 activity compared with IR ($p < 0.05$ for all).

Conclusion: Bilberry (Vaccinium myrtillus) extract demonstrated robust antioxidative and anti-inflammatory effects in experimental lower limb IR injury, mitigating biochemical oxidative stress and histological muscle damage. To our knowledge, this is the first study to demonstrate such protective effects in skeletal muscle IR. These findings highlight bilberry as a promising adjunctive therapeutic option for ischemia-related tissue injury, warranting further mechanistic and translational research to assess its clinical applicability in vascular surgery.

Keywords: Vaccinium myrtillus, ischemia-reperfusion injury, inflammation, skeletal muscle, rats

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OP-073

Endovascular experience in ruptured abdominal aortic aneurysm:EVRAR

Cagla Canbay Sarilar[1], Ilke Keles Selek[2], Birol Akdogan[1], Burak Tavsanoglu[1], Merve Dogru[1], Onur Selcuk Goksel[1]

[1]İstanbul University Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]Çorlu State Hospital, Department of Cardiovascular Surgery, TekirDag, Türkiye

Abstract

Aim: Abdominal aortic aneurysm rupture results massive haematoma and bleeding which can lead to fatal unless untreated. Open surgery for ruptured abdominal aortic aneuryms still has higher mortality rates .Endovascular aneursym repair (EVAR) is a minimally invasive technique which has less postoperative morbidity and mortality than open surgery.

Material and Methods: In our study, between 2014 and 2024 we evaluated the emergency endovascular aneurysm repair for ruptured abdominal aortic aneurysms.

Results: 52 of patients had successful emergency EVAR with mortality rate was 13.5% (7patients, 5 male, 2 female). Compared to open surgery rate of cardiac, pulmonary, renal and bleeding complicaitons were significantly lower. Perioperatively, there were type II endoleaks in 8 of patients. Dialysis requirement was observed in 9 patients. 4 patients developed type I or III endoleaks were observed in 12 patients in 6 months postoperatively.

Conclusion: Endovascular treatment for ruptured abdominal aortic aneursyms was beneficial therapy although long term data was lacking

Keywords: Ruptured abdominal aortic aneurysms, endovascular treatment, endoleak

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OP-074

Hybrid approach containing abdominal debranching and thoracic endovascular aortic repair (TEVAR) for complex aortic diseases

Nuri Utkan Tunca, Erturk Karaagac, Irem Ozcetin, Hasan Iner, Levent Yilik, Ali Gurbuz

İzmir Katip Celebi University Atatürk Education and Research Hospital, İzmir, Türkiye

Abstract

Aim: Treatment of thoracoabdominal aortic aneurysms becomes more complex when the aneurysm involves aortic branches that supply visceral organ perfusion. For the management of thoracoabdominal aneurysms, thoracoabdominal aortic replacement, thoracic endovascular aortic repair (TEVAR), and hybrid interventions are frequently utilized. In this study, we evaluated cases in which we performed suprarenal TEVAR combined with retrograde revascularization of the hepatic artery and superior mesenteric artery—a hybrid approach we employ in complex thoracoabdominal aortic aneurysms.

Material and Methods: Between 2019 and 2024, nine patients underwent one-stage hybrid treatment for thoracoabdominal aortic aneurysm at İzmir Katip Çelebi University Atatürk Training and Research Hospital and were included in this study. The mean age of patients was 59.9±16.6 years. All operations were performed by the same surgical team. In all cases, retrograde bypass from the common iliac artery to the superior mesenteric and hepatic arteries with a synthetic graft was performed, followed by endovascular aortic repair using one of two commercially available stent grafts (Medtronic® or Lifetech®). Two patients underwent urgent surgery—one for a ruptured aortic aneurysm and the other for an aortic pseudoaneurysm secondary to trauma. After exclusion of pseudoaneurysm case, mean aneurysm diameter averaged 58.1±1.7cm.

Results: There was no intraoperative or early postoperative mortality. During long-term follow-up, one patient (11.1%) required reoperation due to an aortoenteric fistula, which was associated with surgery-related mortality. No perioperative renal failure, major neurological event, deep vein thrombosis or major intestinal complications occurred. In two patients, an endoleak was detected during postoperative follow-up; both were successfully treated with reintervention. At the end of one-year follow-up, no statistically significant progression of the aneurysm sacs was observed in control radiological imaging.

Conclusion: Hybrid interventions for aortic pathologies involving visceral arteries may reduce mortality and morbidity in selected patients.

Keywords: Aneurysm, endovascular repair, treatment

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OP-075

Protective role of bromelain's antioxidant and anti-inflammatory effects in experimental lower limb ischemia-reperfusion injury

Saban Cem Sezen[1], Huseyin Demirtas[2], Alperen Kutay Yildirim[3], Abdullah Ozer[2], Ali Dogan Dursun[4], Aysegul Kucuk[5], Işin Gunes[6], Veli Cengiz Ozalp[7], Mustafa Arslan[8]

[1]Kırıkkale University, Faculty of Medicine, Department of Histology and Embryology, Kırıkkale, Türkiye
[2]Gazi University, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[3]Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[4]Atılım University Faculty of Medicine, Department of Physiology, Ankara, Türkiye
[5]Kutahya Health Sciences University, Faculty of Medicine, Department of Physiology, Kutahya, Türkiye
[6]Erciyes University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Kayseri, Türkiye
[7]Atılım UniversityFaculty of Medicine, Department of Biology, Ankara, Türkiye
[8]Gazi University Faculty of Medicine, Department of Anesthesiology and Reanimation, Ankara, Türkiye

Abstract

Aim: Ischemia-reperfusion (IR) injury remains a critical clinical problem, particularly in vascular and cardiovascular surgery, where restoration of blood flow to ischemic tissues paradoxically initiates oxidative and inflammatory cascades that aggravate tissue damage. Excessive reactive oxygen species (ROS) generation, impaired antioxidant defense, leukocyte infiltration, and mitochondrial dysfunction collectively drive structural and functional deterioration of skeletal muscle. Bromelain, a proteolytic enzyme complex extracted from Ananas comosus, has been shown to possess potent antioxidant, anti-inflammatory, and immunomodulatory activities. This experimental study aimed to evaluate the protective role of bromelain in skeletal muscle IR injury by integrating biochemical and histopathological assessments.

Material and Methods: Twenty-four male Wistar Albino rats (250–350 g) were randomized into four groups (n=6): Sham-operated (SHAM), Bromelain-only (BR), Ischemia-Reperfusion (IR), and Ischemia-Reperfusion plus Bromelain treatment (IR+BR). IR was induced via infrarenal aortic clamping for 45 minutes, followed by 120 minutes of reperfusion. Bromelain (40 mg/kg, intraperitoneal) was administered immediately prior to ischemia. Biochemical evaluation included measurement of total antioxidant status (TAS), total oxidant status (TOS), and oxidative stress index (OSI). Histopathological analyses assessed muscle fiber atrophy/hypertrophy, degeneration, vascular congestion, leukocyte infiltration, nuclear internalization, fragmentation, and hyalinization.

Results: The IR group demonstrated a marked oxidative imbalance, evidenced by significantly elevated total oxidant status (TOS) and oxidative stress index (OSI), together with reduced total antioxidant status (TAS) ($p < 0.05$ compared with the SHAM and Bromelain-only groups). Histopathological analysis confirmed extensive damage, including muscle fiber degeneration, displacement of nuclei to central and oval positions, intense leukocyte infiltration, and widespread myofibrillar fragmentation and hyalinization. In contrast, bromelain treatment (IR+BR) significantly restored redox balance, increasing TAS and reducing TOS and OSI ($p < 0.05$ compared with the IR group). Histologically, bromelain markedly attenuated muscle injury, with reductions in atrophy, degeneration, leukocyte infiltration, nuclear alterations, and fiber fragmentation. Consequently, muscle architecture was largely preserved in the IR+BR group, in stark contrast to the severe tissue disruption observed in untreated IR groups.

Conclusion: Bromelain effectively attenuated oxidative stress and histopathological damage in an experimental model of lower limb IR injury, underscoring its multifactorial protective mechanisms. Its actions appear to involve restoration of redox homeostasis, suppression of inflammatory cell infiltration, and preservation of skeletal muscle architecture. These findings highlight bromelain's therapeutic potential as an adjunctive strategy in managing IR-related tissue injury. Translational studies are warranted to elucidate molecular pathways, evaluate dose-response relationships, and confirm its clinical applicability in ischemia-reperfusion syndromes.

Keywords: Bromelain, ischemia-reperfusion injury, inflammation, oxidative stress, rat

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OP-076

2-year results of percutaneous balloon angioplasty for santral venous stenosis in hemodialysis patients: Our clinical outcomes

Huseyin Bilal Aydin, Mervan Aydin, Omer Arda Uslu, Aykan Atambay, Burak Kocak, Sebil Merve Sen Topcu, Osman Ture, Fatih Avni Bayraktar, Cemal Kocaaslan, Ebuzer Aydin

İstanbul Goztepe Prof. Dr. Suleyman Yalcin City Hospital, İstanbul, Türkiye

Abstract

Aim: Central venous stenosis (CVS) and occlusion in hemodialysis patients are a common and significant cause of vascular access dysfunction. CVS is a complication of long-term hemodialysis catheters and permanent intravenous devices such as pacemakers. Increased venous flow and hemodynamic stress resulting from vascular access are also significant causes of stenosis. The primary approach for CVS treatment is Endovascular interventions. The main goal of percutaneous transluminal angioplasty is to achieve less than 30% residual stenosis and prolong reintervention time. This report aims to present drug-coated balloon angioplasty results in CVS at single center with 3, 6 , 12 months patency results.

Material and Methods: Hemodialysis patients with central venous stenosis who underwent endovascular procedures at our clinic between January 2024 and June 2025 were retrospectively screened. The demographic data, procedural success rates, and venous patency rates at 3, 6, and 12 months were compared for these patients. Patients were compared separately for each patency duration.

Results: From January 2024 to June 2025, a total of 57 hemodialysis patients with central venous stenosis or occlusion underwent the procedure. Thirty patients were male (52.6%), 27 were female (47.4%) and the mean age of the patients was 62.5 years. Of the total 57 procedures, 45 were successful (78.9%) and 12 were unsuccessful (21.1%). For 45 patients, 56 drug coated balloon angioplasty were performed. In the 3-month patency group, there were 42 patients with patency (93.3%) and 3 patients with failure (6.7%). In the 6-month patency group, 34 of 40 patients were patent (85%) and 6 were occluded (15%). In the 12-month patency group, 17 of 25 patients were patent (68%) and 8 were occluded (32%).

Conclusion: Central venous stenosis is a significant problem in vascular access treatment for hemodialysis patients. Based on our experience, endovascular treatment is the primary approach for treating this condition. Drug-coated balloon angioplasty has promising results and should be a good option for CVS treatment at hemodialysis dependent patients.

Keywords: Central venous stenosis, arteriovenous fistula, vascular access, percutaneous balloon angioplasty, patency

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OP-077

The impact of "Flush" endovenous laser ablation on thromboembolic risk: A retrospective safety analysis

Gokhan Arslan, Tuna Demirkiran, Yigit Tokgoz, Zahir Kilic, Gizem Isik Okten, Nihan Tuten, Kubilay Karabacak

University of Health Sciences, Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Endovenous laser ablation (EVLA) is the accepted standard for treating superficial venous insufficiency. This retrospective study evaluates the safety profile of the "flush" EVLA technique, specifically its association with postoperative thromboembolic complications like deep vein thrombosis (DVT) and pulmonary embolism (PE). This method utilizes a radial laser catheter (Biolitec) to initiate ablation directly at the saphenofemoral junction (SFJ).

Material and Methods: We conducted a retrospective review of all patients who underwent "flush" EVLA with a Biolitec radial laser catheter at our institution between February 2023 and June 2025. Unlike the traditional approach, where ablation typically begins distal to the epigastric vein, the "flush" technique involves initiating the laser fiber at the SFJ. The study cohort included 501 patients (281 female, 220 male) with a mean age of 45.8 years. All procedures were performed under tumescent local anesthesia. Postoperatively, patients did not receive prophylactic anticoagulant therapy. They were discharged within 24 hours with a Class 2 below-knee compression stocking. Patients were followed for a period of six months, with follow-up data on thromboembolic events obtained from their electronic health records.

Results: No cases of systemic thromboembolic events, specifically DVT or PE, were observed in any of the 501 patients during the six-month follow-up period, resulting in a 0% incidence rate. One patient experienced a localized thrombosis within a venous packet, which was successfully managed with a mini-phlebectomy and thrombectomy under local anesthesia, and was not classified as a systemic complication. The absence of major complications suggests a high safety margin for this technique.

Conclusion: This large-scale retrospective analysis demonstrates that "flush" endovenous laser ablation, when performed with a Biolitec radial laser catheter, is an exceptionally safe procedure with a negligible risk of serious thromboembolic complications. The direct ablation at the SFJ does not appear to increase the risk of DVT or PE. These findings underscore the effectiveness and safety of the "flush" technique as a comprehensive treatment for varicose veins, offering a more complete ablation of the saphenous trunk without compromising patient safety.

Keywords: "Flush" EVLA, endovenous laser ablation, biolitec radial laser, thromboembolism.

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OP-078

Clinical outcomes of open abdominal surgery after endovascular abdominal aneurysm repair

Merve Ates, Emine Turhan, Ufuk Sayar, Ali Kemal Arslan, Muhammet Onur Hanedan

Trabzon University, Faculty of Medicine, Ahi Evren Thoracic and Cardiovascular Surgery Health Application and Research Center Trabzon, Türkiye

Abstract

Aim: The aim of this study was to present the postoperative outcomes of patients who had previously undergone endovascular abdominal aortic aneurysm repair (EVAR) in our clinic and subsequently required open abdominal surgery due to early or late complications following EVAR.

Material and Methods: Between March 2016 and September 2025, open abdominal surgery was performed in 25 patients who developed early or late complications after EVAR. The endovascular graft was completely excised in 13 patients (52%), partially excised in 9 patients (36%), and preserved in 3 patients (12%). Surgical procedures included aorto-bifemoral bypass in 9 patients (36%), aorto-biiliac bypass in 6 patients (24%), aorto-unifemoral bypass in 1 patient(4%), aorto-unifemoral-uniiliac bypass in 1 patient (4%), aortic tube graft interposition in 4 patients (16%), endoleak control in 3 patients (12%), and bleeding control of the lumbar arteries in 1 patient (4%).

Results: The majority of patients (96%) were male, with a mean age of 77.1±8.2 years. The mean interval between EVAR and open surgery was 1152.8±943.9 days. The indications for open abdominal surgery were rupture of the abdominal aorta in 13 patients (52%), endoleak in 8 patients (32%), graft thrombosis in 3 patients (12%), and graft migration in 1 patient (4%). 6 patients (24%) underwent elective surgery, while 19 patients (76%) required emergency procedures; 11 patients (44%) presented with hemodynamic shock. Postoperatively, acute renal failure occurred in 7 patients (28%), and 5 patients (20%)required hemodialysis. Additional complications included lower extremity ischemia in 3 patients (12%), ileus in 3 patients (12%), acute mesenteric ischemia in 2 patients (8%),pulmonary complications in 6 patients (24%), and neurological complications in 1 patient(4%). Revision surgery due to bleeding was necessary in 3 patients (12%), and re-operation was required in 2 patients (8%). In-hospital mortality was 28%, while overall mortality reached 76%. The mean intensive care unit stay was 5.5±6.4 days, and the mean total hospital stay was 11.6±10.5 days.

Conclusion: EVAR has become increasingly favored in the treatment of abdominal aortic aneurysms due to its less invasive nature compared with open surgery. However, with the progressive increase in life expectancy, late complications following EVAR are being encountered more frequently. In elderly patients with multiple co-morbidities, open abdominal surgery after EVAR carries high mortality and morbidity. Therefore, lifelong follow-up of patients after EVAR is mandatory, and in younger patients, careful preoperative evaluation is crucial before considering EVAR, keeping in mind the potential need for subsequent open abdominal surgery.

Keywords: Abdominal aortic aneurysm, aortic aneurysm repair - endovascular, abdominal aortic aneurysm repair - open

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OP-079

Effectiveness of calcium dobesilate versus rusci radix et rhizoma on pain, edema, and quality of life following EVLA

Mehmet Ali Yesiltas[1], Ahmet Ozan Koyuncu[2]

[1]Şişli Kolan International Hospital, İstanbul, Türkiye
[2]Şırnak State Hospital, Şırnak, Türkiye

Abstract

Aim: Endovenous laser ablation (EVLA) is a commonly used minimally invasive method for treating varicose veins. Postoperative complications such as edema, pain, and superficial phlebitis can negatively affect patient comfort. Calcium dobesilate and Rusci radix et rhizoma (Butcher's broom) are two agents known for their venoprotective effects. This study aimed to compare the efficacy of these two agents on postoperative complications and patient comfort after EVLA.

Material and Methods: In this retrospective randomized study including 325 patients, all underwent standard EVLA. Seventy-five patients received Rusci radix et rhizoma, and 250 patients received calcium dobesilate. Patients were divided into two groups: Group A (Calcium dobesilate, [2000 mg/day]) and Group B (Rusci radix et rhizoma, [450 mg/day]). Pain (VAS score), edema severity, superficial phlebitis incidence, and quality of life (e.g., CIVIQ-20) were assessed at 1 and 4 weeks postoperatively.

Results: At the 1-week assessment, VAS scores were lower in the Rusci radix group compared to the calcium dobesilate group (4.2 ± 1.1 vs. 5.0 ± 1.3, p=0.01). No difference was observed in edema scores between the groups (p=0.12). At week 4, the incidence of edema was significantly lower in the calcium dobesilate group (6% vs. 15%, p=0.02). No significant differences were observed in superficial phlebitis. CIVIQ-20 scores improved from week 1 in both groups; at week 4, the mean score was slightly higher in the Rusci radix et rhizoma group (68 ± 9 vs. 63 ± 8), but this difference was not statistically significant (p > 0.05).

Conclusion: Both agents were effective in reducing postoperative symptoms after EVLA. Rusci radix provided better early pain control, while calcium dobesilate was more effective in reducing edema incidence. CIVIQ-20 scores showed significant improvement in both groups. Larger-scale and longer-term follow-up studies are needed to confirm these findings.

Keywords: Ca dobesilat, rusci radix et rhizoma, endovenous laser ablation, venoprotective

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OP-080

Impact of postoperative anemia on the risk of cerebrovascular events following carotico-subclavian bypass

Mehmet Emir Erol, Medine Sarac, Ilker Ince, Sertan Ozyalcin, Emre Boysan, Enes Bostankolu

Etlik City Hospital Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: The objective of this study is to determine the risk factors associated with cerebrovascular events (CVEs) during the postoperative follow-up of patients who have undergone carotico-subclavian bypass surgery.

Material and Methods: From December 2022 to June 2025, forty-nine patients who underwent carotico-subclavian bypass in conjunction with thoracic endovascular aortic repair (TEVAR) were enrolled in the study. The mean patient age was 62.9 ± 11.3 years, and the mean follow-up period was 17 ± 8 months. TEVAR was performed for descending aortic aneurysm in 38 patients (77.5%) and for type B dissection in 11 patients (22.5%). In all cases, carotico-subclavian bypass was planned prior to TEVAR, as the landing zone was anticipated to be zone 2, terminating at the left carotid artery. Aortic rupture was present in six patients (12.2%). No significant differences were observed in preoperative hemoglobin levels ($p = 0.34$).

Results: Among the 49 patients included in the study, nine (18.4%) died during follow-up. Of these nine patients, four presented with ruptured thoracic aortic aneurysm, three underwent the procedure due to type B dissection, and the remaining two had elective repair for thoracic aortic aneurysm. Causes of death were attributable to rupture-related shock in patients with ruptured aneurysms and malperfusion syndromes in those with type B dissection. Among the two patients who underwent elective procedures, one died due to myocardial infarction, while the other succumbed to sepsis.During postoperative follow-up, cerebrovascular events (CVEs) occurred in six patients (12.2%). CVEs were not found to be associated with postoperative mortality ($p = 0.302$). However, patients with persistently lower postoperative hemoglobin levels demonstrated a significantly higher incidence of CVEs ($p = 0.02$). All CVEs were determined to be embolic in origin, with no cases of hemorrhagic stroke observed.

Conclusion: Endovascular repair techniques for thoracic aortic aneurysms are gaining increasing importance over time. The fundamental principle in patients undergoing TEVAR is the placement of the graft onto healthy aortic tissue. However, due to anatomical variations and the location of the aneurysm, this may not always be feasible. In such cases, extra-anatomic bypass procedures, such as carotico-subclavian bypass, may be required to create a secure landing zone. The objective of these procedures is to preserve vertebral artery flow, thereby maintaining posterior circulation and preventing upper limb ischemia.Particularly in fragile patient populations with aneurysm or dissection, as in our study, maintaining hemoglobin levels within appropriate ranges during postoperative follow-up appears to play a critical role in reducing the risk of cerebrovascular events (CVEs).

Keywords: Thoracic endovascular aortic repair, cerebrovascular event, anemia

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OP-081

Sac remodeling after EVAR: The paradoxical impact of diabetes mellitus and predictors of reintervention

Ali Demiray, Muhammet B Cavlak, Yalcin Gunerhan, Omer Tanyeli, Niyazi Gormus

Necmettin Erbakan University, Konya, Türkiye

Abstract

Aim: Endovascular aneurysm repair(EVAR) is currently the standard treatment for abdominal aortic-aneurysms. However, long-term sac remodeling and predictors of reintervention remain incompletely understood. The vascular effects of diabetes mellitus (DM) are complex, and its influence on aneurysm-remodeling has been inconsistently reported in the literature. This study aimed to evaluate the impact of DM and endoleak on sac dynamics and to identify independent predictors of early reintervention.

Material and Methods: A-retrospective analysis was conducted on 421 patients who underwent EVAR between 2015 and 2022 at a single tertiary center. Demographics,comorbidities,pre-and postoperative computed tomography(CT) measurements, and endoleak status were recorded. Sac regression was assessed using three thresholds:≥5 mm reduction,≥10 mm reduction and ≥10% relative shrinkage. All CT-angiographies were performed with 1-mm slice thickness to minimize measurement variability. Group comparisons were performed using Student's t-test and Fisher's exact test, while logistic regression identified independent predictors of reintervention within two years.

Results: The mean age was 70 years;24% had DM, 38% hypertension, and 30% coronary artery disease. The mean preoperative aneurysm diameter was 64 mm, decreasing to 62 mm after EVAR. Sac regression ≥5 mm occurred in 30% of patients. In the DM group, mean sac diameter significantly decreased(–4.3 mm; p=0.034), whereas no significant change was observed in non-diabetics (p=0.62), with an intergroup difference favoring DM (p=0.029). Using the ≥10 mm criterion, regression was observed in 5% of diabetics and 1% of non-diabetics, demonstrating a consistent but non-significant trend. Relative shrinkage ≥10% confirmed this paradoxical association. Endoleak strongly limited sac regression and was associated with sac enlargement in some cases. Within two years, 10.9% of patients required reintervention. Multivariable analysis identified endoleak (OR≈3.5) and absence of sac regression as independent predictors of reintervention,whereas age,hypertension,and coronary artery disease were not significant.

Conclusion: This study demonstrates that, in contrast to most prior reports describing impaired remodeling, DM was paradoxically associated with greater sac-regression after EVAR. Possible mechanisms include altered extracellular matrix dynamics, stent-graft–induced compression of calcified tissue, or intensified medical therapy in diabetic patients. Endoleak emerged as the strongest predictor of reintervention, consistently impeding sac shrinkage. Absence of sac regression, regardless of its definition, should be regarded as a clinically important warning sign for future intervention. These findings highlight the importance of close postoperative surveillance of sac dynamics and endoleak, while contributing new evidence to the ongoing debate on the role of DM in aneurysm remodeling. Prospective, multicenter studies evaluating DM subgroups (HbA1c,insulin-use,obesity) and distinguishing endoleak-types are warranted to validate these results.

Keywords: Endovascular aneurysm repair, sac remodeling, diabetes mellitus, endoleak, reintervention

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OP-082

Pseudoaneurysm following percutaneous interventions: Incidence, clinical characteristics, and treatment approaches

Fatih Kizilyel

Koşuyolu High Specialization Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Pseudoaneurysm is an uncommon but clinically significant complication following percutaneous interventions. This study aimed to evaluate the incidence, patient characteristics, localization, and treatment modalities of pseudoaneurysm cases that occurred after percutaneous procedures performed at our center between January 1, 2025, and September 10, 2025.

Material and Methods: During the study period, a total of 12,150 percutaneous interventions were performed in our center. Twenty-four patients who were diagnosed with pseudoaneurysm either during hospitalization or after discharge were retrospectively analyzed. Demographic data, comorbidities, procedural characteristics, pseudoaneurysm localization, and treatment strategies were evaluated.

Results: The incidence of pseudoaneurysm was 0.19%. Of the patients, 10 were female and 14 were male, with a mean age of 65.3 ± 14.8 years and a mean ejection fraction of 49.6%. Regarding localization, 83.3% of pseudoaneurysms occurred in the femoral artery, 12.5% in the brachial artery, and 4.2% in the radial artery. One patient developed bilateral femoral pseudoaneurysms. Surgical repair was performed in nine patients, thrombin injection in one patient, while 14 patients were successfully managed conservatively with compression therapy. Hypertension, diabetes mellitus, and active smoking were observed in 58.3%, 54.1%, and 29.1% of cases, respectively.

Conclusion: Although the incidence of pseudoaneurysm following percutaneous interventions is low, it remains clinically important. Our findings are consistent with complication rates reported in the current literature. Most cases can be managed successfully with conservative treatment; however, surgical intervention or additional procedures may be required in selected patients. Female sex, advanced age, anticoagulant/antiplatelet therapy, and obesity may represent potential risk factors for pseudoaneurysm development. Implementing preventive measures during and after percutaneous procedures in high-risk patients may help reduce this complication.

Keywords: Pseudoaneurysm, vascular surgical procedures, percutaneous coronary intervention

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OP-083

One-year outcomes of chocolate balloon angioplasty in peripheral artery disease: A single-center retrospective study

Mehmet Kursat Kurt[1], Mehmet Ali Yesiltas[2], Yasar Gokkurt[2], Cihan Yucel[1], Serkan Ketenciler[2], Ilhan Sanisoglu[1]

[1]İstanbul Prof. Dr. Cemil Taşcıoglu City Hospita[l], İstanbul, Türkiye
[2]İstinye University Şişli Kolan International Hospital, İstanbul, Türkiye

Abstract

Aim: This study aimed to evaluate the safety and efficacy of the Chocolate™ percutaneous transluminal angioplasty (PTA) balloon catheter in patients with peripheral artery disease (PAD) treated at a single tertiary care center.

Material and Methods: A retrospective analysis was performed on 46 patients (50 lesions) who underwent Chocolate balloon angioplasty between January 2024 and January 2025. Demographic characteristics, lesion features, procedural details, and 12-month clinical outcomes were reviewed. The primary endpoints were technical success and primary patency. Secondary endpoints included target lesion revascularization, major adverse limb events, and limb salvage.

Results: Technical success was achieved in 90% of cases. At 12 months, primary patency was 86%, freedom from TLR was 80%, and the limb salvage rate was 90%. No flow-limiting dissections or major periprocedural complications were observed.

Conclusion: In this single-center, real-world experience, Chocolate balloon angioplasty demonstrated high technical success, durable vessel patency, and favorable safety outcomes over a 12-month follow-up period. These findings support Chocolate balloon angioplasty as an effective treatment option for PAD, consistent with previously reported multicenter prospective data.

Keywords: Peripheral artery disease, chocolate balloon angioplasty, endovascular therapy

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OP-084

Lymphorrhea: The silent threat of minimally invasive cardiac surgery

Tayfun Ozdem, Yigit Tokgoz, Zahir Kilic, Namik Nahmadov, Kubilay Karabacak

Gülhane Training and Research Hospital Department of Cardiovascular Surgery Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: This study aimed to evaluate the management strategies and outcomes of lymphorrhea as a postoperative complication of minimally invasive cardiac surgery (MICS).

Material and Methods: A retrospective analysis was conducted on 800 MICS procedures (including Bentall, CABG, congenital, and valve surgeries) performed via femoral artery and venous access between January 2020 and August 2025. Patients who developed persistent drainage from the femoral incision site after a 3-day dressing period, leading to a diagnosis of lymphorrhea, were identified. The interventions applied to these patients and their respective outcomes were then analyzed.

Results: Nine patients were diagnosed with lymphorrhea in the femoral region. All underwent early wound revision, which included lymphatic node capitonation and fascia closure. Drains were placed for monitoring. On the third postoperative day, drains were removed from four patients with less than 20 mL drainage. The remaining five patients with persistent high-volume drainage required further interventions. Of these, two received povidone-iodine injections with no observed reduction in lymphorrhea. In contrast, one of the two patients treated with iohexol and the single patient who received a thrombin injection showed a reduction in drainage. Three patients with continued lymphorrhea were successfully managed with low-pressure negative-pressure wound therapy (VAC). A single patient experienced mortality due to wound infection and sepsis secondary to prolonged lymphorrhea.

Conclusion: Early wound revision and tissue capitonation are crucial first-line treatments for lymphorrhea following MICS. For unresponsive cases, VAC therapy serves as an effective alternative. The high morbidity and mortality risk associated with this complication underscore the critical importance of early diagnosis and aggressive management of femoral lymphorrhea in MICS patients.

Keywords: Lymphorrhea, minimally invasive surgical procedures, cardiac surgery, postoperative complications

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OP-085

Behind the knee or at the groin? A comparative analysis of popliteal and femoral access in peripheral interventions

Emre Can Mermi, Alp Yildirim

Ankara Atatürk Sanatoryum Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Peripheral artery disease (PAD) is a common vascular condition that can lead to significant morbidity due to lower extremity ischemia. This study aims to compare endovascular interventions performed at the femoral and popliteal artery levels in our clinic in terms of local complications, early postoperative complications, primary patency rates, and lesion accessibility.

Material and Methods: A total of 91 patients who underwent endovascular intervention for PAD in our clinic between July 2024 and July 2025 were retrospectively evaluated. All patients were assessed preoperatively with peripheral CT angiography. There were 78 male and 13 female patients in the study group. Access was obtained via the femoral artery in 23 (25.2%) patients and via the popliteal artery in 68 (74.8%) patients with ultrasound guidance. Post-procedural local complications, early complications, primary patency rates, and lesion accessibility were compared between the two groups. Data were analysed using SPSS version 27.0. Categorical variables were compared using the chi-square test, while continuous variables were analysed with either the Student's t-test or the Mann–Whitney U test, as appropriate. A p-value < 0.05 was considered statistically significant.

Results: No major complications occurred in any of the 91 patients included in the study, and none required open surgery. Among the patients who underwent femoral access, 4 (17.3%) developed access-site hematoma and 2 (8.6%) developed pseudoaneurysm. In contrast, no hematoma or pseudoaneurysm was observed in patients who underwent popliteal access ($p < 0.05$). In cases of chronic total occlusion of the superficial femoral artery, when contralateral femoral access was attempted, lesion crossing failed in 5 patients (21.7%) due to insufficient stump formation. In comparison, ipsilateral lesion crossing failed in only 2 patients (2.9%) in the popliteal access group, and this difference was statistically significant ($p < 0.05$). During follow-up, there was no statistically significant difference in primary patency rates between the femoral and popliteal access groups ($p > 0.05$).

Conclusion: Both femoral and popliteal access routes can be performed safely and effectively with appropriate patient selection but in cases of ipsilateral total occlusion, hostile iliac anatomy, or femoral artery occlusions without a stump, popliteal access may be preferred due to its lower rate of local complications and ease of access.

Keywords: Femoral access, popliteal access, peripheral artery disease

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OP-086

Mid-term clinical outcomes in patients treated with co_2-assisted EVAR

Mehmet Emir Erol, Medine Sarac, Sertan Ozyalcin, Mustafa Seren, Ilker Ince, Deniz Sarp Beyazpinar, Ferit Cicekcioglu

Etlik City Hospital Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Both open surgical repair and endovascular treatment of abdominal aortic aneurysms in patients with chronic kidney disease are associated with substantial risk. In recent years, carbon dioxide–assisted EVAR has gained increasing adoption among non-dialysis-dependent patients with chronic kidney disease, primarily to mitigate the risk of contrast-induced nephrotoxicity. In such procedures, the use of iodinated contrast agents is either entirely avoided or markedly reduced, thereby facilitating the preservation of renal function. Main aim of this study is to report our outcomes of CO2 asisted EVAR.

Material and Methods: Between January 2022 and June 2025, 226 patients underwent EVAR in our clinic, among whom 30 procedures were performed with carbon dioxide assistance owing to underlying chronic kidney disease. The mean follow-up duration was 19 ± 12 months.The mean age of patients treated with CO_2-assisted EVAR was 76 ± 7.79 years. Preoperative serum creatinine levels averaged 3.04 mg/dl, whereas postoperative levels averaged 3.29 mg/dl. Importantly, no patient required renal replacement therapy or dialysis during the postoperative course.

Results: Importantly, no patient required renal replacement therapy or dialysis during the postoperative course.Over the follow-up period, six patients died. Four deaths occurred intraoperatively due to ruptured abdominal aortic aneurysm, while cardiogenic shock and sepsis accounted for one death each.Throughout the follow-up, surviving patients did not necessitate any additional interventions.

Conclusion: In conclusion, the treatment of abdominal aortic aneurysms is rendered more complex by advanced age and an increasing burden of comorbid conditions. Chronic kidney disease and its related complications represent significant factors influencing outcomes in both open surgical repair and endovascular interventions. Given its rapid clearance and absence of nephrotoxicity, carbon dioxide has emerged as a valuable adjunct in endovascular therapy for this high-risk population. We particularly recommend the use of CO_2-assisted EVAR in patients with chronic kidney disease who are not dialysis-dependent.

Keywords: Abdominal aort aneuyrsm, endovascular aortic repair, dialysis

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OP-087

The forgotten type of vascular entrapment:Nutcracker syndrome

Onur Isik, Muhammet Akyuz

İzmir City Hospital, University of Health Sciences, Pediatric Heart Surgery, İzmir, Türkiye

Abstract

Aim: The nutcracker syndrome(NCS) is an abdominal venous compression syndrome that occur due to extrinsic compression of of the left renal vein via SMA(anterior NCS) or abdominal aorta(posterior NCS). This compression causes complications of venous hypertension or venous thrombosis. Clinical presentation, diagnostic methods, and management options are reviewed. When timely diagnosis and treated, long-term consequences can be avoided.

Material and Methods: A total of 18 consecutive patients (5(27.8%) males and 13(72.2%) females) with nutcracker syndrome who underwent transabdominal surgical approach between April 2020 and November 2024 were enrolled. The average age was 20.5±7.78 years (range 11-32) and the average weight was 51.1±7.97 kg (range 35-65).These patients were evaluated retrospectively in terms of clinical, preoperative, intra operative, and postoperative parameters.

Results: All of surgical procedures were corrected successfully without adverse events intraoperatively. The most commonly reported initial clinical manifestations were exercise-induced lumbar pain in 14 (77.8%) and microhematuria in 7 (38.9%). Five patients (27.7%) had accompanying SMA syndrome. The mean renal vein clamping time was 10.3±2.7(range 8-15 minutes). The surgical techniques were left renal vein transpositions in 12 (66.7%), graft interposition in 4 (22.2%) and gonadal vein transposition in 2 (11.1%). There were no postoperative renal complications such as renal dysfunction or renal vein thrombosis. The follow-up periods were reported caval osteal stenosis in 3 patients following surgery without any thrombosis within 3th and 6th months.These stenosis were successfully treated with endovascular management in 2 patient with graft interposition and surgical approach in 1 patient with isolated LRV transposition

Conclusion: Whatever the reasons for hospital application among patients with NCS, the presence of significant stenosis should not hinder aortopexy decision. Surgical approach is a viable treatment option for NCS. The results and outcomes are satisfactory and psychosocial problems due to pain can prevent too.

Keywords: Lumbar pain, renal vein, nutcracker syndrome

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OP-088

A new approach to telangiectasias and feeder veins, experiences of a new clinic that has just started CLaCS treatment

Fahri Hayri Atli

Nev FSM Hospital, Bursa, Türkiye

Abstract

Aim: A new approach to telangiectasias and feeder veins, experiences of a new clinic that has just started ClaCS (cryo-laser and cryo-sclerotherapy) treatment, the aim of this study is to see efficiency and side effects of ClaCS treatment.

Material and Methods: Between january and september 2025 we treated 160 women with ClaCS technique who complains from talengiectasias, reticular and feeder veins. We use imaging system, 1064 nm ND:YAG laser, cooling system and %70 hypertonic dextrose as a sclerosing agent. Laser was applied with 6mm spot size, 15 ms pulse-width and 70-80J/cm2 fluence. And after cryo-laser %70 dextrose injected using 2.5 ml syringes and 27 G needle. And after punctures cotton ball applied on to the skin with adhesive tape.

Results: 160 women (320 legs) treated with 524 sessions of ClaCS. The mean age of the patients was 39 years (21-67) with prevelance of women (%100). No allergic reactions, systemic reactions, skin burn, infections and matting observed. Ecchymosis were observed in %100 of the cases, and bullous changes %1 of the them without infection and scar and %5 hyperpigmentation of them. Avarage number of sessions for the ClaCS was 3,27 for the treated patients.

Conclusion: ClaCS treatment is an effective and safe option to treat telangiectasias, reticular and feeder veins.

Keywords: CLaCS, talengectesias, feeder vein

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OP-089

Analysis of risk factors in patients with abdominal aortic aneurysms undergoing EVAR

Ziya Yildiz, Mehmet Burak Gulcan, Suleyman Aycan, Abdulselam Karaduman, Ozgur Dag, Mehmet Ali Kaygin

Erzurum City Hospital, Erzurum, Türkiye

Abstract

Aim: Abdominal aortic aneurysms (AAA) are often asymptomatic. Physical examination is often insufficient to detect aneurysms, and diagnoses are often made incidentally. Endovascular aortic repair (EVAR) involves covering the inner lining of the aorta with a stent-graft. The stent-graft consists of a metallic scaffold covered with impermeable fabric and is implanted through the femoral arteries using fluoroscopic guidance. Our goal is to identify and analyze the risk factors we encountered in patients undergoing EVAR to encourage early diagnosis of AAA in patients with similar risk factors and to prevent AAA from being overlooked.

Material and Methods: In our hospital's Cardiovascular Surgery Clinic, 118 patients diagnosed with AAA and successfully undergoing EVAR over the past five years were studied.

Results: 92 (78%) were male and 26 (22%) were female. The mean age of the women was 64.8 (±3.4) years, and the mean age of the men was 56.2 (±7.6). 30% of the women (n: 8) and 87% of the men had a history of smoking. 92% of the women (n: 24) and 81% of the men (n: 75) had a history of hypertension. 42% of the women (n: 11) and 39% of the men (n: 36) had a history of diabetes mellitus (DM). BMI was found to be ≥ 25 kg/m2 or higher in 76% of women (n: 20) and 21% of men (n: 20). LDL levels were found to be ≥ 200 mg/dl in 96% of women (n: 25) and 91% of men (n: 84). A history of regular exercise more than once a week was present in 7% of women (n: 2) and 19% of men (n: 18). Mild to moderate peripheral arterial disease was diagnosed in 11% (n: 2) of women and 67% (n: 18) of men. A family history of AAA was present in 11% (n: 3) of women and 7% (n: 6) of men.

Conclusion: When all findings were evaluated, the incidence of AAA was found to be higher in males, those over 60 years of age, smokers, those with hypertension, diabetes, a BMI ≥ 25 kg/m2, and hyperlipidemia, those who do not exercise regularly, and those with PAH and a positive family history. The suspicion of AAA aneurysm should be considered in patients with these symptoms. Initially, investigation with CDUS, which is highly sensitive, inexpensive, and now readily available in all healthcare facilities, will be effective in reducing potential morbidity and mortality.

Keywords: Endovascular, risks, abdominal aneurysm

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OP-090

Third-year single center results of CERAB

Evren Ozcinar[1], Elif Ezel Kadiroglu[1], Emre Sen[1], Mustafa Furkan Tanis[1], Ali Fuat Karacuha[1], Fatma Akca[2], Giorgi Sulukhia[1], Cagdas Baran[1], Mustafa Sirlak[1], Sadik Eryilmaz[1]

[1]Ankara University, Ankara, Türkiye
[2]Kırıkkale High Specialization Training and Research Hospital, Kırıkkale, Türkiye

Abstract

Aim: The Covered Endovascular Reconstruction of the Aortic Bifurcation (CERAB) is a new, promising tecnique for aorto-occlusive diseses. We aimed to uptade our long term data on the effectiveness of CERAB. Furthermore we aimed to evaluate complication rates to better define the safety profile of this tecnique.

Material and Methods: A total of 58 patients operated with CERAB procedure between 2022 – 2025 and under follow-up in our university. We evaluated the procedural outcoumes , symptom progresses and patency rates.

Results: 58 patients(49 males and 9 women) treated with CERAB procedure. One of these patients underwent open surgery during CERAB procedure and exluded. At third-year follow up , primary patency rates, secondary patency rates are %86.2 and %71. Patients mean age is 52.1 and mean hospital stay is 6.56 days.

Conclusion: Third-years outcomes of CERAB procedure is related to good long term outcomes and seems a safe alternative to open surgery. Our data suggest that CERAB tecnique has effective patency rates and close and prolonged follow up is necessity. These finding underscore the need for larger prospective studies to further validate long-term durability and to refine patient selection criteria.

Keywords: Covered endovascular reconstruction of aortic bifurcation, aortoiliac disease, aortoiliac occlusive disease

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TEVAR for blunt thoracic aortic injury

Dilsad Amanvermez Senarslan, Halil Demren, Esra Barluk, Funda Yildirim, Adnan Taner Kurdal, Omer Tetik

Manisa Celal Bayar University, Faculty of Medicine, Department of Cardiovascular Surgery, Manisa, Türkiye

Abstract

Aim: Blunt thoracic aortic injury (BTAI) is a life-threatening condition typically caused by high-energy trauma such as motor vehicle accidents, falls, or crush injuries. It represents the second leading cause of death in trauma patients after intracranial hemorrhage, with mortality rates reaching 75% in untreated cases. The development of thoracic endovascular aortic repair (TEVAR) has shifted management from conventional open repair to a less invasive approach with reduced morbidity and mortality. However, the optimal timing of TEVAR in polytrauma patients remains controversial. The decision to perform immediate or delayed intervention is often influenced by hemodynamic stability and the severity of associated injuries. This study aims to evaluate the outcomes of TEVAR in multi-trauma patients with BTAI.

Material and Methods: We retrospectively reviewed 21 patients (18 male, 3 female) with BTAI treated between January 2020 and August 2025. The Society for Vascular Surgery (SVS) grading system was used for injury classification. Patients with grade I injuries were managed conservatively. Delayed TEVAR was preferred for stable grade II–III injuries when associated organ injuries required priority treatment, while emergency repair was performed in grade IV injuries or free rupture. Demographic data, trauma mechanism, procedural details, and clinical outcomes were analyzed.

Results: The mean patient age was 44 ± 18 years. Motor vehicle accidents were the leading cause of injury (85%), followed by falls from height (9.5%) and landslides (4.7%). Three patients with grade I injuries were closely monitored, and 18 underwent TEVAR. Delayed intervention was required in 6 patients (28.5%), whereas 15 (71.5%) underwent urgent repair. The mean intensive care stay was 4 ± 2 days, and the mean hospital stay was 9 ± 7 days. One patient (4.7%) died due to intracranial hemorrhage. In three patients, coverage of the left subclavian artery was necessary due to inadequate proximal landing zones. Low-dose heparin was used in cases with concomitant intracranial or visceral injuries. Stent-graft oversizing was kept below 10%.

Conclusion: BTAI remains a critical cause of trauma-related mortality. TEVAR provides rapid hemodynamic stabilization, favorable perioperative outcomes, and lower invasiveness compared with open repair. In polytrauma patients, careful timing of TEVAR according to injury severity allows safe treatment of associated organ damage, supporting TEVAR as the optimal modality for BTAI management.

Keywords: Aortic rupture, blunt thoracic aortic injuries, endovascular procedures, multiple trauma, treatment outcome

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OP-092

Surgical versus endovascular management of peripheral artery pseudoaneurysms: A single-center experience

Sefer Kaya, Metin Onur Beyaz, Iyad Fansa

Hatay Mustafa Kemal University Cardiovascular Surgery Clinic, Hatay, Türkiye

Abstract

Aim: Peripheral artery pseudoaneurysms (PSA) are increasingly encountered, particularly after vascular interventions. Surgical repair and endovascular therapy are both established treatments, yet their comparative outcomes remain under discussion. This study reports a single-center experience evaluating clinical results of both strategies.

Material and Methods: Between 2020 and 2024, 63 consecutive patients with PSA were retrospectively reviewed. Etiologies were iatrogenic in 78% and traumatic in 22%. Thirty-five patients (56%) underwent endovascular repair, while 28 (44%) were treated surgically. Patient demographics, comorbidities, lesion characteristics, complications, recurrence, patency, limb salvage, and mortality were analyzed. Mean follow-up was 18 months.

Results: The mean age was 52 years, and 70% were male. Common comorbidities included hypertension (48%), diabetes mellitus (38%), and smoking history (40%). Mean lesion diameter was 2.5 cm, and 73% were symptomatic. Complications were less frequent with endovascular treatment (9%) compared to surgery (14%). Recurrence occurred in 5% of cases, limb loss in 2%, and 30-day mortality in 1.6%. Secondary patency exceeded 95% in both groups. Kaplan–Meier analysis showed superior short-term outcomes with endovascular repair, though long-term durability was similar between the two approaches.

Conclusion: This single-center series demonstrates that endovascular therapy offers efficacy comparable to surgery, with lower morbidity. Endovascular repair appears to be a safe and effective first-line option in anatomically suitable patients, while open surgery remains indispensable for complex or unfavorable lesions. Individualized treatment planning remains key in optimizing outcomes for patients with peripheral artery pseudoaneurysms.

Keywords: Peripheral artery pseudoaneurysm, endovascular repair, vascular complications, traumatic pseudoaneurysm, iatrogenic injury

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OP-093

Our 10-year results of EKOS in pulmonary embolism

Turhan Yavuz, Dincer Uysal, Kadir Burhan Karadem, Omer Buyuktahtakin, Ceyda Yilmaz, Caner Celik, Omer Faruk Ozdemir, Seyma Karaisli, Ahmet Horzum, Muhammet Olayan, Emre Yavuz, Erdogan Ibrisim

Süleyman Demirel University Cardiovascular Surgery, Isparta, Türkiye

Abstract

Aim: We wanted to show the long-term results of the EKOS method in pulmonary embolism.

Material and Methods: The results of 25 patients who underwent echocardiography at the 1st month, 5th year and 10th year after the procedure were examined. A total of 25 out of 80 cases were included in the study. The CT angiography and echocardiography results after the procedure were examined. There was no appearance of pulmonary embolism in the patients at the 10th and 10th year follow-up CT angiography. The RV/LV ratios in echocardiography were below 0.9 and the patients were clinically comfortable.

Results: EKOS is an effective treatment for pulmonary embolism and has good long-term results.

Conclusion: There are many treatment methods for pulmonary embolism. ECHO is an effective treatment, especially in the acute phase. It stops right ventricular strain symptoms in patients within hours. Depending on the patient's clinical condition and the extent of embolism, one or two catheters may be inserted, or the procedure time may be extended to achieve effective treatment.

Keywords: Pulmonary embolism, EKOS, thrombozis

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OP-094

Single center experience in endovascular aortic repair: Review of technical and clinical aspects

Yasin Sarac, Nazmi Alperen Gul, Hakki Kursat Cetin, Erman Sureyya Kiris, Helin El Kilic, Tolga Demir, Ismail Koramaz

Seyrantepe Hamidiye Etfal Training And Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is sharing of our endovascular aortic repair experiments in patients with risk for surgery and contributing to literature with comparing previous report according to mortality complications and additional operations.

Material and Methods: Patients with endovascular aortic repair application were evaluated retrospectively. Perioperative one month mortality, additional applications during procedure, occurred complications, endoleak types, approaching anesthetical technique, diagnosis of disease, comorbid factors and demographical data registered.

Results: Abdominal endovascular aortic repair (EVAR) applicated into 23 patients. Thoracic endovascular aortic repair (TEVAR) applicated into 14 patients. Both EVAR and TEVAR were aplicated to 1 patient. EVAR patients were operated with diagnosis of abdominal aortic aneurysm. 3 of these patients were emergency operated due to rupture. TEVAR applicated 11 patients were operated due to Type 3 Aortic Dissection. One month mortality of all patients were found as 15,8% (6 patients). Endoleaks were occurred 2 patients: one of them were Type 1, one of them were Type3.Type 1 aortic disection was developed in one patient (2,63%) after EVAR.

Conclusion: Endovascular techniques are become frequently preferred treatment modality with the developing technology. We believed that endovascular approaches are safely preferable alternative in patients with high surgical risk as our series.

Keywords: Aortic patologies, endovascular aortic repair, thoracic endovascular aortic repair, clinical outcomes, application technique

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OP-095

Results of two-year follow-up of patients undergoing endovascular and surgical revascularization for peripheral artery disease

Mustafa Enes Bostankolu, Medine Sarac, Ceylan Gurcan, Ayse Kabacalioglu, Busra Karakoc, Ali Aghayev, Ahmet Erkam Cevik, Mehmet Emir Erol, Levent Altinay

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: The aim of this study was to evaluate the two-year postoperative outcomes of patients who underwent interventions for PAD in our center.

Material and Methods: A total of 392 patients who underwent interventions for PAD between August 2023 and August 2025 at the Department of Cardiovascular Surgery, Etlik City Hospital, were retrospectively analyzed. Demographic data, procedural characteristics, technical success, complications, patency rates, and follow-up outcomes were recorded.

Results: The study included 316 male patients (81%) with a mean age of 62.5±11.6 years. The most common risk factors were smoking (286 patients, 73%) and diabetes mellitus (220 patients, 56%). Interventions included endovascular (239 patients, 61%), open surgical (132 patients,34%), and hybrid procedures (21 patients, 5%). The technical success rate was 93% (364 patients). No perioperative mortality, acute kidney injury, or dialysis requirement was observed. One patient developed cerebrovascular event. During follow-up, 28 patients(%7) experienced vessel occlusion, of whom 5(%1) underwent amputation. The mean vessel patency duration was 324±204 days. In this study, we demonstrated high technical success and low complication rates in patients who underwent interventions for PAD at our center. The proportion of endovascular procedures (239 patients, 61%) was consistent with recent literature, reflecting the global trend toward less invasive approaches.

Conclusion: Both endovascular and open surgical interventions for PAD can be performed successfully in our center with high technical success.

Keywords: Peripheral artery disease, endovascular intervention, surgical treatment, vessel patency, outcomes

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OP-096

Protective effects of BPC 157 in rats with experimentally induced lower extremity ischemia-reperfusion injury

Alperen Kutay Yildirim[1], Huseyin Demirtas[2], Abdullah Ozer[2], Mustafa Arslan[3]

[1]Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Gazi University, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[3]Gazi University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Ankara, Türkiye

Abstract

Aim: Ischemia-reperfusion (I/R) injury is a critical complication frequently encountered in peripheral arterial disease (PAD), particularly following surgical revascularization procedures. The pathophysiology of I/R injury is characterized by an imbalance between oxidative stress and antioxidant defenses, inflammatory responses, cellular apoptosis, and impaired angiogenesis. Body Protection Compound 157 (BPC 157), a stable pentadecapeptide isolated from human gastric juice, has shown promising therapeutic potential due to its antioxidative, anti-inflammatory, and angiogenic properties. However, its protective efficacy in extremity I/R injury remains poorly understood. This study aims to comprehensively investigate the protective role of BPC 157 against lower extremity ischemia-reperfusion injury in a controlled rat model by evaluating oxidative stress markers, inflammatory cytokines, apoptotic signaling pathways, and histopathological changes.

Material and Methods: A total of twenty-four adult male Wistar albino rats were randomly divided into four experimental groups (n=6): SHAM (only laparotomy performed), B (laparotomy followed by BPC 157 administration), IR (laparotomy followed by induction of ischemia for 45 minutes and subsequent reperfusion for 120 minutes), and IRB (ischemia induction for 45 minutes accompanied by BPC 157 treatment and subsequent reperfusion for 120 minutes). Biochemical analysis was conducted by measuring oxidative stress biomarkers including superoxide dismutase (SOD), malondialdehyde (MDA), total antioxidant status (TAS), and total oxidant status (TOS). Quantitative real-time polymerase chain reaction assays were performed to determine the expression levels of inflammatory markers (IL-6), pro-apoptotic markers (p53, Bax, Caspase-3), anti-apoptotic marker (Bcl-2) and HIF-1α. Comprehensive histopathological evaluations were conducted using hematoxylin-eosin and Masson's trichrome staining, as well as immunohistochemical analyses for VEGF, eNOS, IL-6, and Caspase-3.

Results: Administration of BPC 157 in the IRB group significantly mitigated oxidative stress, demonstrated by decreased MDA and TOS levels and increased SOD and TAS levels compared to the untreated IR group. Molecular analyses revealed downregulation of IL-6, Bax, Caspase-3 and HIF-1α, alongside upregulation of Bcl-2. No change was observed in terms of p53 between IRB group and SHAM. Immunohistochemical evaluations showed upregulation of VEGF and downregulation of eNOS, Caspase-3 and IL-6. Histopathological findings corroborated these biochemical and molecular results, showing markedly reduced tissue damage in the IRB group compared to IR.

Conclusion: BPC 157 effectively attenuates extremity I/R injury by concurrently exerting antioxidative, anti-inflammatory, anti-apoptotic, and angiogenic effects. These findings support its potential utility as a therapeutic agent to manage I/R injury and associated complications in PAD, highlighting its promise for future clinical application.

Keywords: Protection Compound 157, ischemia-reperfusion injury, peripheral arterial disease, extremity, rat

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OP-097

The impact of diabetes on procedural success, morbidity, and mortality in patients undergoing isolated infrapopliteal endovascular intervention (Prospective single centre study)

Mehmet Sengor, Ramazan Akal

Bezmialem Vakıf University, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: In this study, we aimed to evaluate the impact of Diabetes Mellitus (DM) on procedural success, morbidity, and mortality in patients diagnosed with critical limb ischemia who underwent isolated infrapopliteal endovascular balloon angioplasty.

Material and Methods: This prospective, single-center study included a total of 48 patients who presented with critical limb ischemia and underwent isolated infrapopliteal balloon angioplasty between 2023 and 2025. Patients were divided into two groups: those with Diabetes Mellitus (DM) (n=38, 79.2%) and those without DM (n=10, 20.8%). The change in ankle-brachial index (ABI) values before and after the procedure was evaluated in both groups. In addition, within a 6-month follow-up period, rates of restenosis, minor/major amputations, and overall survival were compared between the two groups.

Results: An increase of more than 20% in ankle-brachial index (ABI) following the procedure was observed in 78% of patients with diabetes and 90% of those without diabetes; however, the difference was not statistically significant (p=0.39). Similarly, no significant difference was found between the groups in terms of 6-month restenosis (p=0.45) or amputation rates (p=0.62).While no cases of amputation or mortality were observed in the non-diabetic group within 6 months, in the diabetic group, pseudoaneurysm occurred in 2 patients, amputation in 2 patients, and mortality was recorded in 3 patients.

Conclusion: Diabetes Mellitus is a systemic disease that contributes not only to cardiovascular and metabolic complications but also to an increased incidence of peripheral arterial disease. In patients with critical limb ischemia undergoing endovascular angioplasty, DM is considered a significant risk factor influencing procedural success, morbidity, and mortality. Although our study did not yield statistically significant results, post-procedural complications, amputations, and deaths were observed exclusively in the diabetic group. This suggests a clinically relevant trend. We believe that with larger sample sizes, future studies may demonstrate statistically significant differences.In patients undergoing infrapopliteal endovascular intervention, the optimization of medical therapy for Diabetes Mellitus alongside revascularization is crucial for procedural success and overall patient outcomes.

Keywords: Peripheral arterial disease, peripheral catheterization, diabetes mellitus

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OP-098

Management of ascending aortic graft infections: Single-center experience

Anil Guzeloglu, Meril Ahmet, Serkan Aygun, Salih Saylam, Ekrem Yilmaz, Fatih Yigit, Ahmet Can Topcu, Farid Gojayev, Fuat Buyukbayrak

Koşuyolu High Specialization Education and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Synthetic grafts are widely used in the surgical treatment of patients with thoracic aortic disease. Ascending aortic graft infections are an exceedingly rare, and often lethal, late complication of surgical operations of the ascending aorta. We aimed to report the characteristics and outcomes of patients who were recently treated for ascending aortic graft infection in our institution.

Material and Methods: This was a retrospective analysis of adults who received treatment for ascending aortic graft infection at a single center between September 2024 and September 2025. Data was collected via assessment of electronic health records, patient charts and radiological images. Graft infection diagnosis was made by utilizing echocardiographic examination, computed tomography angiogram and positron emission tomography scan. Patients with an unconfirmed diagnosis of ascending aortic graft infection were excluded from the analysis. Results were reported as median values with ranges.

Results: There were four patients who were treated with a confirmed diagnosis of ascending aortic graft infection between September 2024 and September 2025. Median age at diagnosis was 56.5 years (range, 36-74 years). All patients were male. Median time from initial graft implantation to ascending aortic graft infection diagnosis was 26.0 months (range, 9-144 months). Indication for initial surgery was acute type A aortic dissection in three (75%) patients, and ascending aortic aneurysm in one (25%). All patients presented with fever and positive blood cultures. The infected grafts were made of Dacron (polyethylene terephthalate) in all patients. All patients received intravenous antibiotics. Two patients underwent surgery with complete excision of the infected material and implantation of a new synthetic graft —one underwent a redo ascending aorta replacement, and another underwent a redo modified Bentall procedure with the flange technique. Two patients were managed nonoperatively due to refusal of high-risk surgical procedure. In-hospital mortality rate was 0% in the surgical group, and %100 in the nonoperative group ($p < 0.001$).

Conclusion: Reoperation with complete excision of the infected material should be the preferred treatment modality in patients with ascending aortic graft infections. Nonoperative management is not a viable option in this patient population.

Keywords: Reoperation, graft infection, ascending aorta

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OP-099

Non-contrast surgery and acute kidney injury: Single-center results from carotid endarterectomy

Ali Demiray, Muhammet Talha Ceran, Yalcin Gunerhan, Serkan Yildirim, Omer Tanyeli, Niyazi Gormus

Necmettin Erbakan University, Konya, Türkiye

Abstract

Aim: Acute kidney injury (AKI) after vascular surgery is often attributed to contrast-induced nephropathy. However, its occurrence following open procedures without contrast exposure has not been well characterized. This study aimed to investigate the incidence, risk factors, and clinical impact of AKI in patients undergoing carotid endarterectomy (CEA) without contrast exposue.

Material and Methods: We retrospectively analyzed 227 patients who underwent CEA between January 2015 and December 2023 in our cardiovascular surgery clinic. Demographic characteristics, comorbidities, preoperative neurological status, plaque morphology, stenosis severity, perioperative laboratory findings, and postoperative outcomes were assessed. AKI was defined as an increase in serum creatinine ≥0.3 mg/dL or ≥50% from baseline, while Hb decline was defined as a reduction of ≥2 g/dL. Statistical analyses were performed using chi-square or Fisher's exact test for categorical variables and the Mann–Whitney U test for continuous variables.

Results: AKI occurred in 9 patients (4.0%). All patients with AKI had coronary artery disease (CAD) (100%vs62.4%, p=0.028). Peripheral arterial disease (PAD) was also more common in this group (44.4% vs 8.3%, p=0.006). Diabetes mellitus (77.8% vs 46.3%) and hypertension (88.9% vs 70.6%) were more frequent among patients with AKI, but these differences did not reach statistical significance. A significant perioperative Hb decline was observed in 50 patients (22.0%). This was associated with higher CAD prevalence (78.0% vs 59.9%, p=0.020) and preoperative neurological deficits (22.0% vs 8.5%, p=0.012). Patients with Hb decline experienced longer ICU stays (median 1 [0.25–3.0] vs 1 [0–1.0] days, p=0.001) and longer hospitalizations (6 [4–8.75] vs 4 [3–7] days, p=0.0003). However, these differences were partly influenced by a small number of patients with markedly prolonged admissions.

Conclusion: AKI was observed in approximately 4% of patients undergoing CEA without contrast exposure. Both CAD and PAD were consistently present in patients with AKI, highlighting the role of widespread arterial disease burden as a potential underlying factor. Hb decline occurred more frequently, affecting about one-fifth of patients, and was associated with CAD and preoperative neurological deficits. This association may in part be explained by the higher use of antiplatelet therapy in these patient groups, potentially increasing perioperative bleeding tendency. Overall, perioperative renal injury after CEA appears to result from multifactorial mechanisms, including hemodynamic instability, impaired cardiac reserve, anemia-related renal hypoxia, and systemic inflammation. Given the retrospective single-center design and the limited number of AKI- cases, these findings should be interpreted with caution. Larger multicenter prospective studies are needed to validate these associations and clarify the underlying mechanisms.

Keywords: Carotid endarterectomy, acute kidney injury, perioperative complications, coronary artery disease

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OP-100

Retroperitoneal aortobifemoral bypass surgery: Single-center experience highlighting ICU and hospital stay advantages

Hakan Guven

Medical Park Bursa Hospital, Bursa, Türkiye

Abstract

Aim: The aim of this study is to evaluate the clinical and surgical outcomes of patients undergoing retroperitoneal aortobifemoral bypass for advanced aortoiliac occlusive disease, with a particular emphasis on intensive care unit (ICU) and overall hospital stay durations.

Material and Methods: A retrospective analysis was conducted on 52 patients who underwent retroperitoneal aortobifemoral bypass surgery at our institution between January 2020 and December 2024. Data collected included patient demographics (age, sex), comorbidities (e.g., hypertension, diabetes, chronic obstructive pulmonary disease), surgical indications (e.g., claudication, rest pain, tissue loss), graft types (Dacron vs. PTFE), and intraoperative findings (e.g., operative time, blood loss). Postoperative outcomes assessed were ICU stay duration, total hospital stay, morbidity (e.g., wound infections, pulmonary complications), mortality, and graft patency rates at 6, 12, and 24 months.

Results: Of the 52 patients (mean age: 63.8 ± 9.1 years; 60% male, n=31), 94% (n=49) reported significant symptom relief post-surgery, with 87% (n=45) achieving complete resolution of claudication or rest pain. Per protocol, all patients remained in the ICU for at least one night for drainage and hemodynamic monitoring, resulting in a mean ICU stay of 1.2 ± 0.4 days. The average total hospital stay was 3.0 ± 0.8 days, with 88% (n=46) discharged by day 4. Graft patency rates were 97% (n=50) at 6 months, 94% (n=49) at 12 months, and 91% (n=47) at 24 months. Postoperative complications occurred in 9% (n=5) of cases, primarily minor wound infections (5%, n=3) and transient renal dysfunction (3%, n=2). Pulmonary complications were notably low (1.5%, n=1), attributed to the retroperitoneal approach avoiding transabdominal access. No perioperative mortality was recorded, and early mobilization was achieved in 95% (n=49) of patients within 24 hours post-surgery.

Conclusion: Retroperitoneal aortobifemoral bypass surgery provides effective revascularization for aortoiliac occlusive disease while optimizing postoperative recovery. A minimum one-night ICU stay for drainage and hemodynamic monitoring ensures patient safety, complemented by a remarkably short average hospital stay of 3 days, with most patients (88%) discharged by day 4. This approach minimizes complications, supports early mobilization, and is particularly advantageous for patients with multiple comorbidities, offering a safe and efficient option for postoperative care and resource utilization.

Keywords: Aortobifemoral bypass, retroperitoneal approach, ICU stay, aortoiliac occlusive disease, vascular surgery

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OP-101

Anatomical severity, sarcopenia and nutritional status as predictors of amputation and mortality after lower extremity revascularization

Senanur Duymaz[1], Burak Duymaz[2], Ceren Sayarer[1]

[1]Dokuz Eylül University Hospital, Cardiovascular Surgery Department, İzmir, Türkiye
[2]Dokuz Eylül University Hospital, Orthopaedics and Traumatology Department, İzmir, Türkiye

Abstract

Aim: The aim of this study was to evaluate the prognostic significance of anatomical severity, sarcopenia and nutritional status in patients undergoing lower extremity revascularization. We hypothesized that the Global Limb Anatomic Staging System (GLASS) would serve as a strong independent predictor of major amputation and mortality, and that the addition of the psoas–vertebra index (PVLI) and serum albumin would further enhance prognostic accuracy, thereby improving risk stratification beyond anatomical assessment alone.

Material and Methods: A total of 274 patients undergoing open surgery or endovascular intervention between 2015 and 2024 were retrospectively analyzed. Baseline characteristics, comorbidities, GLASS stage, PVLI measurements and preoperative albumin levels were collected. The primary endpoint was major amputation or 1-year mortality. Multivariable logistic regression was performed to identify independent predictors. Receiver operating characteristic (ROC) curves with 95% confidence intervals (CI) were used to assess discriminative performance.

Results: A total of 274 patients were included, mean age 65.3 ± 10.2 years, 69% male. Diabetes was present in 35%, chronic kidney disease in 7%, and coronary artery disease in 28%. Open surgery was performed in 57% and endovascular procedures in 43%. Anatomical complexity was high, with 38.7% of patients in GLASS stage III–IV. The median psoas–vertebra index (PVLI) was 2490, and 29% had albumin < 3.5 g/dL. Major amputation occurred in 17.5% and 1-year mortality in 11.3%.Logistic regression identified GLASS ≥3 as a strong independent predictor (odds ratio [OR] 2.48, 95% confidence interval [CI] 1.28–4.75, p=0.006). Diabetes (OR 2.36, p=0.006) and age (OR 1.03 per year, p=0.047) were also significant. Chronic kidney disease (OR 2.05, p=0.061) and PVLI below the median (OR 1.58, p=0.067) showed borderline significance, whereas albumin < 3.5 g/dL was not independently predictive.ROC analysis showed GLASS ≥3 had strong discrimination with an area under the curve (AUC) of 0.818 (95% CI 0.75–0.87), sensitivity 85%, specificity 79%. PVLI < 2490 improved prognostic ability (AUC 0.760, 95% CI 0.69–0.82; sensitivity 83%, specificity 79%). Albumin < 3.5 g/dL was less informative (AUC 0.653, 95% CI 0.58–0.73). The combined model integrating GLASS, PVLI, and albumin achieved the best accuracy (AUC 0.890, 95% CI 0.83–0.93), sensitivity 93%, and specificity 75%.

Conclusion: GLASS classification was a strong and independent predictor of adverse outcomes after lower extremity revascularization. The addition of sarcopenia (PVLI) and nutritional status (albumin) further improved prognostic accuracy. While GLASS alone remains a reliable staging tool, the combined model offers superior risk stratification and should be validated in larger, prospective cohorts.

Keywords: Peripheral arterial disease, lower extremity revascularization, sarcopenia, psoas vertebra index, global limb anatomic staging system

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OP-102

Evaluation of early postoperative lower extremity reperfusion with ischemia modified albumin in patients undergoing endovascular or open surgical procedure due to peripheral artery disease

Salih Tuysuz, Adem Reyhancan, Mursel Buyukadali, Fadil Shehu, Fatih Mehmet Isik, Suat Canbaz, Orkut Guclu, Serhat Huseyin, Ertugrul Kocak

Trakya University Faculty of Medicine Hospital University Hospital, Edirne, Türkiye

Abstract

Aim: Ischemia-modified albumin (IMA) is formed due to increased oxidative stress encountered in various ischemic conditions affecting many organs, including the myocardium. Serum IMA levels rise in both cardiac and non-cardiac ischemic diseases as well as in peripheral vascular diseases. The aim of this study was to evaluate the early-term outcomes of patients with peripheral arterial disease undergoing different surgical interventions by using IMA. Thus, we aimed to assess the potential role of IMA in the follow-up of peripheral arterial disease and to gain insight into the relative effectiveness of different surgical options.

Material and Methods: Patients admitted to the Trakya University Cardiovascular Surgery Clinic with complaints of walking difficulty and diagnosed with peripheral artery disease between 15.09.2024 and 15.03.2025 were prospectively evaluated. Of the 52 patients included in our study, 37 (71.2%) were included in endovascular procedures and 15 (28.8%) were included in open vascular surgery procedures. For IMA measurements, three blood samples were obtained from each patient: pre-procedure, 1 hour post-procedure, and 1 day post-procedure. Samples were centrifuged at 4000 rpm for 10 minutes and stored at –80 °C until analysis. IMA levels were then measured after all samples had been collected.

Results: The preoperative IMA value in the open surgery group was significantly lower compared to the endovascular group ($p < 0.05$). The change in IMA from preoperative to postoperative 1st hour was significantly higher in the endovascular group ($p < 0.05$). Within this change, a decrease was observed in the endovascular group, while an increase was noted in the open surgery group.

Conclusion: Peripheral artery disease is a major cause of morbidity and mortality worldwide. In addition to medical treatment, revascularization techniques have been increasingly adopted with advances in technology. Choosing the appropriate intervention for each patient and evaluating procedural success are of great importance.Our findings suggest that IMA cannot reliably distinguish the superiority of open surgical versus endovascular techniques in the early postoperative period. This may be due to the longer vascular clamping times in the open surgery group, which delays the return of IMA to baseline. Studies including follow-up beyond 24 hours or post-discharge outpatient evaluations are needed to better assess this issue.In our study, a decrease in IMA was observed in the first postoperative hour following endovascular procedures. These findings indicate that IMA may be useful for assessing early procedural success and identifying patients who may require reintervention during follow-up.

Keywords: Endovascular, revascularization, periheral arterial disease

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OP-103

Relationship between foot ulcer development and tibiale artery score in diabetic patients

Ozlem Cakirkose

Giresun University Faculty of Medicine, Giresun, Türkiye

Abstract

Aim: The aim of this study is to investigate the relationship between the development of foot ulcers in diabetic patients and the tibial artery score (TAS). Peripheral artery disease is an important etiological factor for diabetic foot ulcers. The degree of stenosis and occlusion in the tibial arteries may be decisive in the development of foot ulcers.

Material and Methods: This study, planned as a retrospective cross-sectional study, included diabetic patients followed in the Cardiovascular Surgery clinic of Giresun Training and Research Hospital, who were evaluated with Doppler ultrasonography of the lower extremity arteries. Patients were divided into two groups based on the presence or absence of foot ulcers; a total tibial artery score was calculated by assigning a score of 0-3 for each artery based on the findings of stenosis and occlusion. Additionally, Wagner classification was performed in the ulcer group.

Results: A total of 100 patients were included in the study, with 50 patients in each group. It was found that the tibial artery score was significantly higher in patients with foot ulcers compared to those without ($p < 0.05$). A positive correlation was observed between TAS and Wagner stage. Furthermore, significant relationships were found between the presence of ulcers and age, duration of diabetes, and vascular comorbidities.

Conclusion: The tibial artery score is a valuable risk indicator for the development of foot ulcers in diabetic patients. The use of this score in clinical follow-up may facilitate the early identification of high-risk patients. Additionally, the prognostic value of TAS should be considered to prevent further ischemic damage.

Keywords: Diabetic foot, ulcer, tibial artery score, peripheral artery disease, wagner classification

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OP-104

Thrombotic versus embolic upper extremity arterial occlusion: A comparative analysis of clinical profiles, treatments, and outcomes

Selcuk Coskun[1], Pinar Koksal Coskun[2], Ferhat Icme[1], Selahattin Guru[1]

[1]Ankara Bilkent City Hospital, Department of Emergency Medicine, Ankara, Türkiye
[2]Ankara Etlik City Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Upper extremity arterial occlusion (UEAO) is a critical vascular condition that leads to significant morbidity, including tissue ischemia and potential limb loss. UEAO can arise from thrombotic or embolic etiologies, each with distinct pathophysiological mechanisms and clinical implications. Thrombotic occlusions typically result from in-situ thrombus formation due to endothelial injury, hypercoagulability, or stasis, often linked to atherosclerotic disease or vascular risk factors. In contrast, embolic occlusions occur when thrombi, frequently originating from cardiac sources such as atrial fibrillation, dislodge and obstruct distal arterial beds. These conditions are associated with cardiovascular comorbidities, including coronary artery disease and heart failure, which complicate management and prognosis. Despite advancements in anticoagulant therapies and surgical interventions, UEAO remains a clinical challenge due to varying outcomes based on etiologyTo compare demographic profiles, clinical characteristics, treatment approaches, and outcomes of patients with thrombotic versus embolic upper extremity arterial occlusion (UEAO) to inform tailored therapeutic strategies.

Material and Methods: We analysed 168 consecutive adult patients with acute UEAO, categorized into thrombotic (n=109) or embolic (n=59) groups based on Doppler ultrasonography or computed tomography angiography. Data on demographics, medical history, affected vessels, treatments (surgical interventions, anticoagulation), and outcomes (thrombosis resolution, mortality, limb loss, recovery time) were extracted from electronic medical records. Statistical analyses included t-tests, chi-square tests, Fisher's exact tests, and effect size calculations (Cohen's d, Cramer's V, odds ratios).

Results: Embolic patients were older (73.1 ± 13.7 vs. 54.4 ± 14.5 years, $p < 0.001$) and more often female (66.1% vs. 38.5%, p=0.001). They had higher rates of cardiac comorbidities, including congestive heart failure (52.5% vs. 4.6%, OR=22.7, $p < 0.001$) and atrial fibrillation with thrombus on echocardiography (40.7% vs. 0%, $p < 0.001$). Although radial involvement is the most common in both patient groups, embolic occlusions more commonly affected ulnar (61.0% vs. 22.9%, OR=5.3, $p < 0.001$) and brachial arteries (61.0% vs. 12.8%, OR=11.0, $p < 0.001$). Embolic patients underwent more surgical interventions (59.3% vs. 6.4%, OR=21.8, $p < 0.001$) and received low molecular weight heparin (79.7% vs. 65.1%, p=0.04). Mortality was higher in embolic patients (20.3% vs. 3.7%, OR=6.6, $p < 0.001$), but limb loss (5.1% vs. 2.8%, p=0.43) and recovery time (median 20 days, p=0.53) were similar.

Conclusion: Embolic UEAO, associated with older age, female predominance, and cardiac comorbidities, carries higher mortality, necessitating aggressive management. Comparable limb loss and recovery times suggest effective interventions when timely, highlighting the need for tailored strategies to optimize outcomes.

Keywords: Arterial occlusion, thrombosis, embolism, upper extremity

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OP-105

Postoperative 2 year follow up results of percutaneous access site in peripheral arterial disease patients

Busra Karakoc Kaplan, Ceylan Gurcan, Mustafa Enes Bostankolu, Ali Aghayev, Ahmet Erkam Cevik, Medine Sarac, Emre Kaymakci, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Today, endovascular methods are generally the first choice in the treatment of peripheral arterial disease (PAD). The choice of access site usually varies depending on the patient's anatomical characteristics and the location of the intervention, with femoral or brachial access being the most commonly used routes. In this study, we present the postoperative two year clinical follow up results of access sites in patients who underwent percutaneous intervention for PAD in our clinic.

Material and Methods: We reviewed the data of 406 patients diagnosed with PAD in our clinic. Among these, 260 patients who underwent endovascular procedures were evaluated. The data were obtained retrospectively from hospital archives. The patients' average follow-up duration, the medical treatment recommended at discharge, and the complications such as embolism, thrombosis, major bleeding, pseudoaneurysm, and neurological complications observed after the procedure, as well as the interventions performed for these complications, were recorded.

Results: Between August 2023 and August 2025, a total of 260 interventional cases were analyzed. Of the patients, 201 (77%) were male. Comorbidities included hypertension in 142 (54%), diabetes mellitus in 151 (58%), and hyperlipidemia in 142 (54%) patients. Smoking history was present in 186 (71%), coronary artery disease in 121 (46%), and positive family history in 61 (23%) patients. The mean follow-up was 378 ± 213.74 days. Brachial access was used in 56 (21.5%), femoral in 195 (75%), and simultaneous brachial-femoral access in 9 (3.5%) patients. Complications included neurological complication in 1 femoral patient and none in brachial, pseudoaneurysm in 2 femoral and 1 brachial, major bleeding in 3 femoral and 1 brachial, and embolism in 3 femoral and none in brachial. No statistically significant difference was found between brachial and femoral access in terms of complication rates ($p > 0.05$). No access site infections were observed in any of the patients. Vascular closure devices were not used in any of the cases. A 7F sheath was used in 215 patients (82.7%), a 6F sheath in 40 patients (15.4%), and an 8F sheath in 5 patients (1.9%). The femoral artery is preferred for its larger diameter and easier access, facilitating hemostasis and vessel control. The brachial artery is smaller and near nerves and muscles, increasing complication risk. Both routes may cause hematoma, thrombosis, pseudoaneurysm, or infection.

Conclusion: Femoral and brachial arteries demonstrate similar complication rates for peripheral endovascular interventions. Both access routes can be safely used depending on the lesion characteristics and the patient's anatomical features.

Keywords: Peripheral arterial disease, treatment, endovascular

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OP-106

Early outcomes of TEVAR: Spinal cord ischemia and reintervention rates in a single-center study

Mehmet Cahit Saricaoglu[1], Fatma Akca[2], Evren Ozcinar[1], Ali Ihsan Hasde[1], Ali Fuat Karacuha[2], Salih Anil Boga[3], Onur Buyukcakir[1], Cağdas Baran[1], Levent Yazicioglu[1], Sadik Eryilmaz[1]

[1]Ankara University, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Kırıkkale High Specialization Hospital, Department of Cardiovascular Surgery, Kırıkkale, Türkiye
[3]Trabzon Kanuni Training and Research Hospital, Department of Cardiovascular Surgery, Trabzon, Türkiye

Abstract

Aim: Data based on the technical successes of endovascular procedures and certain advantages over open surgery have recently led to their being the preferred treatment protocol for thoracic aortic interventions. The aim of this study is to present the single-center results, especially focusing on spinal cord ischemia and reintervention, and to examine their relationships with various variables.

Material and Methods: Data from patients who underwent TEVAR between February 2012 and August 2023 were retrospectively collected. Primary outcomes were spinal cord ischemia and early reinterventions. Secondary outcomes included stroke, arm ischemia, and 30-day mortality outcomes.

Results: : In the dataset of 146 patients, 116 (79.45%) were male, with an average age of 63.23 ± 12.50. Among the complications, postoperative stroke was observed in 20 patients (13.7%), and arm ischemia, likely due to occlusion of the subclavian artery, was observed in 10 patients (6.84%). Spinal cord ischemia was observed in 11 patients (7.5%), while TEVAR-related reintervention was required in 38 patients (26%). No significant relationship was found between SCI and the variables (p-value > 0.05); however, a statistically significant relationship was observed between reinterventions and smoking, diabetes, and lesions located in the distal zone (p-value < 0.05).

Conclusion: This study has demonstrated that the risk of reintervention is increased in cases with a history of diabetes mellitus, smoking, and aortic pathologies located in the distal thoracic zone. However, the current findings need to be supported by larger randomized multicenter studies.

Keywords: Thoracic aorta, endovascular procedures, spinal cord ischemia, reintervention, aortic aneurysm

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OP-107

The aim is to compare serum IL-6, calponin-1 (CNN-1), and matrix gla protein (MGP) levels in patients operated on with a diagnosis of ascending aortic aneurysm with those of a healthy control group, and to evaluate the disease-related changes in these biomarkers. In this way, the diagnostic or prognostic potential of these biomarkers will be assessed, contributing to the development of new follow-up approaches that may be used in the future

Ferhat Tumkaya, Osman Eren Karpuzoglu

Health Sciences University Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim is to compare serum IL-6, Calponin-1 (CNN-1), and Matrix Gla Protein (MGP) levels in patients operated on with a diagnosis of ascending aortic aneurysm with those of a healthy control group, and to evaluate the disease-related changes in these biomarkers. In this way, the diagnostic or prognostic potential of these biomarkers will be assessed, contributing to the development of new follow-up approaches that may be used in the future.

Material and Methods: The study included patients who met the inclusion criteria and underwent surgery for ascending aortic aneurysm and coronary artery disease at Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital between April 2025 and August 2025, over a 5-month period. Designed as a prospective study, demographic, biochemical, and radiological data, as well as echocardiographic findings, were collected from all patients. Serum samples were analyzed for IL-6, Calponin-1, and Matrix Gla Protein expression levels, which were then compared.

Results: As a result, serum Calponin-1 levels were found to be significantly decreased in the patient group compared to the control group (p=0.028). Serum Matrix Gla Protein (MGP) levels, on the other hand, showed a significant increase (p=0.004). When IL-6 levels were examined, no significant difference was detected between the control and aneurysm groups (p=0.500).The optimal cut-off value for MGP to distinguish the patient group from the control group was calculated using ROC curve analysis. In aneurysm patients, the optimal MGP cut-off value was determined to be 471.08. At this threshold, MGP levels showed a specificity of 54% and a sensitivity of 77.5%.Similarly, the optimal cut-off value for Calponin-1 was calculated using ROC curve analysis. In aneurysm patients, the optimal Calponin-1 cut-off value was found to be 1.15. At this threshold, Calponin-1 levels demonstrated a specificity of 49.9% and a sensitivity of 75.0%.

Conclusion: This study demonstrates that decreased Calponin-1 and increased MGP levels, with no significant difference in IL-6, in patients with ascending aortic aneurysm are consistent with the processes of vascular smooth muscle cell (VSMC) phenotypic modulation and calcification/extracellular matrix remodeling in aneurysm wall biology. CNN-1 provides indirect information regarding the contractile capacity and structural integrity of the vascular wall, whereas MGP emerges as a marker reflecting calcification and matrix dynamics. The neutral outcome for IL-6 suggests the predominance of local inflammation in thoracic/ascending aortic pathophysiology and highlights the limitations of systemic measurement.

Keywords: Ascending aortic aneurysm, matrix gla protein, calponin-1, IL-6

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OP-108

The effect of modified eras protocol on discharge time in patients undergoing ascending aortic replacement

Seval Tobakcal, Osman Asilturk, Canan Cevik, Serkan Yildirim, Yuksel Dereli, Erdal Ege

Necmettin Erbakan University Faculty of Medicine Hospital, Konya, Türkiye

Abstract

Aim: The recovery process after ascending aortic replacement (AAR) is usually prolonged and affects patients' discharge times. This study aimed to evaluate the effect of the modified Enhanced Recovery After Surgery (ERAS) protocol on discharge times in patients undergoing AAR.

Material and Methods: A total of 60 patients who underwent AAR were included in the study. Patients were divided into two groups:- Control group (n=30): Patients without ERAS protocol implementation- ERAS group (n=30): Patients with modified ERAS protocol implementationPostoperative discharge days were recorded and compared between the two groups.

Results: In the ERAS group, the distribution of discharge was as follows:-Postoperativeday 3: 3 patients- Postoperative day 4: 12 patients- Postoperative day 5: 11 patients- Postoperative day 6: 1 patient- Postoperative day 7: 1 patient- Postoperative day 8: 2 patientsIn the control group without ERAS:- Postoperative day 5: 9 patients- Postoperative day 6: 7 patients- Postoperative day 7: 2 patients- Postoperative day 8: 2 patients- Postoperative day ≥9: 9 patientsThe mean discharge time was calculated as 4.7 days in the ERAS group and 6.8 days in the control group.

Conclusion: The implementation of the modified ERAS protocol in patients undergoing ascending aortic replacement accelerates postoperative recovery and shortens discharge times. These findings support the effectiveness of ERAS applications in cardiac surgery.

Keywords: Ascending aortic replacement, Enhanced Recovery After Surgery protocol, cardiac surgery, discharge time, postoperative recovery

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OP-109

Packing the chest: A useful technique for intractable bleeding after aort dissection operation

Aydemir Kocarslan, Mustafa Etli, Gokhan Ozerdem

Antalya City Hospital, Antalya, Türkiye

Abstract

Aim: The aim of this retrospective study is to demonstrate the effects of the packing method we applied in delayed sternal closure on early and mid-term mortality and morbidity.

Material and Methods: This study examined 65 consecutive patients who underwent ascending aortic surgery at Antalya City Hospital between February 2024 and September 2025. Forty of these patients had undergone aortic dissection surgery. Clinical features, surgical information, postoperative complications, cumulative one-month and six-month survival, and reoperation-free rates were documented.

Results: All of patients (100%) survived. None developed a sternal wound infection. The conclusion drawn was that chest packing could be a life-saving procedure following aort surgery.

Conclusion: Unstoppable bleeding after aortic dissection surgery is a life-threatening complication. Prolonged surgery and excessive fluid administration due to hypothermia can lead to clotting disorders. Chest packing can be an important rescue method when bleeding cannot be controlled using standard surgical techniques and correction of coagulation disorders. The aim was to determine the outcomes of patients who underwent primary chest packing in the operating room due to uncontrolled bleeding after aortic surgery. The method used was a retrospective analysis of the patients' medical records. Over a 18 month period, 65 patients underwent ascending aortic surgery at Antalya City Hospital. Forty of these patients had aortic dissection. Packing was applied before leaving the operating room in four of these patients, and chest tubes were placed without sternum closure, and only skin sutures were placed. After the patients' drainage stopped within the first 24 hours and their blood values and fibrinogen levels returned to normal, they were taken back into surgery without being awakened. Packing should be considered as a method of delayed sternal closure. Packing as a method of delayed sternal closure is an effective life-saving technique for stabilizing patients with uncontrolled bleeding after ATAAD repair surgery and provides acceptable short- and long-term outcomes. Patients at risk for uncontrolled bleeding should consider packing early.

Keywords: Acute type A aortic dissection, bleeding, coagulopathy, delayed sternal closure, mediastinal packing

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OP-110

A novel approach to percutaneous revascularization in critical and complex lower limb ischemia

Emced Khalil

Ahi Evren Cardiovascular Surgery Research And Education Hospital, Trabzon, Türkiye

Abstract

Aim: Critical and complex lower limb ischemia (CLI) represents an advanced stage of peripheral arterial disease and is associated with high morbidity, prolonged hospital stays, and risk of major limb loss. Traditional surgical bypass may not always be feasible, particularly in patients with multiple comorbidities. Combining minimally invasive revascularization techniques with intensive medical therapy could offer improved outcomes in limb salvage and functional recovery.

Material and Methods: Fifty patients with CLI were prospectively included. All underwent percutaneous endovascular revascularization—targeting infrapopliteal vessels—combined with intensive medical management, including dual antiplatelet therapy, statins, strict glycemic control, and smoking cessation support. Among the cohort, 40 (80%) were smokers, 30 (60%) had diabetes mellitus, and 15 (30%) presented with ischemic ulcers. The majority were male. Patients were monitored for procedural success, vessel patency, amputation rates, wound healing, and hospital stay duration.

Results: Technical success and patency: Complete infrapopliteal patency was achieved in 34 patients (68%), secondary patency in 12 (24%), while 2 patients (4%) failed to achieve patency.Limb salvage: No below-knee amputations occurred. Two patients (4%) underwent ankle-level amputation, and among the 12 ulcer patients, 10 (83%) required only minor toe amputations.Clinical course: Hospital stays were prolonged in cases with active ulcers, but most wounds demonstrated significant healing within follow-up. The combined approach was associated with improved ambulation and pain relief.Outcomes: Quality of life improved markedly, and the strategy substantially reduced major amputation rates compared to historical expectations for CLI.

Conclusion: The integration of percutaneous revascularization with comprehensive medical therapy provides a safe and effective strategy for treating critical and complex lower limb ischemia. This approach enhances limb salvage, accelerates ulcer healing, and improves functional outcomes while markedly reducing the need for major amputations.

Keywords: Percutaneous revascularization, critical limb ischemia, endovascular therap, amputation prevention, quality of life

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OP-111

Role of the prognostic nutritional index in the assessment of symptomatic carotid stenosis

Omer Faruk Rahman[1], Mert Arslangilay[1], Onder Turgut Bozkurt[2], Alper Ozbakkaloglu[1], Ahmet Daylan[1], Sahin Bozok[1]

[1]İzmir Bakırçay University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye
[2]İzmir Çiğli Training and Research Hospital, Ministry of Health, İzmir, Türkiye

Abstract

Aim: Carotid endarterectomy (CEA) is performed to reduce the risk of stroke in patients with carotid artery stenosis. Current guidelines recommend surgical treatment for stenosis > 60% in asymptomatic patients and > 50% in symptomatic patients. Identifying high-risk patients before they become symptomatic is crucial to enable intervention before morbidity develops. The Prognostic Nutritional Index (PNI), calculated from serum albumin and lymphocyte count, reflects nutritional and immune status and may be useful in predicting the risk of symptom development. This study aimed to evaluate the discriminatory value of PNI in differentiating between symptomatic and asymptomatic carotid stenosis in patients indicated for CEA.

Material and Methods: Between January 2025 and July 2025, patients who underwent CEA at a single center were retrospectively analyzed. Demographic data, laboratory parameters, antiplatelet drug use, and carotid stenosis degrees were obtained from patient records. Stenosis degrees were determined by computed tomography angiography (CTA). For laboratory evaluation, preoperative current test results were used for asymptomatic patients, while the most recent laboratory values prior to the onset of symptoms (stroke, transient ischemic attack, or amaurosis fugax) were used for symptomatic patients. Patients were categorized into symptomatic and asymptomatic groups. PNI was calculated for each patient and compared between groups. Prognostic Nutritional Index (PNI) for each patient was calculated using the formula: 10 × Albumin (g/dL) + 0.005 × Lymphocyte (/mm³). The potential of PNI to predict symptomatic status was assessed using ROC analysis. A p-value < 0.05 was considered statistically significant.

Results: The median age of the 49 patients included was 69.5 years in the symptomatic group and 69.0 years in the asymptomatic group, with no significant difference ($p > 0.05$). There were also no statistically significant differences in sex distribution and comorbidities ($p > 0.05$). Albumin levels were significantly lower in the symptomatic group ($p < 0.05$). Although lymphocyte count was lower in the symptomatic group, the difference was not statistically significant ($p > 0.05$). No significant differences were found in other laboratory parameters ($p > 0.05$). PNI was significantly lower in the symptomatic group (51.2 vs. 53.4; p=0.021). ROC analysis showed an AUC of 0.694 (95% CI: 0.545–0.842; p=0.021) for PNI in distinguishing asymptomatic patients. The optimal cut-off value was 51.95, with a sensitivity of 70.4% and a specificity of 59.1%.

Conclusion: PNI is a simple and easily calculable parameter that may help differentiate between symptomatic and asymptomatic carotid stenosis. However, further large-scale, multicenter studies are needed to validate these findings.

Keywords: Prognostic nutritional index, carotid stenosis, carotid endarterectomy, serum albumin

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Oral Presentations Nominated for an Award

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Best Abstracts -1

Arginine metabolites as novel biomarkers of chronic venous insufficiency: A prospective case-control study

Eyup Cihan Kaya[1], Omer Faruk Cicek[2], Fikret Akyurek[3], Halil Ozer[4], Ayse Ari[4], Atilla Orhan[2], Hakan Akbayrak[2], Ibrahim Enes Ozdemir[5], Mucahit Tahsin Demirtas[2], Mustafa Buyukates[2]

[1]Çorum Erol Olçok Training and Research Hospital, Department of Cardiovascular Surgery, Çorum, Türkiye
[2]Selçuk University, Medical Faculty, Department of Cardiovascular Surgery, Konya, Türkiye
[3]Selçuk University, Medical Faculty, Department of Biochemistry, Konya, Türkiye
[4]Selçuk University, Medical Faculty, Department of Radiology, Konya, Türkiye
[5]Etlik City Hospital, Department of Pediatric Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Chronic venous insufficiency (CVI) imposes a major health burden worldwide. Established risk factors include advanced age, female sex, family history, obesity, and occupations requiring prolonged standing. Despite various theories, its etiology remains incompletely understood. Recent evidence implicates endothelial dysfunction, with biomarkers emerging as targets of investigation. This study aimed to evaluate arginine metabolites associated with endothelial dysfunction in CVI, thereby clarifying disease mechanisms and supporting therapeutic strategies.

Material and Methods: We conducted a single-center prospective case control study. Consecutive patients with lower-extremity pain underwent clinical examination and duplex ultrasonography. Those diagnosed with CVI formed the study group, while patients with normal findings served as controls. The Clinical-Etiology-Anatomy-Pathophysiology (CEAP) classification and Venous Clinical Severity Score (VCSS) were used to define the population.

Results: A total of 103 individuals were included: 58 with CVI (median age 41.5 [35–49.25] years) and 45 controls (median age 35 [30–44.5] years; p=0.066). Females comprised 54.4% of participants. No significant differences were observed between groups regarding demographics, smoking, anthropometry, hematological indices, renal function, lipid profile, liver enzymes, or inflammatory markers. In contrast, ADMA (asymmetric dimethylarginine), SDMA (symmetric dimethylarginine), and L-NMMA (monomethyl arginine) were significantly elevated in CVI patients (p=0.004, p=0.004, and p=0.001, respectively), whereas arginine, homoarginine, and the arginine/ADMA ratio were significantly reduced (p=0.027, p=0.022, and p < 0.001). Homoarginine levels were lower in CVI patients (1.08±0.31 vs. 1.23±0.33 µmol/L; p=0.022). The arginine/ADMA ratio was higher in controls group (190.6 [161.6–248.3] vs. 155.0 [124.9–194.3]; p < 0.001). Multivariate analysis identified homoarginine (OR 0.19, 95% CI 0.04–0.80, p=0.024) and arginine/ADMA ratio (OR 0.99, 95% CI 0.98–0.99, p=0.027) as independent predictors of CVI.

Conclusion: The arginine/ADMA ratio reflects nitric-oxide (NO) synthesis efficiency; higher values may enhance NO bioavailability, support endothelial recovery, and lower cardiovascular risk. Homoarginine appears similarly protective. These findings indicate that L-arginine and homoarginine supplementation could mitigate endothelial dysfunction, supporting both prevention and treatment of CVI. Incorporating these biomarkers into clinical practice may improve understanding of disease mechanisms and guide therapeutic decision-making.

Keywords: Arginine, asymmetric dimethylarginine, homoarginine, nitric oxide, venous insufficiency

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Best Abstracts -2

Which endovenous technique is more reliable? A comparative analysis of long-term outcomes of RF, EVLA, and cyanoacrylate glue

Ali Demiray, Yalcin Gunerhan, Serkan Yildirim, Mehmet Isik, Omer Tanyeli, Yuksel Dereli, Niyazi Gormus

Necmettin Erbakan University, Konya, Türkiye

Abstract

Aim: Endovenous procedures have largely replaced surgical stripping for varicose veins. Radiofrequency ablation (RFA) and endovenous laser ablation (EVLA) are well-established, while cyanoacrylate glue offers a non-thermal, anesthesia-free alternative. Despite procedural convenience, its long-term durability and thrombotic safety remain uncertain. This study compared RFA, EVLA, and glue in terms of recanalization, deep vein thrombosis (DVT), phlebitis, and reintervention.

Material and Methods: A retrospective review was performed on 376 patients with great saphenous vein (GSV) insufficiency between january 2015 and december 2023: 147 underwent RFA, 96 EVLA, and 133 glue. Baseline demographics, preoperative saphenofemoral junction (SFJ) and GSV diameters, anesthesia type, and follow-up duration were analyzed. Outcomes included recanalization, DVT, phlebitis, and reintervention. ANOVA, Kruskal–Wallis, and Chi-square tests were applied. Odds ratios (OR) with 95% confidence intervals were calculated, with $p < 0.05$ considered significant.

Results: Mean age was 46.2±11.3 years with no group difference (p=0.87). Female predominance was similar (RFA 74.8%, EVLA 71.9%, Glue 72.9%; p=0.92). Glue patients had smaller preoperative diameters ($p < 0.001$) and longer follow-up (41.9±25.9 months; $p < 0.001$).Recanalization was highest with glue (26.3%) versus RFA (8.2%) and EVLA (12.5%) (p=0.0001). Glue carried a fourfold higher risk than RFA (OR 4.0, 95% CI 1.9–8.4) and 2.5-fold higher risk than EVLA (OR 2.5, 95% CI 1.2–5.5). DVT occurred in 9.8% with glue, compared with 0.7% and 2.1% in RFA and EVLA ($p < 0.001$). Phlebitis did not differ (p=0.33). Reintervention was required in 14% of glue patients but < 2% with RFA/EVLA. Notably, even when restricted to 24 months, glue outcomes remained inferior, suggesting technique-specific risks.

Conclusion: In this study, RFA and EVLA showed more favorable long-term outcomes compared with cyanoacrylate glue, particularly with regard to recanalization rates, thrombotic complications, and the need for reintervention. However, glue offers important procedural advantages, including the absence of tumescent anesthesia, shorter procedure time, and early mobilization, which may be especially beneficial for patients with anesthetic risk or for those managed in an outpatient setting. Although higher rates of recanalization and DVT were observed in the glue group, these findings do not indicate that the technique is inadequate but rather highlight the need for careful patient selection. Glue may still represent a reasonable alternative in selected cases, whereas thermal techniques appear to provide greater durability in the broader patient population. Further multicenter and prospective studies are necessary to better define the long-term role of glue and optimize selection criteria.

Keywords: Cyanoacrylates glue, endovenous laser therapy, radiofrequency ablation, treatment outcome, varicose veins

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Best Abstracts -3

Triglyceride-glucose index for predicting in-stent restenosis in patients with iliac artery stenosis after percutaneous intervention with stents

Saygin Turkyilmaz[1], Hasan Toz[2], Gulsum Turkyilmaz[2], Yusuf Kuserli[2], Ali Aycan Kavala[2], Necdet Kilicaslan[2]

[1]Medipol Mega University Hospital, İstanbul, Türkiye
[2]Bakırköy Dr. Sadi Konuk Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: To evaluate the triglyceride-glucose index (TyG index) for predicting in-stent restenosis in patients with iliac artery stenosis after percutaneous interventionwith stents

Material and Methods: Subjects with iliac artery stenosis, who underwent an iliac stent intervention and were followed up for at least 2 years were included in the study. Subjects were grouped according to TyG index (Group A, TyG index ≤8.848; Group B 8.849 ≤TyG index ≤9.382 and Group C TyG index ≥9.383). The subject's baseline characteristics, blood parameters, claudication distance, Transatlantic Intersociety Consensus classification, target lesion localization, stent direction, number of stents that were applied, and stent type were noted. Pre- and 1st and 2nd-year post-procedure Rutherford statuses, ankle-brachial index, and stenosis degree were recorded. To calculate the sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV), Group B and Group C were combined and compared with Group A

Results: In total, 255 subjects were evaluated (female, n=77-30.2%, male, n=178-69.8%). The mean age of the subjects was 66.00±10.00 years (range from 39 to 90 years). The pre-procedure Rutherford measurements were significantly different among the groups (p=0.001). The rates of mild claudication and resting pain in Group A were higher than those in Groups B and C. The rate of moderate claudication in Group C was higher than that in Groups A and B. The rate of severe claudication in Group B was higher than that in Groups A and C. . The rate of mild claudication in Group C was lower than that in Groups A and B. One year after the procedure, the computed tomography angiography (CTA) measurements and the rate of full patency in Group A were higher than that in Groups B and C. The rate of 0-50% stenosis in Group B was higher than that in Groups A and C. The rate of 50-70% stenosis in Group C was higher than that in Group A. Two years after the procedure, the CTA measurements and the rates of 70-99% stenosis and 100% occlusion in Group C were higher than those in Groups A and B. The TyG index has high specificity and NPV. However, specificity and PPV levels were found to be quite low

Conclusion: The TyG index was found to be an easy-to-use marker for predicting in-stent restenosis in patients with iliac artery stenosis after percutaneous intervention with stents

Keywords: Triglyceride-glucose index, percutaneous intervention, stent, sensitivity, specificity

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Best Abstracts -4

Effects of preemptive embolisation of side branches on preventing type 2 endoleaks after EVAR

Osman Eren Karpuzoglu, Naci Cem Aydogdu, Recep Caliskan, Cevdet Kocogullari

Dr Siyami Ersek Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Endovascular aneurysm repair (EVAR) has revolutionized the treatment of abdominal aortic aneurysms (AAA), but long-term durability is limited by type II endoleak (T2EL), the most common postoperative complication. Preventive embolization of branch vessels such as the inferior mesenteric or lumbar arteries during EVAR has been proposed to reduce the risk of T2EL. However, its efficacy remains debated. This study aimed to evaluate the impact of prophylactic embolization on T2EL incidence and reintervention rates in a contemporary EVAR cohort.

Material and Methods: Our study included 108 consecutive patients who underwent EVAR for AAA at our institution between 2018 and 2025. Prophylactic embolization with coils or plugs was performed in 30 patients meeting the criteria (IMA or accessory renal arter diameter larger than 3mm, accessory renal supplying less than 1/3 of the kidney and internal iliac when necessary). The remaining 88 patients did not undergo embolization. All patients applicable were followed with contrast-enhanced CT at 1 and 6 months. The primary endpoint was occurrence of T2EL; secondary endpoints included reintervention and rehospitalization.

Results: T2EL developed in 2 of 30 patients (6.7%) in the embolization group, compared with 19 of 88 patients (21.6%) in the non-embolization group. Preventive embolization was thus associated with a 69% relative risk reduction in T2EL (absolute risk reduction 14.9%). Among the 19 patients without prophylactic embolization who developed T2EL, 12 (63.2%) required rehospitalization and secondary intervention. By contrast, no patient in the embolization group required reintervention.

Conclusion: Prophylactic embolization of side branches during EVAR significantly reduced the incidence of type II endoleak and eliminated the need for secondary interventions in our cohort. These findings support a selective but proactive embolization strategy, particularly in anatomies at high risk for T2EL. Our results underscore the importance of tailoring adjunctive procedures to optimize long-term EVAR durability. Larger, prospective studies are warranted to confirm these promising results and refine patient selection criteria.

Keywords: EVAR, type 2 endoleak, preemptive embolisation

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Best Abstracts -5

A new method for acute type A dissections where the primary tear extends to the coronary ostium: Neo-button creation

Sahin Sahinalp[1], Ugursay Kiziltepe[2]

[1]Van Yüzüncü Yıl University, Van, Türkiye
[2]Dışkapı Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Coronary ostial involvement has been reported in 7% of acute type A aortic dissections in postmortem studies. Extension of the primary tear to the coronary ostium complicates surgical repair, and hemostatic anastomosis with damaged coronary buttons is difficult, especially when the aortic root is replaced with polyester grafts. Therefore, a hemostatic and long-lasting method is needed. For this purpose, 84 patients with acute type A dissections who underwent surgery between 2013 and 2024 were evaluated.

Material and Methods: In 9 of 84 patients (9.5%) who underwent surgery, the primary tear was observed to have extended to one or both ostium. One of these patients underwent local repair with pledgeted sutures, three underwent bypass surgery with a polyester graft, and two underwent bypass surgery with a saphenous vein. Three patients requiring composite aortic root replacement (Bentall procedure) underwent repair using a new technique, the neo-button technique, which utilizes a tapered cuff made from fresh autologous pericardium. In this technique, the autologous pericardium is prepared by punching a 4-5 mm diameter hole in the pericardium and forming a 5-6 mm wide ring around it. After trimming the unhealthy tissues in the traumatized coronary artery to create a healthy suture line, the following procedures are performed: The inner edge of the ring was sutured to the coronary artery using a continuous suture technique using 6/0-7/0 polypropylene. Following the preparation of the neo-button, the outer edge of the ring was sutured to the window created in the sinus of Valsalva using the standard method using a continuous suture technique using 5/0-6/0 polypropylene.

Results: Complications such as difficulty adjusting the graft diameter and length and bleeding were observed in patients undergoing bypass surgery. In Bentall patients requiring coronary artery anastomosis to a polyester ascending aortic graft, the placement of a neo-button between the neo-button coronary artery and surgical graft-neo-button anastomoses was found to be more hemostatic. The pericardial cuff absorbs the traumatic effects of the rigid surgical graft's movement on the fragile coronary artery ostium, particularly during the cardiac cycle. It also allows for patchplasty in cases where the primary tear extends longitudinally into the coronary artery ostium.

Conclusion: In patients requiring aortic root replacement, we believe that creating a neo-button using an autologous pericardial cuff is an advantageous method for overcoming the length and diameter issues encountered with synthetic grafts or saphenous vein bypass procedures.

Keywords: Aortic dissection, coronary tear, aortic root

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Best Abstracts -6

Total endovascular aortic arch repair using in situ needle triple fenestration and selective cerebral perfusion:Single-center results

Evren Ozcinar[1], Fatma Akca[2], Mehmet Cahit Saricaoglu[1], Ali Ihsan Hasde[1], Nur Dikmen[1], Onur Buyukcakir[1], Aysegul Guven[3], Oguzhan Durmaz[4], Salih Anil Boga[2], Ali Fuat Karacuha[5], Melisa Kandemir[1], Levent Yazicioglu[1], Sadik Eryilmaz[1]

[1]Ankara University, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Kırıkkale High Specialization Hospital, Department of Cardiovascular Surgery, Kırıkkale, Türkiye
[3]Ankara University, Faculty of Medicine, Department of Anesthesiology and Reanimation, Ankara, Türkiye
[4]Ankara University, Faculty of Medicine, Department of Cardiovascular Surgery, Perfusion Unit, Ankara, Türkiye
[5]Trabzon Kanuni Training and Research Hospital, Department of Cardiovascular Surgery, Trabzon, Türkiye

Abstract

Aim: Advances in stent grafts and endovascular techniques have expanded the indications for thoracic endovascular aortic repair (TEVAR) to include arch lesions. In situ needle fenestration(ISNF) has emerged as a promising technique for revascularizing supra-aortic branches. The aim of this study is to evaluate the safety and efficacy of triple in situ needle fenestration during TEVAR for aortic arch pathologies in a single-center experience.

Material and Methods: A retrospective analysis was conducted on fifteen patients who underwent in situ triple fenestration TEVAR between June 2023 and March 2024. The median age of the patients was 51,33 years(±19.69) and twelve of the patients were male. All procedures were performed under general anesthesia in a hybrid operating room. Ethical approval was obtained from the institutional review board, and informed consent was received from all participants

Results: Primary technical success was achieved in all cases (15/15, 100%). The mean operation time was 197.33 minutes (range: 126–302). Two patient experienced a minor hematoma at the access site. Mortality was observed in 1 patient (6.66%) during the 30-day follow-up period. The total hospital stay averaged 7 ± 3.36 days. One patient had a transient ischemic attack, but there were no incidents of stroke or spinal cord ischemia. No procedure-related endoleak was observed during the intervention; however, 8 patients required reintervention in the descending aorta.

Conclusion: ISNF may be an effective and feasible method for revascularizing arch vessels, with low rates of early mortality and stroke when performed by experienced practitioners. However, larger multicenter studies with longer follow-up are needed to confirm the durability and long-term outcomes of this technique.

Keywords: Thoracic endovascular aortic repair, in situ needle fenestration, aortic arch, total endovascular aortic arch replacement, cardiopulmonary bypass

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Best Abstracts -7

Comparison of endovascular kissing stent and aortobifemoral bypass in patients with aortoiliac occlusive disease

Yusuf Kuserli[1], Ali Aycan Kavala[1], Hasan Toz[1], Gulsum Turkyilmaz[1], Onur Emre Satilmis[1], Saygin Turkyilmaz[2], Cansu Sariarslan[1]

[1]Bakırköy Dr. Sadi Konuk Training and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]Medipol Mega University Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: To compare endovascular kissing stent (KS) and aortobifemoral bypass (AFB) procedures in patients with bilateral common iliac artery occlusion.

Material and Methods: This was a single-centre retrospective study. Subjects who underwent treatment for bilateral TransAtlantic Inter-Society Consensus (TASC) II C and D common iliac artery occlusion between August 2013 and August 2021 with at least 3 years of follow-up were included in the study. The study group was divided into kissing stent (group A) and aortobifemoral bypass (group B) groups. The subjects' demographic data, TASC II classifications and Rutherford classifications were noted. Preoperative diagnostic data included ankle–brachial index measurements and computed tomography (CT) angiography assessments of the aorta and iliac–femoral axis. Intraoperative data and hospital stay data were recorded. Patients were evaluated at the 1st, 3rd, 6th, 12th, 24th and 36th months after the procedure at outpatient visits. The primary patency, primary assisted patency and secondary patency rates were calculated.

Results: This study included 120 cases. The mean age of the participants in the study group was 66.18±4.63 years. The body mass index (BMI) of group A was significantly greater than that of group B ($p=0.001$). The rate of TASC D classification in group B was significantly greater than that in group A ($p=0.001$; $p < 0.01$). The operation time of group B was significantly greater than that of group A ($p=0.001$). Moreover, the hospital stay of group B was significantly longer than that of group A ($p=0.001$). For the follow-up CT angiography measurements, a significant difference was observed between the groups at the 24th month of follow-up ($p=0.023$; $p < 0.05$). The rate of full patency in patients in group B was significantly greater than that in group A ($p=0.027$; $p < 0.05$). Additionally, the rate of 0–50% stenosis in patients in group B was significantly lower than that in patients in group A ($p=0.023$; $p < 0.05$). Other comparisons, such as those for CT angiography measurements, were not significant ($p > 0.05$ for all comparisons). 11 (18.3%) out of 60 subjects in group A and 7 (11.7%) out of 60 subjects in group B underwent secondary interventions ($p=0.444$). The calculated primary patency, primary assisted patency and secondary patency rates at 36 months were 68.3%, 21.7% and 10% for Group A and 83.3%, 11% and 6.7% for Group B, respectively.

Conclusion: The use of KS and AFB procedures in subjects with bilateral common iliac artery occlusion have comparable long-term patency rates.

Keywords: Kissing stent, aortoiliac occlusive disease, aortobifemoral bypass

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Best Abstracts -8

Comparison of the effectiveness and outcomes of endovenous radiofrequency ablation and cyanoacrylate ablation in patients with chronic venous insufficiency with a venous diameter of 10 mm or greater

Recep Berat Cicek[1], Erdinc Eroglu[2], Mehmet Acipayam[2], Mehmet Kirisci[2], Alptekin Yasim[2]

[1]Mardin Training and Research Hospital, Department of Cardiovascular Surgery, Mardin, Türkiye
[2]Kahramanmaraş Sütçü İmam University, Faculty of Medicine, Department of Cardiovascular Surgery, Kahramanmaraş, Türkiye

Abstract

Aim: The aim of this study was to compare the clinical and anatomical effectiveness of endovenous radiofrequency ablation (RFA) and cyanoacrylate ablation (CAA) in patients with chronic venous insufficiency with a venous diameter of 10 mm or greater.

Material and Methods: This retrospective study included 445 patients with chronic venous insufficiency and a venous diameter of ≥10 mm who were treated at the Department of Cardiovascular Surgery, Kahramanmaraş Sütçü Imam University Training and Research Hospital between 2013 and 2024. Of these, 248 patients underwent RFA and 197 patients underwent CAA. Preoperative and postoperative evaluations at 6 months, 1 year, and 5 years included Doppler ultrasonography to assess occlusion rates. Procedural pain was measured using the Visual Analog Scale (VAS). Complications, CEAP classification, and VCSS were recorded. Statistical analysis was performed using SPSS version 22, with a significance level set at $p < 0.05$.

Results: The mean preoperative venous diameters were similar between the two groups (RFA: 13.65 ± 2.34 mm; CAA: 13.57 ± 2.23 mm; $p > 0.05$). At 6 months and 1 year, the total occlusion rates were higher in the CAA group (97.49% and 94.56%) compared with the RFA group (92.72% and 92.23%). At 5 years, the occlusion rate was higher in the RFA group (88.35%) than in the CAA group (86.19%), but the difference was not statistically significant. The procedure time was significantly shorter in the CAA group (11.2 ± 2.3 min vs. 19.7 ± 3.1 min; $p < 0.001$). Pain scores were lower in the CAA group (VAS 1.34 ± 1.04 vs. 2.51 ± 1.18; $p < 0.001$). The complication rate was significantly lower in the CAA group (4.6%) compared with the RFA group (12.4%; $p < 0.05$). Both groups demonstrated significant improvements in CEAP classification and VCSS. No significant differences were observed, except that the RFA group had a lower VCSS at 6 months ($p < 0.05$). At 5 years, there was no significant difference regarding the need for reintervention.

Conclusion: Both RFA and CAA are effective and safe treatment options for patients with chronic venous insufficiency and large-diameter veins (≥10 mm). CAA demonstrated advantages in the early period, including higher occlusion rates, shorter procedure time, less pain, and lower complication rates. RFA showed comparable long-term efficacy. Treatment should be individualized by considering reintervention requirements, patient comfort, and clinical outcomes. Prospective randomized studies are needed to further evaluate long-term efficacy and patient satisfaction, particularly in large-diameter veins.

Keywords: Chronic venous insufficiency, radiofrequency ablation, cyanoacrylate ablation, endovenous treatmen, doppler ultrasonography

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Best Abstracts -9

Effect of circ-KIF4a and miR-637 gene expression on aortic tissues of the patients with ascending aortic aneurysm

Osman Eren Karpuzoglu[1], Serhat Kilinc[2], Naci Cem Aydogdu[1], Cevdet Ugur Kocogullari[1], Fatma Hande Karpuzoglu[2]

[1]Department of Cardiovascular Surgery, Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye
[2]Department of Biochemistry, İstanbul Faculty of Medicine, İstanbul University, İstanbul, Türkiye

Abstract

Aim: Vascular smooth muscle cells (VSMCs) undergo critical changes in proliferation and extracellular matrix (ECM) regulation during thoracic aortic aneurysm (TAA) development. KIF4A, a kinesin superfamily protein and circular RNA, plays a central role in mitotic processes. miR-637, previously implicated in hepatocellular carcinoma, is also associated with vascular inflammation and endothelial dysfunction, highlighting its potential as a biomarker. Recent studies suggest circKIF4A can sponge miR-637 to activate STAT3 signaling in VSMCs, thereby modulating proliferation, apoptosis, and ECM remodeling. We hypothesize that dysregulation of mitotic machinery involving KIF4A disrupts VSMC homeostasis and contributes significantly to the pathogenesis of TAA.

Material and Methods: The study included patients who underwent surgery for ascending aortic aneurysms and patients who underwent CABG as 2 groups. The excised aneurysmal tissues from ascending aortic aneurysm patients constituted the experimental group (24 pax), while the aortic tissues removed using an aortic punch for proximal anastomoses in coronary bypass patients constituted the control group (24 pax).Tissue samples and blood samples from the patients were investigated.Circulating KIF 4a and miR-637 expression levels were measured by a quantitative real-time polymerase chain reaction assay (qRT-PCR).Then, the value of these parameters as both diagnostic and their relationship with disease-related clinical variables were investigated. Results were evaluated using chi-square, logistic regression analysis, and Mann-Whitney U tests.

Results: There was no significant difference between ascending aorta aneurysm patients and the control group regarding tissue cicrc KIF 4a expression levels (p=0.203). However, miR-637 expression levels were significantly decreased in the patient group compared to the control group (p=0.001). There was no correlation between cicrc KIF 4a and miR-637 levels (p=0.306) .The optimum cut-off value to separate the patient group from the control group using miR-637 expression levels and the sensitivity and specificity of miR-637 expression level when this cut-off value was used were calculated using the ROC curve. As a result of the calculations, selectivity for miR-637 expression was found to be 78,6 %, and sensitivity was found to be 79%

Conclusion: Our findings found no significant difference in circ KIF4a expression when the experiment group was compared with the control group. circ KIF4a tissue expression levels may not be a risk factor for ascending aorta aneurysm. However, miR-637 gene expression was decreased in the aortic tissues of the patients with AscAA. With further studies, miR-637 could be a therapeutic target for preventing aneurysm development. Our study continues investigating ncRNA levels in patient serums to understand its diagnostic value.

Keywords: MiR-637, KIF, ascending aorta, aneursym

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Best Abstracts -10

Perfusion evaluation in patients with lower extremity peripheral artery disease with indication for intervention

Oguzhan Semercioglu, Adil Polat

Bağcılar Education and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral artery disease (PAD) is a chronic circulatory disorder affecting nearly 200 million people worldwide, caused by atherosclerosis in the arteries. Numerous measurement and imaging methods are available for diagnosis and monitoring, yet most focus primarily on large vessel blood flow, without evaluating microcirculation and tissue oxygenation in peripheral tissues, particularly foot capillaries. Although transcutaneous oxygen pressure ($TcPO_2$) is suggested as a noninvasive microcirculation assessment method, it remains insufficient due to various limiting factors. This study aimed to determine if the perfusion index (PI)—a pulse oximetry-based measurement reflecting the ratio of pulsatile to non-pulsatile blood flow—can assess tissue oxygenation and microcirculation by examining its correlation with ABI and $TcPO_2$.

Material and Methods: Between July 2023 and September 2024, patients who underwent surgical and endovascular procedures for peripheral artery disease in the cardiovascular surgery ward of Bağcılar Training and Research Hospital had their preoperative and postoperative ABI, transcutaneous oxygen pressure ($TcPO_2$), and PI values measured. The correlation between PI measurements and ABI as well as transcutaneous oxygen pressure was analyzed. The study aimed to determine whether PI values could serve as an indicator of limb microcirculation and perfusion, whether PI could be used in the diagnostic phase, and whether PI values could assess the success of surgical and endovascular revascularization procedures.

Results: Eighty-six volunteers were examined: 41 patients undergoing intervention and 45 healthy controls. Of participants, 70.9% were male and 29.1% female; mean age was 44.6±16.9 years. Patient group mean age was 59.9±9.4 years; healthy group 30.7±7.2 years. Pre-procedure ABI, $TcPO_2$, and PI values of patients were significantly lower than those of healthy controls. Post-procedure, ABI, $TcPO_2$, and PI increased significantly. Pre-procedure values for all extremities were 0.47±0.21, 40.9±21.7 mmHg, and 1.03±1.24%, respectively; post-procedure values were 0.73±0.29, 46.4±17.7 mmHg, and 1.48±1.55%. In healthy volunteers, ABI, $TcPO_2$, and PI values were 1.06±0.08, 55.1±12.2 mmHg, and 3.91±2.66%, respectively. A significant correlation was found between PI and both ABI and $TcPO_2$.

Conclusion: Perfusion index is a useful method for indicating limb perfusion in peripheral artery disease, diagnosing peripheral artery disease patients, and monitoring procedural success.

Keywords: Perfusion index, peripheral artery disease, limb perfusion, microcirculation, transcutaneous oxygen measurement

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Best Abstracts -11

Investigation into the protective effects of hydroxytyrosol on erythrocyte deformability during hind limb ischemia-reperfusion injury in rats

Hakan Kartal[1], Ertan Demirdas[1], Faruk Metin Comu[2], Gokhan Erol[1], Tayfun Ozdem[1], Isil Tasoz Ozdas[1], Basak Yavuz[3], Elif Ertas[4], Tuna Demirkiran[1], Alperen Kutay Yildirim[1], Yigit Tokgoz[2], Sahin Kaym

[1]University of Health Sciences, Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Kırıkkale University, Faculty of Medicine, Department of Physiology, Kırıkkale, Türkiye
[3]İzmir Democracy University, Faculty of Medicine, Department of Pathology, İzmir, Türkiye
[4]Selcuk University, Faculty of Medicine, Department of Biostatistics, Konya, Türkiye

Abstract

Aim: Ischemia-reperfusion (IR) injury significantly impairs erythrocyte deformability, leading to enhanced oxidative stress, inflammation, and compromised microvascular perfusion. This study aimed to investigate the protective effects of hydroxytyrosol (HT), a potent antioxidant derived from olives, on erythrocyte deformability and associated oxidative stress markers in a rat model of hind limb ischemia-reperfusion injury.

Material and Methods: Twenty-four rats were randomly assigned to four groups: Sham, HT-Sham, IR, and IR treated with HT (IR-HT). HT was administered intraperitoneally at 10 mg/kg before ischemia induction. Post-reperfusion, biochemical parameters including malondialdehyde (MDA), superoxide dismutase (SOD), endothelial nitric oxide synthase (e-NOS), erythrocyte deformability, and morphology were assessed.

Results: HT administration significantly improved erythrocyte deformability, reduced MDA levels, enhanced SOD activity, and moderated e-NOS expression in the IR-HT group compared to the untreated IR group ($p < 0.001$). Morphological analysis revealed substantial preservation of erythrocyte integrity, with fewer pathological alterations such as echinocytes and dacrocytes.

Conclusion: The study provides preliminary insights into the protective mechanisms of HT, highlighting its therapeutic potential in reducing erythrocyte dysfunction and oxidative damage during ischemia-reperfusion events. Further research examining comprehensive signalling pathways and long-term clinical outcomes is recommended.

Keywords: Ischemia-reperfusion, hydroxytyrosol, erythrocyte deformability, oxidative stress

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Best Abstracts -12

Long-term comparison of rotational and directional atherectomy outcomes in patients with femoropopliteal lesions

Hasan Toz[1], Yusuf Kuserli[1], Gulsum Turkyilmaz[1], Ali Aycan Kavala[1], Saygin Turkyilmaz[2], Onur Emre Satilmis[1]

[1]Bakırköy Dr. Sadi Konuk Training and Research Hospital, İstanbul, Türkiye
[2]Medipol Mega University, İstanbul, Türkiye

Abstract

Aim: This study aims to elucidate the differences in vessel patency rates, procedural complications, and the need for repeat interventions between these two techniques, thereby providing insights into the optimal atherectomy strategy for managing peripheral arterial disease in the femoropopliteal segment.

Material and Methods: This retrospective study investigated the long-term effectiveness of two atherectomy techniques, rotational atherectomy (RA) and directional atherectomy (DA), in treating lower extremity peripheral artery disease (LE-PAD) affecting the superficial femoral artery (SFA) and popliteal arteries. A total of 134 patients with symptomatic LE-PAD and significant stenosis (70%–99%) were included and divided into two groups based on the atherectomy method used. Both groups underwent similar pre- and post-atherectomy procedures, including drug-coated balloon angioplasty. The primary outcome measure was clinical success, defined as procedural success and an improvement in Rutherford classification at 1 year.

Results: Baseline characteristics were similar between the two groups, with no significant differences in demographics or lesion characteristics, except for a higher proportion of right-sided lesions in the DA group. While both RA and DA effectively improved ankle-brachial index (ABI) and Rutherford classification at 12 months, RA demonstrated superior long-term benefits, with significantly higher ABI at 24 months and a greater proportion of asymptomatic patients. Although RA had a longer procedural duration and a higher incidence of dissection, it resulted in lower residual stenosis and fewer cases of treated segment thrombosis than DA. Both RA and DA are effective treatment options for femoropopliteal lesions, but RA may offer advantages in long-term symptom management and vessel patency.

Conclusion: Both rotational and directional atherectomy effectively treat femoropopliteal lesions, with rotational atherectomy demonstrating superior long-term outcomes in terms of symptom management and vessel patency. Despite longer procedural times and a slightly higher risk of dissection, rotational atherectomy resulted in lower residual stenosis and fewer cases of treated segment thrombosis than directional atherectomy.

Keywords: Atherectomy, femoropopliteal, directional atherectomy, rotational atherectomy

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Best Abstracts -13

Biochemical and metabolic determinants of peripheral arterial disease: Focus on amino acids and inflammation

Hakan Comakli[1], Mohammad Ahmad Bik[2]

[1]Ankara Bilkent City Hospital, Ankara, Türkiye
[2]Selcuk University Biochemistry Department, Konya, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is a clinical manifestation of atherosclerosis and represents an important risk factor for morbidity and mortality. This study aimed to compare general biochemical parameters, as well as the levels of L-arginine, L-tryptophan, and related metabolites, between individuals with and without PAD.Endothelial dysfunction and the consequent reduction in nitric oxide (NO) bioavailability play a central role in the pathophysiology of peripheral arterial disease (PAD). L-arginine is the primary substrate for endothelium-derived NO synthesis. However, impaired L-arginine metabolism results in the accumulation of endogenous nitric oxide synthase (NOS) inhibitors, particularly asymmetric dimethylarginine (ADMA), leading to vascular dysfunction.

Material and Methods: In this prospective study, 23 individuals diagnosed with PAD and 72 individuals without PAD were included. Biochemical parameters and amino acid/metabolite levels were measured in venous blood samples obtained from the participants, and intergroup differences were evaluated using appropriate statistical tests. LC-MS/MS Analysis; Plasma concentrations of L-arginine, asymmetric dimethylarginine (ADMA), symmetric dimethylarginine (SDMA), L-NMMA, ornithine, citrulline, homoarginine, and tryptophan metabolites (kynurenine, kynurenic acid, 3-hydroxykynurenine, and 3-hydroxyanthranilic acid) were quantitatively determined. Analyses were performed using a Shimadzu HPLC system equipped with a Phenomenex C18 column (150 × 2.1 mm, 3 µm) for chromatographic separation, followed by detection with an API 3200 triple quadrupole mass spectrometer

Results: The PAD (+) group was significantly younger (p=0.022). In amino acid/metabolite analysis, ADMA levels were higher in the non-PAD group (p=0.016), whereas citrulline levels were significantly lower in the PAD (+) group (p=0.007). In subgroup analysis according to the presence of diabetes in PAD (+) individuals, kynurenic acid (p=0.031) and 3-hydroxykynurenine (p=0.023) levels were higher in the diabetic group. Creatinine levels were significantly higher, while eGFR was lower in the PAD (+) group (p=0.049 and p=0.018, respectively). Moreover, significant differences were observed in MCH (p=0.023), MCHC (p=0.018), and RDW (p=0.033) values. The CRP/albumin ratio was also higher in the PAD (+) group (p=0.044). ROC analysis demonstrated that SPAB measurement had the highest discriminatory power (AUC=0.719). Cohen's d analysis revealed medium effect sizes for ADMA, citrulline, and eGFR.

Conclusion: Our findings suggest that reduced citrulline levels and differences in ADMA concentrations in PAD patients may be associated with endothelial dysfunction. In addition, renal function parameters (creatinine and eGFR) and inflammatory markers (CRP/albumin ratio) were found to be related to PAD. These results indicate that amino acid metabolism and inflammatory indicators may serve as potential biomarkers in the pathogenesis of PAD.

Keywords: Peripheral arterial disease, l-arginine, l-tryptophan, adma, citrulline

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Best Abstracts -14

Perfusion index as a simple and objective method to follow-up patients after deep venous stenting

Suat Doganci[1], Mehmet Emin Ince[2], Emre Kubat[1], Alperen Kutay Yildirim[3], Irwin Toonder[4], Houman Jalaie[5], Mohammad Barbati[5], Vedat Yildirim[2]

[1]University of Health Sciences Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]University of Health Sciences Gülhane Training and Research Hospital, Department of Anesthesiology and Reanimation, Ankara, Türkiye
[3]Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[4]Toonder Consulo, Zilvergracht, Netherlands
[5]RWTH Aachen University Hospital, Clinic of Vascular and Endovascular Surgery, Aachen, Germany

Abstract

Aim: Post-thrombotic syndrome (PTS) is a frequent sequela of deep vein thrombosis that substantially impairs quality of life and may cause venous claudication. Endovascular recanalization and stenting have emerged as standard options for patients with advanced disease, yet objective, non-invasive methods for monitoring post-intervention outcomes remain limited. The perfusion index (PI), derived from pulse oximetry, reflects peripheral perfusion by quantifying the ratio of pulsatile to non-pulsatile blood flow. This study evaluated the role of PI as an adjunctive tool for surveillance following deep venous stenting in PTS patients.

Material and Methods: In a prospective, single-center study, 41 patients (53 limbs) with symptomatic PTS and venous claudication underwent iliac or iliofemoral venous stenting between April 2021 and April 2023. Demographic and clinical data including Clinical-Etiology-Anatomy-Pathophysiology classifications were recorded. Disease severity was assessed pre- and post-intervention using the Villalta score, Venous Clinical Severity Score(VCSS), and VEINES-QOL/Sym questionnaire. PI values were obtained bilaterally at baseline and at 15, 30, and 90 days post-stenting using standardized conditions with a Masimo Radical-7® pulse CO-oximeter. A PI ratio was calculated by dividing the highest upper-extremity PI by the lower-extremity PI. Statistical comparisons were performed using paired t-tests and repeated-measures ANOVA.

Results: The cohort had a mean age of 43.3±13.7 years; 63% were female. The majority of limbs presented with chronic venous obstruction Class 4a (n=46), followed by Class 4b (n=3) and Class 3 (n=4). The mean number of stents deployed per patient was 4.7±1.8, with an average stented length of 25.2±3.4 cm. Clinical severity significantly improved at three months: Villalta and VCSS scores decreased ($p < 0.0001$), and VEINES-QOL/Sym scores increased ($p < 0.0001$). Venous claudication resolved in 85% of patients, and ulcer healing occurred in 91% of affected limbs. PI values in treated limbs rose from 2.2±1.9 pre-intervention to 4.6±3.2 at day 15, 4.6±3.0 at day 30, and 4.8±3.1 at day 90 ($p < 0.0001$), becoming comparable to contralateral healthy limbs. The PI ratio decreased significantly in treated extremities post-stenting ($p < 0.001$), reflecting normalization of peripheral perfusion. No stent failures or thromboses were observed during follow-up.

Conclusion: PI significantly increases after venous stenting in patients with PTS and correlates with clinical improvement and symptom relief. As a simple, objective, and cost-effective measurement, PI may serve as a valuable adjunct to clinical scoring systems and duplex ultrasound for post-procedural monitoring. Larger multicenter studies with extended follow-up are warranted to validate PI as a surveillance biomarker for stent patency and treatment response.

Keywords: Post-thrombotic syndrome, venous stenting, quality of life, pulse oximetry, perfusion

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Best Abstracts -15

The influence of morphovolumetric characteristics of the aneurysm sac on risk prediction and outcomes following EVAR

Sinan Ozcelik, Enis Burak Gul, Murat Gevrek, Bekir Bogachan Akkaya, Hakki Zafer Iscan

Ankara Bilkent City Hospital Cardiovascular Surgery Clinic, Ankara, Türkiye

Abstract

Aim: To investigate the impact of preoperative morphovolumetric analyses on postoperative clinical and long-term outcomes in patients undergoing elective endovascular aortic aneurysm repair (EVAR) for iAAA, with the aim of personalizing treatment strategies and follow-up protocols on a patient-specific basis.

Materials and Methods: Between January 2016 and April 2024, a total of 383 patients who underwent elective EVAR were included in the study, who had available preoperative and postoperative CTA and a minimum of one year postoperative follow-up data.

Results: Mean follow-up period of the study was 33.2±21.2 months (min 12-max 99 months). In the multivariate linear regression analysis examining the relationship between volume and diameter regression, a 10% change in aneurysm volume corresponded to an average change of 4 mm in diameter ($p < 0.001$). The overall incidence of endoleak was 26,1% ($n = 100$), with type II being the most common subtype ($n = 47$). At the end of the follow-up period, a reduction in aneurysm diameter was observed in 74.7%, stability in 18,5% and sac enlargement in 6.8%. Among patients who developed endoleak, the following factors were found to be significantly associated: use of dual antiplatelet therapy ($p < 0.001$), preoperative aneurysm length >133 mm ($p < 0.001$), elevated preoperative ($p = 0.006$) and postoperative D-dimer levels ($p = 0.010$), and preoperative aneurysm diameter >59 mm ($p < 0.001$). Additionally, preoperative aneurysm volume >164 cm^3 ($p < 0.001$) and sac thrombus volume >89 cm^3 ($p = 0.006$) were identified as significant thresholds. For all Type of endoleak, significant risk factors were identified. Secondary interventions were performed in 54 patients (14.1%), with a mean time to reintervention of 21.7 ± 10 months. Preoperative variables significantly associated with secondary interventions included aneurysm length >132 mm ($p < 0.001$), aneurysm diameter >64 mm ($p = 0.004$), aneurysm volume >189 cm^3 ($p = 0.001$), thrombus volume >106 cm^3 ($p = 0.002$), and TR/AO ratio >51% ($p < 0.001$).

Conclusion: Among patients who demonstrated sac diameter regression during the first year following EVAR, long-term follow-up revealed significantly lower complication rates, and none of these patients experienced aneurysm-related mortality (ARM), a result that was found to be statistically significant. When considering the advantages and limitations of both volume and diameter assessments, diameter measurements may be more suitable for initial evaluation and rapid screening purposes, whereas volumetric analysis appears to be a more appropriate complementary tool in borderline cases (particularly in stable sacs) due to its greater sensitivity and earlier predictive value for complications. We believe that preoperative morphovolumetric parameters of the aneurysm serve as important guides in determining treatment strategy before intervention and in planning postoperative surveillance following EVAR. Therefore, these parameters should be taken into account when designing individualized follow-up protocols for each patient.

Keywords: Endovascular aortic aneurysm repair, abdominal aortic aneurysm, endoleak, aneurysm diameter, aneurysm volume, thrombus volume, secondary intervention

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Nursing Presentations

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NP-01

Perceptions and experiences of cardiovascular surgery nurses regarding the care of patients undergoing femoropopliteal bypass surgery: A qualitative study

Hulya Karaer, Kaymak Gunduz, Ozlem Gumus

Başkent University Hospital, Directorate of Nursing Services, Ankara, Türkiye

Abstract

Aim: This qualitative study aims to examine in depth the perceptions and experiences of Cardiovascular Surgery nurses regarding the care of patients undergoing femoropopliteal bypass surgery.

Material and Methods: This descriptive and qualitative study is being conducted with volunteer nurses working in the cardiovascular surgery ward and intensive care unit of Başkent University Ankara Hospital between August and October 2025 after obtaining ethics committee approval. The demographic characteristics of the nurses were obtained through a data collection form, and an interview form consisting of 8 questions prepared through literature review was used. Face-to-face interviews were conducted until data saturation was reached, and a voice recorder was used during the interview process to record the interviews. The obtained data are planned to be analyzed and categorized by the content analysis method.

Results: In this study, the following questions were sought to be answered: How do you define the care of patients undergoing femoropopliteal bypass surgery? What are the difficulties you encounter in the care of patients? What are the positive experiences you have in the care of patients? How do these experiences affect your professional satisfaction? What are the areas that need to be improved or your suggestions in the care of patients undergoing femoropopliteal bypass surgery? Do you think your professional knowledge and skills are sufficient in both ward and intensive care processes? What education or support do you think is needed to improve nursing care?

Conclusion: The analysis of the study data is in progress.

Keywords: Femoropopliteal bypass, nursing experience, cardiovascular surgery, perception of care, nursing care

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NP-02

Endovascular surgery: Postoperative respiratory support and the role of nursing – Case series

Fikriye Figen Bursa, Nevzat Erdil

Antalya City Hospital Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: To describe the role of nurses in invasive and noninvasive respiratory support during the postoperative period following endovascular surgery (TEVAR, EVAR) through a case series of five patients treated at Antalya City Hospital.

Material and Methods: A retrospective review was conducted on five patients who underwent endovascular surgery (TEVAR, EVAR) between January and June 2025 at Antalya City Hospital. Postoperative respiratory support methods (mechanical ventilation, CPAP, High Flow, oxygen masks), their duration, complications, and nursing interventions were evaluated. Nursing responsibilities included ventilator parameter monitoring, arterial blood gas control, airway maintenance, secretion management, prevention of ventilator-associated pneumonia (VAP), mask fit control, SpO_2 and respiratory monitoring, and timely escalation of therapy.

Results: - Demographics: 5 patients (3 male, 2 female), aged 61–74 years.- Respiratory Support: Two patients required invasive mechanical ventilation (12–20 h). Two patients received CPAP (24–36 h). One patient was managed with High Flow due to poor mask tolerance.- Nursing Observations & Interventions: Frequent suctioning for secretion management during ventilation. Mask-related skin redness treated with protective dressing. Hypotension during mechanical ventilation managed appropriately. SpO_2 fluctuations corrected by adjusting CPAP settings. HFNC well-tolerated in a patient unable to use CPAP.- Outcomes: All patients were successfully stabilized and discharged. No ventilator-associated pneumonia developed, thanks to preventive nursing measures.

Conclusion: Postoperative respiratory support is frequently required after endovascular surgery. A stepwise approach—from nasal cannula to advanced modalities (CPAP, HFNC, mechanical ventilation)—tailored to clinical needs was effective. Nursing care was crucial in ensuring device compatibility, monitoring parameters, preventing complications, and supporting patient adaptation. These findings underline the critical role of nurses in improving patient outcomes after endovascular surgery.

Keywords: Endovascular treatment, aneurysm, nurse

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NP-03

Nursing follow-up of renal functions after EVAR: A retrospective study

Sadik Turgut, Aysel Acar

Ankara Bilkent City Hospital Cardiovascular Hospital, Ankara, Türkiye

Abstract

Aim: Endovascular aneurysm repair (EVAR) is widely used as a minimally invasive method for the treatment of abdominal aortic aneurysms. Regular and careful postoperative renal function monitoring plays a critical role in the early identification of potential complications. The purpose of this study is to evaluate the nursing care process for postoperative renal function in patients undergoing EVAR, to determine the rates of complications, and to demonstrate the effectiveness of nursing care.

Material and Methods: This study was conducted on 78 patients undergoing EVAR at a Cardiovascular Surgery clinic in Ankara. Data from 78 patients who underwent EVAR between January 2020 and September 2025 were retrospectively analyzed. Data were obtained from nurse observation forms and electronic hospital records (HİCAMP). Number, percentage, and mean were used to analyze the data.

Results: Fifty-two patients were male (66.6%) and 26 were female (33.4%). The mean age of the patients was 71.4 ± 6.3 years. While 72 of the cases were prepared and processed electively, 6 cases underwent emergency processing due to ruptured abdominal aortic aneurysms. Preoperative risk factors included diabetes mellitus (20.5%), hypertension (62.8%), chronic kidney disease (11.5%), and other diseases (5.2%). No patients were on dialysis. Regular hourly urine volume monitoring was performed in all patients. Fluid intake was increased when fluid balance was observed negative in 14 patients. Patients who underwent the procedure under spinal anesthesia and did not have a urinary catheter were closely monitored for globe vesical. Eight patients with a daily urine output of < 1000 mL were consulted with a nephrology department. Fluid balance, blood gases, laboratory values, and vital signs were recorded in all patients. Procedure entry sites were closely monitored for bleeding, and daily dressings were performed. Patients received 1200 mg/day of N-Acetylcysteine postoperatively. The average amount of contrast agent used was 115 cc, and the amount varied depending on the duration and complexity of the procedure. The average preoperative creatinine level was 1.1 mg/dl, and the average creatinine level at 48 hours postoperatively was 1.21 mg/dl. Six patients (7.69%) developed contrast-induced nephropathy. Two patients required hemodialysis, and no patient remained on permanent dialysis.

Conclusion: It has been shown that the rates of contrast nephropathy remain low thanks to effective monitoring of nurses and can be controlled with early intervention. Effective nursing monitoring can be conducted through holistic assessment of the patient's fluid balance, urine output, and laboratory values. Standard nursing protocols should be established for patient monitoring after EVAR.

Keywords: Endovascular aneurysm repair, nursing care, renal function

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NP-04

The importance of psychosocial support in foot amputation due to peripheral arterial disease

Ibrahim Ozturk

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is a serious cardiovascular condition that can result in limb loss, especially in its advanced stages. Lower extremity amputation is not only a physiological loss for the individual, but also a multidimensional condition that deeply affects psychological, social, and occupational life. The aim of this paper is to discuss the role of psychosocial support in the rehabilitation process of individuals following foot amputation due to PAD and its impact on their quality of life

Material and Methods: A review of national and international literature was conducted, focusing on clinical studies, case reports, and reviews that examine the psychosocial effects of amputation and supportive interventions. The effectiveness of individual psychotherapy, family counseling, group-based interventions, and social support programs were evaluated to provide a holistic perspective.

Results: Depression, anxiety, and post-traumatic stress disorder are commonly observed after amputation. Psychosocial support has been found effective in alleviating these symptoms. Limb loss negatively impacts body image and self-esteem. Psychotherapeutic approaches help individuals reconstruct their identity and self-perception. Amputation affects not only the individual but also the entire family system. Family counseling helps balance caregiving responsibilities and strengthens communication processes. Individuals who receive psychosocial support show higher levels of adherence to prosthetic use, active participation in rehabilitation programs, and integration into daily life.In the long term, psychosocial support significantly enhances individuals' psychological well-being and overall quality of life.

Conclusion: Amputation due to PAD is a complex process that affects individuals on a biopsychosocial level. Therefore, focusing solely on physiological recovery during treatment and rehabilitation is not sufficient. Psychosocial support strengthens emotional resilience, improves family cohesion, and facilitates participation in rehabilitation processes. Psychosocial interventions integrated into a multidisciplinary approach are essential for maintaining and improving the quality of life of individuals after amputation.

Keywords: Amputation, support, peripheral arterial disease

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NP-05

Nursing observations and postoperative care approaches in patients undergoing carotid artery surgery

Ahmet Oguzhan Demir, Berna Doman, Nevzat Erdil, Halenur Sahin

Antalya City Hospital, Cardiovascular Surgery Intensive Care Unit, Antalya, Türkiye

Abstract

Aim: Carotid artery stenosis is one of the leading causes of ischemic cerebrovascular events and carries a high risk of morbidity and mortality. Carotid endarterectomy and stenting are effective surgical interventions for restoring cerebral perfusion. The postoperative intensive care process is critically important for maintaining hemodynamic stability, early detection of neurological deficits, and prevention of complications. Patients admitted to the intensive care unit are usually elderly, with multiple comorbidities and peripheral arterial disease, representing a high-risk population. This study aims to evaluate nursing observations and care practices in 50 patients monitored after carotid surgery at the Cardiovascular Surgery (CVS) Intensive Care Unit of Antalya City Hospital.

Material and Methods: Between March 2024 and July 2025, 50 patients who underwent carotid endarterectomy or stenting were prospectively followed. Among these, revision surgery was required in 2 patients; 2 patients underwent simultaneous coronary artery bypass grafting (CABG), and 2 patients underwent sequential CABG. During the postoperative period, Glasgow Coma Scale (GCS), pupillary reflexes, motor strength, vital parameters, invasive arterial pressure, and oxygen saturation were recorded at regular intervals. Nursing interventions were structured around hemodynamic monitoring, neurological assessment, wound care, pain management, fluid-electrolyte balance, and infection prophylaxis.

Results: Of the patients, 46 were male and 4 were female, with a mean age of 70.6±5.7 years. Most patients were elderly and had multiple comorbidities; peripheral arterial disease was also commonly observed. The mean intubation time was 5.6±1.9 hours, and the mean ICU stay was 37±10 hours. All patients underwent regular neurological monitoring, and no major stroke or permanent neurological deficit was observed. Transient hypertensive episodes occurred in 2 patients, and minimal hematoma was observed in 4 patients; both conditions were promptly managed with nursing interventions. No postoperative infections were recorded. However, one patient with a prior history of cerebrovascular accident (CVA) developed a late complication that resulted in mortality.

Conclusion: Discussion:Findings demonstrate that, even in high-risk patients with advanced age, comorbidities, and peripheral arterial disease, consistent nursing observations and evidence-based practices in intensive care play a critical role in preventing complications. Regular GCS monitoring, prevention of hypertension and hypotension, bleeding and hematoma surveillance, invasive hemodynamic assessment, and wound evaluation were decisive in early management.Postoperative nursing care after carotid surgery plays a fundamental role in early complication detection, maintaining hemodynamic stability, and ensuring safe recovery. Data from Antalya City Hospital highlight intensive care nursing as indispensable within the multidisciplinary care framework.

Keywords: Carotid artery stenosis, intensive care nursing, postoperative care, neurological monitoring, revision surgery

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NP-06

Nursing care and early complication management in patients undergoing emergency surgery for acute Type A aortic dissection

Berna Doman, Ahmet Oguzhan Demir, Nevzat Erdil, Halenur Sahin

Antalya City Hospital, Cardiovascular Surgery Intensive Care Unit, Antalya, Türkiye

Abstract

Aim: Type A aortic dissection is a life-threatening cardiovascular emergency with high mortality and morbidity. Postoperative intensive care monitoring is crucial for the early detection and effective management of complications. This study aimed to evaluate the effectiveness of nursing care practices and monitoring protocols in 35 patients admitted to the Cardiovascular Surgery Intensive Care Unit (CVICU) of Antalya City Hospital within the last year.

Material and Methods: Between April 2024 and August 2025, 35 patients diagnosed with acute Type A aortic dissection and treated with surgical repair or endovascular intervention were prospectively monitored. Postoperative follow-up by intensive care nurses included invasive hemodynamic monitoring, respiratory functions, neurological status, renal function, and bleeding parameters. Nursing interventions focused on maintaining hemodynamic stability, early recognition of bleeding and tamponade, management of hypothermia, preparation for the preoperative process, provision and administration of blood products, fluid-electrolyte balance management, ventilatory support, and infection prophylaxis.

Results: The mean patient age was 52.6±6.8 years, with 25 males. The average ICU length of stay was 72±18 hours, and mean intubation time was 14±5 hours. Postoperative complications were minimal: transient hypertensive episodes in 5 patients, arrhythmias in 4, and limited mediastinal bleeding in 3. Acute renal dysfunction developed in 3 patients but was successfully managed with close nursing observation and timely intervention. One patient experienced a transient neurological deficit, for which early rehabilitation was initiated. Mortality occurred in 8 patients, with continuous nursing surveillance and proactive management significantly influencing outcomes.

Conclusion: Postoperative intensive care nursing in aortic dissection plays a critical role in maintaining hemodynamic stability, enabling early recognition of complications, and ensuring rapid intervention to minimize mortality and morbidity. This observational study conducted in the CVICU of Antalya City Hospital clearly demonstrates the indispensable role of intensive care nurses within the multidisciplinary team and their positive contribution to patient prognosis.

Keywords: Aortic dissection, critical care nursing, postoperative complications, hemodynamic monitoring, cardiovascular surgical procedures

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NP-07

Nursing strategies in pain and mobilization management for patients with peripheral artery disease-an intensive care experience

Rahime Aktug

İstanbul SBÜ Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to present nursing strategies used in pain and mobilization management of patients with peripheral arterial disease, based on intensive care experience, and to highlight their impact on clinical outcomes.

Material and Methods: Pain was assessed regularly using VAS and NRS scales. Pharmacological pain management included the administration of opioid and non-opioid analgesics tailored to the patient's clinical condition. Mobilization protocols consisted of in-bed exercises, Fowler and semi-Fowler positioning, standing, and short-distance ambulation. Throughout the process, continuous nursing observation was maintained; vital signs were monitored before, during, and after mobilization, a safe environment was ensured, and preventive measures were taken against potential complications.

Results: The implemented strategies led to a significant reduction in pain scores and a gradual increase in mobilization duration. Furthermore, the incidence of immobility-related complications such as pulmonary problems, deep vein thrombosis, and pressure ulcers decreased. The continuity of nursing interventions and multidisciplinary collaboration supported these positive clinical outcomes.

Conclusion: Intensive care nursing plays a central role in the effective management of pain and mobilization in patients with peripheral arterial disease. Adherence to standard protocols, regular assessments, and individualized nursing interventions have a direct impact on patient safety and clinical recovery. In this context, the adoption of evidence-based practices and the active involvement of nurses in multidisciplinary teams contribute significantly to the quality of patient care.

Keywords: Peripheral arterial disease, pain, mobilization, nursing strategies, intensive care

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NP-08

Extracorporeal membrane oxygenation in cardiovascular surgery patients: Nursing strategies to prevent vascular complications

Dilan Ciftci

İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Extracorporeal membrane oxygenation (ECMO) provides life-saving support for cardiovascular surgery patients but carries a high risk of vascular complications, including bleeding, hematoma, thrombosis, and limb ischemia. This study aims to describe nurse-led interventions to prevent vascular complications and improve patient outcomes.

Material and Methods: Clinical observations were conducted in a cardiovascular surgery ICU caring for ECMO patients. Nursing strategies included: Frequent assessment of vascular access sites for bleeding, hematoma, thrombosis, and limb ischemia, Continuous monitoring of limb perfusion, skin color, temperature, and pulses, Timely communication with the multidisciplinary team for rapid interventions, Patient and family education on cannula site care, limb positioning, and early signs of complications, Documentation of all assessments and interventions to ensure continuity of care.

Results: Structured nursing protocols reduced the incidence of vascular complications. Early detection enabled timely interventions, such as cannula repositioning, compression management, anticoagulation review, and surgical consultation. Patient and family education improved adherence to preventive care. Multidisciplinary communication enhanced patient safety and response times.

Conclusion: Nurse-led monitoring and preventive strategies are critical in reducing vascular complications in ECMO patients. Continuous assessment, structured interventions, patient and family education, and effective team communication improve clinical outcomes and patient safety in high-risk postoperative care.

Keywords: Extracorporeal membrane oxygenation, cardiovascular surgery, vascular complications, critical care nursing, patient monitoring

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NP-09

Analysis of nursing oral presentations presented at the national vascular and endovascular surgery congresses between 2017 and 2023

Burcu Okyay, Arnel Boke Kilicli, Firuze Cevik Aydin, Aysel Acar

Ankara Bilkent City Hospital, Ankara, Türkiye

Abstract

Aim: Nurses, rapidly advancing in the scientific process, are presenting evidence-based information necessary for nursing practice at congresses in the fields of nursing practice, education, and research. This study aimed to examine the presentations presented at the nursing sessions of the National Congress of Vascular and Endovascular Surgery, held between 2017 and 2023.

Material and Methods: This is a descriptive study that retrospectively examined nursing abstracts from the 2017, 2019, 2021, and 2023 abstracts published in the Journal of Vascular Surgery. The study sample consisted of 51 nursing oral nursing abstracts presented in 2017, 2019, 2021, and 2023.Abstracts were analyzed for research type, topic, sample, number of authors, data collection tools, and number of abstracts by year. Data analysis utilized descriptive statistics such as number, percentage, and mean. Since there were no poster presentations presented in these years, oral presentations were examined.

Results: A total of 51 nursing oral presentations were identified in 2017, 2019, 2021, and 2023. When the number of presentations was evaluated by year, the highest number of presentations were presented in 2019 and 2023. The 2019 (n=15) and 2023 (n=15) presentations constituted 58% of the total. The majority of descriptive research topics in the oral presentations were on postoperative nursing care, case reports, patient quality of life, and pain management. The average number of authors in oral presentations was 4.

Conclusion: More than half of the oral nursing presentations were descriptive research. The number of nursing presentations presented at the congress over the years demonstrates an increase in research diversity in the field of nursing, and trends are shifting beyond care to education, psychosocial support, and multidisciplinary approaches. Research in cardiovascular surgery nursing is necessary to advance evidence-based nursing practice in cardiovascular surgery nursing.

Keywords: Nursing, cardiovascular surgery nursing, research, vascular and endovascular surgery.

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NP-10

Aorto-bifemoral by-pass surgery: Nursing care in preoperative and postoperative period – Case series

Fikriye Figen Bursa, Nevzat Erdil

Antalya City Hospital Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: To highlight the importance of preoperative and postoperative nursing care in patients undergoing aorto-biiliac/femoral by-pass surgery through a case series of seven patients operated in Antalya City Hospital.

Material and Methods: A retrospective review was conducted on seven patients who underwent aorto-biiliac/femoral by-pass surgery between January and June 2025 at Antalya City Hospital. Clinical files and nursing observation notes were examined. Evaluations included preoperative preparation, postoperative first 72 hours, and the occurrence of complications. Nursing interventions covered patient education, risk factor management, psychological and physical preparation, hemodynamic monitoring, distal circulation control, fluid–electrolyte balance, respiratory management, pain and mobilization strategies, wound care, and discharge education.

Results: - Demographics: Mean age 67 years; 5 male, 2 female.- Comorbidities: Hypertension, diabetes, COPD, renal failure, hyperlipidemia, obesity; two patients had a history of smoking.- Complications (0–72 h): 2/7 patients (28.6%) developed early complications: one with a hematoma on postoperative day 2, another with respiratory distress after extubation. One patient had decreased urine output requiring close fluid balance and nephrology consultation.- Nursing Interventions: • Hematoma: aseptic dressing and close monitoring. • Respiratory distress: non-invasive ventilation support. • Oliguria: fluid-electrolyte monitoring and nephrology input. • Pain: PCA and early mobilization. • All patients: distal circulation monitoring (palpation/Doppler), wound observation, lifestyle education.- Outcomes: Complications were managed successfully with nursing interventions. No graft-related complications or mortality occurred in the early period.

Conclusion: Structured preoperative education and optimization combined with close postoperative nursing surveillance in the first 72 hours contribute significantly to the prevention and early management of complications in aorto-biiliac/femoral by-pass surgery. Nursing care plays a pivotal role within the multidisciplinary team, ensuring patient safety, stable recovery, and effective discharge planning.

Keywords: Nurse, cardiovascular icu, postoperative management

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NP-11

Nursing care for patients undergoing peripheral vascular surgery: Evaluating the clinical appropriateness of ChatGPT responses with expert opinions

Eda Ayten Kankaya[1], Irem Akdogan[2], Nihal Muezzinler Evsine[2]

[1]Dokuz Eylül University Nursing Faculty, İzmir, Türkiye
[2]Dokuz Eylül University Hospital Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Chatbot-based artificial intelligence tools can support academic writing, content development, and clinical applications in nursing. A significant advantage is that they can provide clinical nurses with quick access to information on topics such as medication management, procedure planning, and patient education. This study aimed to examine the clinical appropriateness of responses generated by ChatGPT 5.0 regarding the nursing care of a patient who underwent peripheral vascular surgery and had comorbidities, as evaluated by three experts.

Material and Methods: In the study, ChatGPT was given a clinical case and asked to plan the patient's care as a cardiovascular surgery nurse would. The responses generated by the chatbot were evaluated by three nurses specializing in cardiovascular surgery. Expert opinions were collected and analyzed using a specialist opinion form prepared by the researchers, consisting of 10 questions, each scored from 1 to 5. The case involved a 75-year-old female patient admitted to the cardiovascular surgery ward on August 16, 2025, with a diagnosis of peripheral artery disease (PAD). The patient's comorbidities included hypertension, diabetes, hypothyroidism, and chronic renal failure. The patient, who underwent dialysis three days a week, underwent atherectomy and balloon angioplasty on the left lower extremity on the first day of admission. During follow-up, the patient developed a necrotic wound, edema, numbness, loss of peripheral pulse, and respiratory distress in her left lower extremity, requiring intensive care support on postoperative days 10 and 23.

Results: The items that received the highest scores on the expert opinion form were ChatGPT's professional, clear, and understandable language, as well as the appropriateness of the terminology used in the context of the nursing profession (5.0 ± 0.0). Items with the lowest scores included the lack of balanced consideration of the physical, psychological, and social dimensions of care and the clinical applicability of recommended nursing interventions (3.66 ± 0.57). ChatGPT addressed the following nursing diagnoses: acute pain, risk of impaired peripheral tissue perfusion, risk of infection, impaired respiration, fluid-electrolyte imbalance (oliguria), and risk of agitation due to pain. However, diagnoses such as risk of bleeding, delayed wound healing, impaired mobility, and risk of falling were not addressed. There were also deficiencies in the interventions for the included diagnoses.

Conclusion: This study revealed ChatGPT's strengths and limitations in creating nursing care plans. The findings suggest that artificial intelligence tools can support nursing care, but their clinical validity must be evaluated alongside expert opinion.

Keywords: Artificial intelligent, nursing, peripheral artery disease, postoperative care

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NP-12

Use of QR code–supported digital guide for patient education after EVAR–TEVAR surgery within the ERAS protocol

Canan Cevik, Seval Tobakcal, Omer Tanyeli, Niyazi Gormus, Muhammet Kivrak, Yalcin Gunerhan

Necmettin Erbakan University Faculty of Medicine Hospital, Konya, Türkiye

Abstract

Aim: This study aimed to evaluate the impact of a QR code–embedded information label entitled "Postoperative Instructions After EVAR–TEVAR Surgery", implemented by the Department of Cardiovascular Surgery at Necmettin Erbakan University Hospital, on patient education and awareness within the ERAS protocol.Endovascular Aneurysm Repair (EVAR) and Thoracic Endovascular Aneurysm Repair (TEVAR) are minimally invasive surgical techniques frequently preferred in the treatment of aortic aneurysms. Within the framework of the Enhanced Recovery After Surgery (ERAS) protocol, effective communication of postoperative care instructions plays a critical role in ensuring patient safety and improving treatment outcomes.

Material and Methods: Patients undergoing EVAR–TEVAR surgery were provided with an informative QR code label prior to discharge. The label contained the statement "Patient Information Label" and a QR code. Scanning the QR code directed patients to a digital guide including postoperative care instructions. Patients were instructed on how to scan the code with their mobile phones to access the content easily.

Results: A total of 89% of patients successfully scanned the QR code and accessed the information. Digital access was observed to be particularly effective among younger and middle-aged patient groups. The majority of patients reported that this method was more practical and sustainable compared to traditional brochures. Nurses and healthcare providers emphasized that the QR code label served as a time-saving tool in the patient education process.

Conclusion: QR code–embedded information labels provide an effective, rapid, and sustainable method for postoperative patient education following EVAR–TEVAR surgery. Compared with printed brochures, digital content offers the advantage of being easily updatable. It is recommended that this application be expanded to other surgical fields.

Keywords: Patient education, qr code, postoperative period, digital health, information

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NP-13

Reflections on cardiovascular surgery nursing from the ministry of health nursing core competencies guide

Aysel Acar

Ankara Bilkent City Hospital Cardiovascular Hospital, Ankara, Türkiye

Abstract

Aim: In the evolving and changing healthcare delivery landscape, the need for qualified, professionally competent nurses within the healthcare workforce is increasing daily. In response to this need, the Ministry of Health prepared the "Nursing Core Competencies Guide" for the first time in our country and published it in 2021, with the aim of defining the core competencies expected of nurses and establishing these competencies as national standards. The purpose of this review is to evaluate the implications of the Nursing Core Competencies Guide for cardiovascular surgical nursing.

Material and Methods: This research is a review article examining the Ministry of Health Nursing Core Competencies Guide.

Results: This guideline includes seven core competencies. The core competency criteria included in the guideline are professionalism, effective communication, evidence-based practice, care management, quality improvement, teamwork and collaboration, and professional leadership. Recommendations for cardiovascular surgical nurses include: They should provide services in accordance with current practice standards, professional ethical codes, and legal regulations. They should serve as role models for their colleagues. They should utilize effective communication skills in interactions with individuals, families, communities, colleagues, and other members of the healthcare team, and they should utilize therapeutic communication techniques in specific groups and situations. They should provide patient-centered and evidence-based care. They should participate in quality improvement initiatives. They should learn, develop, and practice collaborative teamwork. They should be leaders. Cardiovascular surgery nurses should implement innovative approaches into practice.

Conclusion: The core competencies of cardiovascular surgery nurses are being professional, being a leader, implementing collaboration and teamwork, providing patient-centered care, providing evidence-based care, and participating in quality improvement efforts. As cardiovascular surgery nurses, we must know our core competencies and work within the framework of these competencies.

Keywords: Nursing, competency, cardiovascular surgery nursing

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NP-14

Points to be considered in patients undergoing pta and nursing care

Cansu Eryildirim

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) generally develops due to narrowing or occlusion of the arteries supplying the lower extremities as a result of atherosclerosis. Percutaneous transluminal angioplasty (PTA) is a minimally invasive method used to dilate and open the narrowed or occluded artery The aim of this study is to emphasize the nursing care directed at preventing arterial thromboembolism, venous thrombosis, and bleeding complications that may develop in patients undergoing PTA.

Material and Methods: This study was conducted retrospectively in our clinic between January 2023 and July 2025, and included 140 patients who underwent PTA. The mean age of the patients was 65 years. Of the patients, 16.4% were female and 83.57% were male. The average length of hospital stay was five days.

Results: In patients undergoing PTA due to PAD, pre- and post-procedural care is of great importance. Before the procedure, the patient's vital signs should be assessed, anxiety should be controlled, and hydration should be initiated. Depending on the use of radiopaque substances, creatinine levels should be monitored to prevent nephropathy, and adequate fluid support should be ensured. After the procedure, the risk of bleeding should be closely monitored, the puncture site should be regularly controlled, and activated clotting time (ACT) and laboratory parameters should be followed. Extremity pulse, temperature, and color should be assessed at regular intervals.The most common complications after PTA are hematoma, pseudoaneurysm, arterial perforation, systemic embolism, and infection. The hemodynamic condition of the patient should be monitored; after the procedure, if a sandbag is placed on the puncture site, immobilization should be ensured for 4–6 hours, followed by mobilization planning. Analgesia should be administered to reduce pain and anxiety. Hydration should be maintained to prevent nephropathy. Moreover, the patient should be carefully observed for possible allergic reactions and bleeding parameters should be closely monitored.

Conclusion: The main goal of nursing care after PTA is the early identification and prevention of complications. Nurses should regularly monitor the patient's vital signs, laboratory results, and carefully observe for signs of bleeding, hematoma, and infection. Extremity monitoring, ACT follow-up, adequate hydration, and early mobilization are essential to prevent complications. Regular follow-up, adequate documentation, and a multidisciplinary approach positively affect the prognosis of patients undergoing PTA. Evidence indicates that early detection, close monitoring, and preventive interventions by nurses significantly improve patient outcomes.

Keywords: Peripheral artery disease, prevention, complication

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NP-15

Venous ulcer monitoring and current nursing approaches

Selda Gure, Zeynep Cekim

İstanbul SBU Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The healing process for patients with venous leg ulcers takes a long time. This negatively impacts their quality of life. The key points in treatment and nursing care are to improve the patient's quality of life by alleviating their symptoms, preventing infection, restoring damaged tissue integrity, and preventing recurrences. The primary focus of care is the individual's commitment to self-care. The purpose of this study is to explain the current nursing approach for patients with venous ulcers.

Material and Methods: Literature searches were conducted using the keywords " venous ulcer follow-up, nursing care " in electronic databases and open access databases such as Google Scholar, Pub Med, Web of Science, EBSCO, Scopus, Ulakbim, and TR Index.

Results: A venous ulcer is defined as an open lesion extending from the ankle to the mid-calf, persisting for more than six weeks. The goals of venous ulcer treatment are to reduce venous pressure, reduce edema and pain, stimulate wound granulation, accelerate epithelialization and wound healing, improve the patient's quality of life, and prevent recurrence. A multidisciplinary approach is crucial to increase the chance of success in diagnosis, treatment, and follow-up. Key points to consider in nursing care for venous ulcers include wound cleansing and dressing, infection prevention, hygiene and skin care, interventions addressing the underlying causes of venous ulcers, pain control, edema reduction, prevention of constipation, provision of adequate nutrition, and patient information.

Conclusion: The initial wound development, wound diameter, location, number of wounds, type of tissue, type and amount of exudate, wound characteristics and local skin condition, wound stage, ankle-brachial pressure index, and foot lymphedema ruptures should be evaluated. One of the most important steps in nursing care for venous ulcers is patient education. Lack of patient knowledge about self-care negatively impacts the process and can lead to irreversible problems. Emphasizing the importance of movement, elevation, activity, compression, temperature monitoring, diet, skin care, appropriate clothing and footwear, and awareness of smoking and alcohol use is crucial for preventing venous stasis, alongside hospital nursing care.

Keywords: Nursing care, venous ulcer, follow-up

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NP-16

Cerebrospinal fluid monitoring and nursing care in patients after thoracoabdominal aortic aneurysm surgery

Zeynep Cekim, Selda Gure

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: One of the most serious complications after thoracoabdominal aortic aneurysm (TAAA) surgery is paraplegia and neurological deficits due to spinal cord ischemia. Cerebrospinal fluid (CSF) drainage is applied to reduce this risk. The aim of this paper is to summarize current evidence-based approaches to CSF monitoring and nursing care following TAAA surgery.

Material and Methods: Articles published between 2020 and 2025 were reviewed in PubMed, CINAHL, Cochrane, and Google Scholar databases using the keywords "thoracoabdominal aortic aneurysm," "cerebrospinal fluid," "nursing care," and "spinal cord ischemia."

Results: CSF monitoring is performed after TAAA surgery to prevent complications. To maintain spinal cord perfusion pressure, CSF pressure should be kept below 10 mmHg, as higher pressures increase the risk of ischemia. Nurses play a crucial role in ensuring the closed drainage system functions continuously, maintaining sterility, and recording daily CSF volume and pressure values (generally within 10–20 ml/hour). In addition, close monitoring of potential complications such as hypotension, tachycardia, altered consciousness, and motor loss in the legs is essential. Regular surveillance for signs of infection (fever, neck stiffness, changes in CSF color), ensuring that the lumbar catheter is not compressed during positioning, and controlling the drainage rate are also critical aspects of nursing care. Excessive CSF drainage may lead to complications such as headache, nausea, subdural hematoma, and meningitis, which require immediate notification of the physician.

Conclusion: CSF monitoring after TAAA surgery is a vital intervention for the prevention of spinal cord ischemia. Nurses are at the center of multidisciplinary care through drainage management, infection control, monitoring of vital signs, and neurological assessment. Evidence-based nursing interventions contribute significantly to reducing complications and enhancing patient safety.

Keywords: Cerebrospinal fluid drainage, nursing care, spinal cord ischemia, thoracoabdominal aortic aneurysm

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NP-17

Preventing venous thromboembolism in cardiovascular surgery intensive care: The role of nursing interventions

Dilan Ciftci

İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Venous thromboembolism (VTE), including deep vein thrombosis (DVT) and pulmonary embolism (PE), remains a major cause of morbidity and mortality in patients undergoing cardiovascular surgery. This study aims to describe nurse-led interventions that effectively prevent VTE and improve patient outcomes in intensive care units.

Material and Methods: A descriptive observational study was conducted in a cardiovascular surgery ICU. Nursing interventions included: •Systematic VTE risk assessment using validated tools such as the Caprini score, •Implementation of individualized early mobilization and limb exercise protocols, •Patient and family education emphasizing VTE prevention and signs of complications, •Continuous monitoring of anticoagulant therapy, including dosage adjustments and laboratory follow-up, •Documentation and communication within the multidisciplinary team to ensure timely interventions.Clinical observations focused on timing of mobilization, patient adherence to preventive measures, and incidence of VTE events during ICU stay.

Results: Structured, nurse-led interventions were associated with a significant reduction in DVT and PE incidence. Early mobilization and limb exercises improved venous return and decreased lower limb edema. Patient and family education increased engagement and adherence to preventive strategies. Close monitoring of anticoagulation therapy ensured safety and timely adjustments. Multidisciplinary communication facilitated rapid response to early signs of VTE, preventing progression to severe complications.

Conclusion: Nursing interventions play a pivotal role in preventing VTE in cardiovascular surgery ICU patients. A structured approach combining risk assessment, early mobilization, patient and family education, and vigilant monitoring improves clinical outcomes and patient safety, reinforcing the critical role of nurses as frontline caregivers in high-risk postoperative care.

Keywords: Venous thromboembolism, cardiovascular surgery, critical care nursing, early mobilization, risk assessment

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NP-18

Examination of nurses' knowledge, awareness, and symptom management regarding deep vein thrombosis

Kaymak Gunduz[1], Hulya Karaer[2], Ozlem Gumus[3]

Başkent University Hospital, Directorate of Nursing Services, Ankara, Türkiye

Abstract

Aim: This study aims to examine the knowledge levels, awareness, and symptom management practices of nurses working in different clinics at Başkent University Hospital regarding deep vein thrombosis. The study is planned in order to identify the educational needs of nurses in high-risk areas and to provide baseline data for future training programs.

Material and Methods: This descriptive and cross-sectional study included all nurses directly involved in patient care at the hospital. The Personal Information Form and the Deep Vein Thrombosis Knowledge, Awareness, and Symptom Management Form were used as data collection tools. The questionnaires will be administered face-to-face, and all data will be collected anonymously. The obtained data will be analyzed using the SPSS 25.0 package program.

Results: The data have been collected.

Conclusion: The analysis of the study data is in progress.

Keywords: Deep vein thrombosis, awareness, symptom management, risk assessment, nursing

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NP-19

The importance of nursing care in carotid endarterectomy surgeries

Nur Senlik

Gülhane Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Carotid endarterectomy (CEA) is a common surgical procedure aimed at reducing the risk of ischemic stroke by removing atherosclerotic plaques from the carotid artery lumen. Beyond surgical technique, perioperative nursing care plays a critical role in ensuring patient safety, preventing complications, and supporting both physiological and psychological recovery. The aim of this study is to emphasize the importance of nursing interventions in patients undergoing CEA and to evaluate their impact on care outcomes based on two years of clinical data.

Material and Methods: This retrospective observational study was conducted in a vascular surgery clinic between January 2023 and December 2024. All patients who underwent CEA during this period were included. A total of 34 cases were analyzed: 10 operations in 2023 and 24 in 2024. Demographic data, perioperative nursing practices, and postoperative outcomes were evaluated. Nursing responsibilities included preoperative patient education and psychological support, intraoperative assistance to the surgical team, and postoperative neurological assessment, hemodynamic monitoring, wound care, and implementation of early mobilization.

Results: Among the 34 patients, 2 developed short-term postoperative neurological deficits (motor weakness, speech disorders) requiring prolonged follow-up and rehabilitation. The remaining 32 patients achieved full recovery without major complications. Postoperative regular neurological examinations, blood pressure monitoring, and wound care performed by nurses enabled early detection of complications and rapid intervention. Furthermore, patient education contributed positively to lifestyle modifications, medication adherence, and long-term recovery.

Conclusion: The findings of this study highlight that nursing care is indispensable in the perioperative management of carotid endarterectomy. Structured and effective nursing interventions significantly reduce complications, facilitate faster recovery, and improve the quality of patient care. Developing standardized nursing protocols specific to vascular surgery and strengthening continuous professional education for nurses may further enhance clinical outcomes. Future studies with larger patient cohorts could provide a more comprehensive understanding of the long-term effects of vascular surgery nursing.

Keywords: Carotid endarterectomy; nursing care; postoperative complications; recovery; vascular surgery

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NP-020

Hemodynamic effects of early postoperative mobilization in patients undergoing TEVAR for aortic dissection

Perihan Gizem Ilhan

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Thoracic endovascular aortic repair (TEVAR) for aortic dissection is an effective treatment method that reduces mortality and morbidity. However, in the postoperative period, maintaining hemodynamic stability and preventing complications are among the primary goals of nursing care. During this period, the role of early mobilization in enhancing patient recovery is becoming increasingly important.In our study, we aimed to evaluate the effects of early mobilization on hemodynamic parameters, the development of complications, and patient comfort in patients following TEVAR.

Material and Methods: A total of 20 patients who underwent TEVAR between January 2024 and July 2025 were retrospectively included in the study. Patients who were hemodynamically stable and had no clinical conditions preventing mobilization during their postoperative follow-up were selected. Patient files and nursing observation notes were used as the basis for data collection.

Results: Of the patients included, 20% were female and 80% were male. The mean age was 60 years, and the average length of hospital stay was three days.

Conclusion: Our clinical observations demonstrated that early mobilization was effective in maintaining hemodynamic stability following TEVAR. We observed that patients mobilized early had more stable systolic and diastolic blood pressures, with fewer hypertensive episodes. By closely monitoring heart rate, we intervened promptly in sudden increases and were able to control the development of tachycardia. Oxygen saturation levels improved, and deep-breathing exercises contributed to better respiratory function. When pain was effectively managed, patients tolerated mobilization more successfully and demonstrated higher motivation. With pre-mobilization education and safety measures, no falls or additional complications occurred. Furthermore, no pulmonary complications or deep vein thrombosis were observed in patients mobilized early. Consistent with the literature, we noted that early mobilization shortened hospital stays and accelerated recovery. Our findings suggest that, with close nursing monitoring and patient education, early mobilization is safe and feasible. Incorporating early mobilization into standard postoperative nursing protocols after TEVAR can provide significant benefits for patient safety and clinical outcomes

Keywords: Thoracic endovascular aortic repair, aortic dissection, early mobilization, hemodynamic stability, nursing care

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Poster Presentations

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PP-001

Multiple arterial aneurysms in an adult: An incidental encounter or a genetic disorder?

Gulen Sezer Alptekin, Cihad Sen, Enes Pervane

Kütahya University of Health Sciences, Department of Cardiovascular Surgery, Kütahya, Türkiye

Abstract

Aim: Peripheral arterial true aneurysms are rarely seen with a lower prevalence when compared with abdominal aortic aneurysms which are mostly associated with degenerative etiology. Herein we aimed to present a case of a patient with aortoiliac aneurysm concomitant with multiple peripheral arterial aneurysms whowas skeptically diagnosed as having a genetic disorder.

Material and Methods: A 59 year old male patient was operated for brachial artery aneurysm after apunction for blood sampling anamnesis 3 years ago However the aneurysm wasdiagnosed as a true aneurysm intraoperatively. He recently admitted with right lower abdomen pain. During the period his brother died of aortic disease. The computed tomography angiography revealed a 4,5 cm infrarenal abdominal aort aneurysm with 2,5 cm right iiac artery aneurysm. Regarding the previous and familial high risk of the patient, an endovascular abdominal aortic repair was performed. A pathologic specimenfrom common femoral artery was sampled intraoperatively.

Results: The postoperative period was uneventful. Further investigations for aneurysmafter discharge revealed multiple aneurysms of right middle cerebral artery.Thepathology of the specimen was compatible with medial atrophy with loss of smoothmuscle cells and elastic fiber degeneration. The immunologic tests revealed HLA B57positivity without figuring out Behçet disease regarding the clinic. The genetic testsdemonstrated a TALDO-1 gene mutation which refers to transaldolase deficiency whichis described as inborn error of pentose phosphate pathway. There are rare cases withtransaldolase deficiency which were reported in the ages of early childhood in literature,The clinician of genetics suggested that the heterozygous carrier for an autosomal recessive trait of the disease may be suspicious although the margin of error of novel slicing analyses should not be ignored and should be repeated in two years. The patient is referred to the neurointerventionist for further neurological evaluation

Conclusion: Although the etiology of this case is stil compromising, the iceberg behindthe rue peripheral arterial aneurysms should be evaluated carefully by the cardiovascular specialists. A further multidisciplinary approach is vital for these patients.

Keywords: True aneurysm, peripheral arterial aneurysm, genetics, abdominal aorta

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PP-002

Surgical management of popliteal artery entrapment syndrome complicated by post-stenotic aneurysm: A case report

Emre Oteyaka[1], Mustafa Sedat Yildiz[2], Okan Eren Kuguoglu[1], Berk Durak[1], Hasan Erdem[1], Bahadir Daglar[1], Halil Turkoglu[1]

[1]İstanbul Medipol University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul Medipol University, Faculty of Medicine, İstanbul, Türkiye

Abstract

Aim: Popliteal artery entrapment syndrome (PAES) is a rare condition caused by anatomical abnormalities between the popliteal artery and surrounding musculofascial structures. The formation of a post-stenotic aneurysm in the popliteal artery is an extremely rare complication of PAES. The presence of an aneurysm complicates surgical management further by requiring arterial reconstruction. Patients with this syndrome are typically young (≤30 years) and present with associated symptoms such as unilateral or bilateral calf cramping. Early diagnosis and treatment are crucial to prevent complications, including limb ischemia, thromboembolism, post-stenotic dilation with aneurysm formation, and limb amputation. This case report presents the surgical treatment of a 23-year-old male patient with PAES complicated by a post-stenotic aneurysm.

Material and Methods: A 23-year-old male patient was admitted to our clinic with complaints of exercise-induced calf pain and intermittent claudication in the left lower extremity. On physical examination, peripheral pulses were palpable at rest but diminished significantly during active plantar flexion.Diagnostic Evaluation:Doppler ultrasonography revealed a turbulent flow pattern and post-stenotic dilatation of the left popliteal artery.Computed tomography angiography (CTA) demonstrated an aberrant course of the medial head of the gastrocnemius muscle compressing the popliteal artery and confirmed the presence of a post-stenotic aneurysm measuring. Contralateral limb imaging was also performed to exclude bilateral involvement.Surgical Procedure:The patient was positioned prone under general anesthesia. A posterior approach to the popliteal fossa was performed. After careful dissection of the popliteal artery and surrounding musculature, the aberrant muscular bundle causing entrapment was identified and released. The aneurysmal segment of the artery was resected. Arterial continuity was restored using an interposition graft with a reversed autologous great saphenous vein harvested from the ipsilateral limb.

Results: The postoperative course was uneventful. The patient's calf pain resolved completely, and distal pulses were palpable at rest and during stress maneuvers. Postoperative duplex Doppler ultrasonography demonstrated satisfactory graft flow without residual stenosis or aneurysmal dilation. The patient was discharged on the fifth postoperative day with dual antiplatelet therapy. At 2-year follow-up, doppler ultrasonography confirmed graft patency with no evidence of recurrent compression, thrombosis, or aneurysmal changes. The patient reported full return to daily activities and sports without ischemic symptoms.

Conclusion: Early recognition and surgical management of popliteal artery entrapment syndrome complicated by aneurysm are essential to prevent ischemic complications. Arterial decompression combined with venous graft reconstruction provides excellent outcomes in young patients. Careful follow-up remains crucial to detect recurrence, graft stenosis, or new aneurysm formation.

Keywords: Popliteal artery, aneurysm, gastrocnemius

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PP-003

The role of endothelial dysfunction and traditional risk factors in peripheral artery disease

Ercan Kahraman[1], Sirin Cetin[2]

[1]Amasya University Medical Faculty, Department of Cardiovascular Surgery, Amasya, Türkiye
[2]Amasya University Medical Faculty, Department of Biostatistics, Amasya, Türkiye

Abstract

Aim: The aim of this study was to investigate the relationship between peripheral artery disease (PAD), a significant indicator of atherosclerosis, and endothelial dysfunction. Accordingly, the role of serum endocan levels, considered a marker of endothelial damage, and traditional risk factors such as diabetes in the development of PAD was explored.

Material and Methods: Our study included 46 patients diagnosed with peripheral artery disease and a control group of 30 healthy individuals. The demographic, clinical, and laboratory data of both groups were compared. A logistic regression analysis was performed to identify the independent risk factors predicting the presence of PAD.

Results: The prevalence of diabetes, smoking, and coronary artery disease was found to be higher in the patient group compared to the control group ($p < 0.05$). Concurrently, systemic inflammation markers such as the Neutrophil-to-Lymphocyte Ratio (NLR) and Platelet-to-Lymphocyte Ratio (PLR) were also significantly higher in the patient group ($p < 0.05$). Although serum endocan levels were higher in the PAD group (1259 ± 210 pg/mL) compared to the controls (1189 ± 205 pg/mL), this difference was not statistically significant ($p=0.156$). The logistic regression analysis revealed that diabetes increased the risk of PAD by approximately 5-fold (OR: 4.84, $p=0.004$) and smoking by approximately 2.5-fold (OR: 2.32, $p=0.015$), establishing these two factors as independent risk predictors for the disease.

Conclusion: Our study has demonstrated that diabetes and smoking are potent and independent risk factors for PAD. However, a statistically significant association was not found between serum endocan levels, which we investigated as a marker of endothelial dysfunction, and the presence of the disease. These findings indicate that while the role of novel biomarkers in the pathophysiology of PAD continues to be explored, managing traditional risk factors remains the cornerstone of prevention and management strategies for the disease.

Keywords: Peripheral artery disease, endocan, atherosclerosis

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PP-004

Dual antegard cerebral perfusion in arcus aortic surgery

Hayati Deniz, Yavuz Arslanoglu, Yusuf Corbacioglu, Murat Abdulhamit Ercisli, Gulenay Eroglu Hocaoglu

Gaziantep City Hospital, Gaziantep, Türkiye

Abstract

Aim: Deep or moderate hypothermia combined with selective antegrade cerebral perfusion is frequently used in aortic arch surgery. However, postoperative permanent or temporary neurological deficits and perioperative mortality are still seen at varying rates. The normothermic dual antegrade cerebral perfusion technique we have been using in our clinic for the last 5 years has resulted in virtually no postoperative neurological deficits and is free of many side effects associated with cooling and warming. The purpose of this study is to compare the postoperative outcomes of dual ACP (Antegrad Cerebral Perfüzyon) methods with other techniques in the literature.

Material and Methods: We performed a literature search of the MEDLINE, Embase, and PubMed databases. The primary outcomes of this analysis were PND (Permenant Norologic Deficid) and perioperative mortality. Network rank and surface under the cumulative ranking curve analyses were performed to evaluate and identify the superiority of Dual ACP technique.

Results: Thirty-five studies involving 6893 participants were included in this review. The number of studies that involved DHCA(Deep Hipothermic Circulatory Arrest), DHCA + ACP, DHCA + RCP (Retrograd Cerebral Perfusion) and MHCA + ACP were 16, 19, 23 and 15, respectively. Based on SUCRA analyses, normothermic DUAL ACP tecnique was the best choice in terms of both PND and mortality.

Conclusion: Effective and totally cerebral perfusion should be actively considered. Normothermia with duaL ACP is associated with lower in-hospital and 30-day mortality, shorter cardiopulmonary bypass time, and fewer neurologic sequelae than all other brain protection tecniques .

Keywords: Aortic surgery, cerebral protection, network meta-analysis, neurological deficit

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PP-005

From ingestion to aneurysm: Primary repair of a giant paediatric common carotid pseudoaneurysm

Onur Benli[1], Mehmet Sah Topcuoglu[1], Mete Kubilay Kasap[2], Nazenin Durak Kasap[2]

[1]Çukurova University, Faculty of Medicine, Adana, Türkiye
[2]Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: Extracranial carotid artery aneurysms in children are exceedingly rare, accounting for < 1% of pediatric vascular lesions. Although penetrating trauma is the most frequent cause, spontaneous cases and those associated with connective tissue disorders have been reported. A foreign body that perforates the pharyngeal wall—such as a fish bone—may injure adjacent vessels and lead to pseudoaneurysm formation. In this report, we present a child with a giant right common carotid artery pseudoaneurysm caused by fish bone ingestion, successfully treated with aneurysmectomy and primary repair.

Material and Methods: A previously healthy 7-year-old boy presented with a 6-month history of a progressively enlarging, painless right-neck mass after odynophagia from fish-bone ingestion \~1 year earlier. Examination found a firm \~6-cm mass without neurological deficits. Contrast-enhanced CT angiography showed a 5 × 5 cm pseudoaneurysm of the right common carotid artery without intracranial extension; inflammatory markers, ANA, and RF were normal. Under general anesthesia, the sac was opened with proximal/distal control, thrombus evacuated, the wall excised, and a tension-free primary end-to-end anastomosis performed under microscopy using 7-0 polypropylene (clamp time 12 min); Doppler confirmed restored flow.

Results: Pediatric extracranial carotid artery aneurysms are rare, and giant lesions (> 4 cm) are even more uncommon. Most cases arise following penetrating trauma or iatrogenic injury; foreign body–induced aneurysms are exceptional.In our patient, the approximately one-year delay between injury and aneurysm detection is consistent with previously reported pseudoaneurysm cases.The surgical goal in these aneurysms is to prevent rupture and embolic events. Options include interposition grafting and primary repair. In pediatric patients, avoiding prosthetic material reduces long-term complications. In our case, adequate arterial length permitted a tension-free primary end-to-end anastomosis—a technique reported in the literature with high long-term patency rates in children.Although formal follow-up protocols for pediatric carotid aneurysms are not well established, regular Doppler ultrasonography at scheduled intervals is widely practiced.In our two-year follow-up, both clinical and imaging findings confirmed the success of the repair.

Conclusion: In children with a history of foreign body ingestion who develop a neck mass, vascular injury should be considered. Prompt imaging and primary repair can provide safe, durable treatment for giant pediatric carotid pseudoaneurysms.

Keywords: Pseudoaneurysm, end-to-end anastomosis, fish-bone ingestion

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PP-006

Single-session hybrid repair of a complex thoracoabdominal aortic aneurysm: TEVAR with aortobifemoral bypass

Burak Toprak[1], Abdulkadir Bilgic[2], Ahmet Turhan Kilic[1], Ozkan Karaca[1], Nihat Soylemez[1], Menaf Akin Sert[2], Vehbi Kinay[1]

[1]Mersin City Education and Research Hospital, Mersin, Türkiye
[2]Mersin University Faculty of Medicine Hospital, Mersin, Türkiye

Abstract

Aim: To present the feasibility and early outcome of a single-stage hybrid repair—combining thoracic endovascular aortic repair (TEVAR) with aorto-bifemoral bypass—in a patient with a complex thoracoabdominal aortic aneurysm accompanied by abdominal aortic and iliac artery aneurysms. This strategy was selected given the high perioperative risk profile of open surgery and the limitations of endovascular techniques when the abdominal aorta and iliac arteries are extensively involved. Hybrid repair may offer a safe and effective option in carefully selected, multilevel, complex aneurysms, while untreated abdominal/iliac aneurysms carry a notable annual rupture risk.

Material and Methods: The case was discussed in a multidisciplinary board, and a single-stage hybrid repair was planned. Preoperative CT angiography demonstrated diffuse aneurysmal dilatation extending from the thoracic aorta to the infrarenal segment, with focal findings suggestive of chronic dissection and penetrating atherosclerotic ulcers.The thoracic aorta measured 52 mm and the abdominal aorta 60 mm; bilateral iliac artery aneurysms were present without signs of rupture.The operative strategy proceeded as follows; TEVAR, Placement of a thoracic stent graft distal to the left subclavian artery with confirmation of the final position.Open surgery, Via laparotomy, exposure of the infrarenal aorta and iliac arteries followed by completion of an aorto-bifemoral bypass.

Results: The procedure was completed as planned without intraoperative complications. The postoperative course was uneventful, and the patient was discharged in good condition. Stabilizing the thoracic segment with TEVAR and completing distal reconstruction in the same session facilitated hemodynamic control and field management. The favorable early outcome aligns with reports supporting hybrid strategies in multilevel, complex aneurysmal disease.

Conclusion: In multisegment and complex thoracoabdominal aneurysms, a single-stage hybrid approach—endovascular control of the thoracic segment followed by open distal reconstruction—can be an effective and reliable treatment alternative when patient selection is appropriate. Considering the constraints of stand-alone endovascular repair in extensive abdominal/iliac involvement and the high perioperative risk of open surgery, hybrid repair represents a rational strategy to mitigate rupture risk.

Keywords: Thoracoabdominal aortic aneurysm, hybrid repair, thoracic endovascular aortic repair, aortobifemoral bypass

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PP-007

Brachiocephalic AV fistula pseudoaneurysm following shoulder trauma: Access-preserving surgical revision

Mehmet Rum[1], Servet Turgut[2]

[1]Koşuyolu High Specialization Education and Research Hospital, İstanbul, Türkiye
[2]Kars Harakani State Hospital, Kars, Türkiye

Abstract

Aim: Arteriovenous fistulas (AVFs) are the gold standard for hemodialysis access but carry long-term risks such as aneurysm and pseudoaneurysm formation. Their high flow dynamics and superficial location predispose them to trauma-related complications. Blunt injury may trigger pseudoaneurysm development, increasing the risk of rupture and skin breakdown. We present the case of a 68-year-old woman with a brachiocephalic AVF who developed a pseudoaneurysm following shoulder trauma, managed with access-preserving surgery

Material and Methods: Case Presentation:A 68-year-old female with a mature left brachiocephalic AVF presented after a fall, resulting in a shoulder fracture and oozing hemorrhage at the fistula site. Examination revealed an aneurysmal segment distal to the anastomosis, with a 0.5 cm skin-eroding pseudoaneurysm. Doppler ultrasound showed a 2.5 cm heterogeneous lesion compatible with pseudoaneurysm, while plain X-ray confirmed a shoulder fracture. Given the rupture risk, urgent vascular intervention was prioritised, followed by orthopaedic management.Surgical Technique: Under axillary block anaesthesia, the cephalic vein was dissected and clamped proximally and distally. After systemic heparinisation, the pseudoaneurysm sac was opened, thrombus evacuated, and devitalised tissue excised. The affected venous segment was aneurysmal; therefore, aneurysmoplasty was performed via longitudinal venotomy. A palpable thrill confirmed patency.

Results: The postoperative course was uneventful. Vascular examination was normal, and the patient underwent hemodialysis without difficulty on postoperative day 2. The shoulder fracture was managed conservatively.

Conclusion: Mature AVFs are particularly vulnerable to traumatic injury because of their high blood flow and superficial anatomical position. Even blunt trauma may precipitate pseudoaneurysm formation with subsequent risk of rupture. Early recognition and prompt surgical revision are essential, with preservation of vascular access as a key goal. This case underscores the importance of a multidisciplinary approach, and demonstrates that access-preserving surgical revision can yield durable results in complex trauma settings.

Keywords: Arteriovenous fistula, brachiocephalic, pseudoaneurysm, trauma, blunt trauma

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PP-008

Radial artery epithelioid hemangioma managed with saphenous vein interposition graft

Zehra Unlu[1], Ahmet Daylan[2], Sedat Karaca[3], Emrah Oguz[1], Fatih Islamoglu[1]

[1]Ege University School of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye
[2]Bakırçay University Çiğli Training and Research Hospital, Department of Cardiovascular Surgery, İzmir, Türkiye
[3]Şanlıurfa Training and Research Hospital, Department of Cardiovascular Surgery, Şanlıurfa, Türkiye

Abstract

Aim: Epithelioid hemangioma is a rare, benign vascular tumor characterized histologically by a combination of vascular proliferation, lymphoid infiltration, and tissue eosinophilia in varying degrees. It most commonly occurs in the skin and subcutaneous tissues and is generally indolent, occasionally accompanied by local recurrences, and definitive metastasis has not been reported. However, arterial involvement is extremely rare, which can pose challenges in both diagnosis and treatment.

Material and Methods: We report the case of a 17-year-old male who presented with a painless pulsatile swelling in the right wrist. Magnetic resonance imaging performed at an external center showed a well-circumscribed vascular mass (40 × 26 × 20 mm) originating from the radial artery and completely encircling it. The patient was referred to our institution with these findings. There was no history of trauma, no evidence of subcutaneous nodules in other regions of the body, and no peripheral eosinophilia on laboratory testing. Whole-body computed tomographic angiography was performed to exclude additional lesions, and surgical resection of the mass was planned.

Results: Intraoperatively, the lesion was found to involve approximately a 5 cm segment of the radial artery, rendering partial excision or artery-sparing resection unfeasible. The mass was therefore removed en bloc. As end-to-end anastomosis was not possible following excision, arterial continuity was restored using an interposition graft with the saphenous vein. Histopathological examination confirmed the diagnosis of epithelioid hemangioma.

Conclusion: Although epithelioid hemangioma is benign, arterial involvement presents significant diagnostic and therapeutic challenges, often mimicking malignant vascular tumors. Complete surgical excision with vascular reconstruction remains the treatment of choice. Long-term follow-up is essential to monitor for recurrence and ensure graft patency. This case highlights the importance of a vascular surgical approach in managing epithelioid hemangiomas arising from major arteries.

Keywords: Epithelioid hemangioma, radial artery, vascular tumor, surgical resection, vascular reconstruction

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PP-009

Open surgical stripping vs endovenous radiofrequency ablation for varicose veins: A single-center comparative study of patient-reported outcomes

Omer Erdem, Safa Berk Bal, Omer Melih Cinemre, Ceyhun Alp Ozdemir, Zubeyr Husnu Sahin, Ufuk Sayar

Türkiye Health Sciences University Ahi Evren Thoracic and Cardiovascular Surgery Training and Research Hospital, Trabzon, Türkiye

Abstract

Aim: To compare perioperative and postoperative patient-reported outcomes between open surgery and endovenous radiofrequency (RF) ablation.

Material and Methods: Single-center: A total of 60 patients treated at Ahi Evren Thoracic and Cardiovascular Surgery Training and Research Hospital were evaluated: 30 underwent open stripping and 30 underwent endovenous RF ablation. Patients were assessed with VEINES-QOL/Sym, the Venous Clinical Severity Score (VCSS), and the CEAP classification. For statistical analyses, ordinal data were compared using the Mann–Whitney U test, and categorical data using the chi-square test.

Results: Open surgery demonstrated superior pain outcomes compared with RF ablation, whereas RF ablation conferred advantages for swelling and pruritus.

Conclusion: **In this single-center comparative analysis, open surgery showed lower pain scores than RF ablation (on both VEINES and VCSS).** By contrast, RF demonstrated advantages in swelling and pruritus. These findings suggest that different treatment approaches may exert distinct effects on the overall symptom profile. The superiority of open surgery with respect to pain may have been influenced by factors such as analgesic protocols, tumescent volumes, the extent of concomitant microphlebectomy, and potential nerve irritation (e.g., proximity to the saphenous nerve). The timing of questionnaire administration and preoperative symptom baselines should also be considered.RF's relative advantage in swelling and pruritus may be related to more rapid improvement in venous return and comparatively less tissue trauma. Nevertheless, the similarity in CEAP distributions indicates that, in the short term, both techniques have an equivalent impact on clinical staging. Strengths of this study include equal sample sizes, use of standardized instruments, and performance by a single surgical team. Limitations include the relatively small sample size, single-center design, and lack of long-term follow-up. Confirmation with prospective, randomized, multicenter studies is warranted.

Keywords: Ablation, stripping, ceap, venöz, failure

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PP-010

An easy solution to a difficult problem: Right femoral vein access for right ovarian vein insufficiency

Sabahattin Goksel, Mustafa Bilgili, Ramazan Asik, Sadan Tutus

Kayseri City Hospital, Kayseri, Türkiye

Abstract

Aim: While embolization for the left ovarian vein, which drains into the left renal vein, is easily performed via the right common femoral vein during Pelvic congestion syndrome intervention, the brachial vein is there commended access route for the right ovarian vein, which drains directly into the inferior vena cava at a narrow angle. Therefore, if symptoms do not subside sufficiently after the initial left ovarian vein procedure, the right ovarian vein procedure is performed via the brachial route in a second session.

Material and Methods: A 36-year-old woman with PCS symptoms diagnosed radiologically by the Obstetrics and Gynecology Clinic underwent bilateral ovarian vein procedures in the same session. A 7F sheath was placed in the right femoral vein. The left renal vein was then accessed via a guiding catheter, and left ovarian vein insufficiency was visualized. The same catheter was advanced with a guide wire to the left ovarian vein plexus, leaving a 5-centimeter safe distance from the left renal vein before occluders were placed. The right ovarian vein was then visualized with the same catheter. A micro catheter carrying a 0.14-gauge wire, without a guide wire, was advanced through the guiding catheter to the ovarian vein plexus. The 0.14-gauge wire was then inserted, and the micro catheter was exchanged for a compatible 0.34-gauge hydrophilic wire. After insertion of a 0.34 hydrophilic wire, the guiding catheter carrying the plugs was placed at the level of the ovarian vein plexus. Using this catheter, the plugs were inserted into the inferior vena cava up to 5 centimeters away. Control venography revealed complete thrombosis on bothsides.

Results: At the follow-up visit on the 10th and 30th days, there was a significant decrease in the patient's symptoms. Radiologically, no flow was observed in both ovarian veins on pelvic and transvaginal Doppler ultrasonography.

Conclusion: Despite its widespread occurrence, Pelvic Congestion Syndrome is a condition that can be confused with many other clinical conditions, posing significant diagnostic challenges. Definitive diagnosis is challenging due to the nonspecificity of symptoms. The implementation of appropriate, targeted therapy is crucial. While interventional thrombosis of both ovarian veins is considered a viable treatment option, randomized studies are needed to further evaluate this approach.

Keywords: Interventional radiology, pelvic venous disorders, pelvic congestion syndrome, chronic pelvic pain

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PP-011

TEVAR for chronic Type III aortic dissection with giant thoracic aneurysm: A case report

Hasan Cihan, Murat Sezgin

Van Education and Research Hospital, Van, Türkiye

Abstract

Aim: We present a challenging case of chronic type III aortic dissection associated with a giant thoracic aortic aneurysm, involving the celiac trunk and progressing despite optimal medical therapy, successfully treated with thoracic endovascular aortic repair (TEVAR).

Material and Methods: A 52-year-old male patient with a history of hypertension and active smoking presented with persistent back and chest pain. Initial computed tomography angiography (CTA) revealed a type III dissection with thoracic aortic aneurysm. Follow-up imaging demonstrated progression with aneurysmal dilatation up to 85 mm, triple-lumen dissection morphology, and extension into the celiac artery. Despite full medication, symptoms worsened, and the patient was referred to our clinic. After multidisciplinary vascular council evaluation, high-risk TEVAR was indicated. Both brachial and femoral artery accesses were obtained to identify the true lumen. A stent graft was deployed covering the distal left subclavian artery and extending to the level above the diaphragm.

Results: Completion angiography confirmed adequate graft positioning with exclusion of the false lumen and stable perfusion of visceral and distal vessels. The patient's symptoms improved markedly, and he was discharged in good condition. On late follow-up, CTA demonstrated remodeling of the aorta with reduction of triple lumen to double lumen, persistent celiac artery perfusion from the false lumen, and stable distal flow with preserved peripheral pulses.

Conclusion: This case highlights the feasibility of TEVAR in complex chronic type III dissections with giant thoracic aneurysms and multiple lumens, even with visceral artery involvement. Careful preoperative planning, hybrid imaging guidance, and multidisciplinary decision-making are essential for successful outcomes in high-risk patients.

Keywords: Aortic dissection, thoracic aortic aneurysm, thoracic endovascular aortic repair, endovascular repair, celiac artery

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PP-012

Surgical treatment of thoracoabdominal aortic aneurysm accompanied by leriche syndrome and coronary artery disease

Emre Oteyaka[1], Mustafa Sedat Yildiz[2], Didem Melis Oztas[3], Murat Ugurlucan[3], Halil Turkoglu[1]

[1]İstanbul Medipol University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul Medipol University, Faculty of Medicine, İstanbul, Türkiye
[3]İstanbul Biruni University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Thoracoabdominal aortic aneurysm is a rare but serious condition that may coexist with other atherosclerotic diseases. The concurrence of thoracoabdominal aortic aneurysm, Leriche syndrome, and ischemic coronary artery disease presents a significant therapeutic challenge. This case report aims to describe the clinical course and surgical management of such a rare presentation.

Material and Methods: We evaluated a 62-year-old male patient diagnosed with thoracoabdominal aortic aneurysm, Leriche syndrome, and ischemic coronary artery disease. The patient underwent a comprehensive clinical assessment, radiological imaging, and coronary evaluation to determine the optimal treatment strategy

Results: The patient was found to have extensive atherosclerotic disease involving the descending thoracoabdominal aorta, complete occlusion at the aortoiliac bifurcation consistent with Leriche syndrome, and significant coronary artery stenosis. Surgical intervention was planned as the mainstay of therapy to address the coexistence of these pathologies.

Conclusion: The concurrence of thoracoabdominal aortic aneurysm, Leriche syndrome, and ischemic coronary artery disease is extremely rare and requires a multidisciplinary approach. Surgical management remains the cornerstone of treatment, and individualized planning is essential to optimize patient outcomes.

Keywords: Thoracoabdominal aneurysm, aortic surgery, revascularization

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PP-013

Endovascular management of an infected saccular abdominal aortic aneurysm: A case report

Halil Ozturk, Emre Pinar, Ugur Karagoz

Aydın Adnan Menderes University, Aydın, Türkiye

Abstract

Aim: Infected saccular abdominal aortic aneurysms (IAAAs) are rare but potentially life-threatening conditions. This case report aims to emphasize the role and optimal timing of endovascular treatment in the management of IAAAs.

Material and Methods: An 81-year-old male patient presented to the Emergency Department with complaints of abdominal and flank pain. Computed tomography (CT) imaging revealed a saccular aneurysmal dilatation, approximately 35 mm in diameter, at the infrarenal level of the abdominal aorta, with intramural air and no evidence of rupture. Laboratory findings showed elevated C-reactive protein (CRP) levels, and radiological features were consistent with an infected saccular abdominal aortic aneurysm. Empirical antibiotic therapy with ampicillin-sulbactam and ciprofloxacin was initiated, considering the patient's recent history of colonoscopy. Follow-up CT scans performed on days 5 and 15 demonstrated regression of intramural air and periaortic soft tissue heterogeneity; however, a mild increase in the size of the aneurysmal sac was noted.Given the presence of a saccular aneurysm, signs of infection control, and the patient's advanced age with multiple comorbidities, an endovascular approach was selected. A standard endovascular aneurysm repair (EVAR) was performed under spinal anesthesia, using a 23×13×124 mm main body graft and a 16×13×82 mm iliac limb extension graft, covering the infrarenal aorta proximally and extending distally into both common iliac arteries.

Results: No postoperative complications were observed, and the patient's abdominal and flank pain resolved during follow-up.

Conclusion: Infected abdominal aortic aneurysms (IAAAs), though rare, are associated with an increased risk of rupture. If there are no signs indicating urgent intervention, timing surgical intervention after infection control may help reduce the risk of graft infection. Although data comparing open and endovascular repair are limited, the timing and type of intervention should be individualized for each patient. Infection control and prolonged antibiotic therapy remain essential for successful outcomes.

Keywords: Abdominal aortic aneurysm, endovascular aneurysm repair, infection

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PP-014

Coexisting abdominal aortic aneurysm and renal artery aneurysm: The importance of correct contrast-enhanced computed tomography imaging technique

Fatih Ada, Yusuf Taspinar, Salih Toy, Ahmet Turan Ince

Sivas Cumhuriyet University, Faculty of Medicine, Cardiovasculer Surgery Department, Sivas, Türkiye

Abstract

Aim: The coexistence of renal artery aneurysm (RAA) and abdominal aortic aneurysm (AAA) is an extremely rare condition that carries a potentially high risk of mortality in the event of rupture. Various treatment options are available for aneurysms, including endovascular procedures, surgery, and hybrid approaches. Today, the gold standard for the diagnosis and follow-up of aneurysms is contrast-enhanced computed tomography (CT). In this report, we present a case of renal artery aneurysm that was not detected in the initial diagnostic CT due to inappropriate imaging technique, but was subsequently identified during follow-up after endovascular abdominal aortic aneurysm repair (EVAR).

Material and Methods: In screening studies, the prevalence of abdominal aortic aneurysm (AAA) among men ranges from 4% to 8% and has remained relatively stable. Renal artery aneurysm (RAA) is diagnosed in 0.015% to 1% of the general population. The coexistence of AAA and RAA has been rarely reported in the literature, with treatment strategies including endovascular repair for AAA combined with open surgery for RAA, or endovascular repair for AAA combined with coil embolization for RAA. In our patient, endovascular aneurysm repair (EVAR) was performed for AAA, and open surgery was planned for RAA.

Results: A 68-year-old male patient was admitted for further evaluation and treatment planning of an incidentally detected abdominal aortic aneurysm (AAA) at an outside center. He also reported intermittent pain in the left flank and epigastrium. On physical examination, a pulsatile, tender mass was palpable around the umbilical region. Contrast-enhanced CT performed at the referring center described a 45 mm AAA with mural hematoma, but the renal artery aneurysm (RAA) was not identified due to the imaging phase. After completion of preoperative preparations, the patient underwent endovascular aneurysm repair (EVAR). In the postoperative follow-up after discharge, control CT revealed no signs of endoleak or bleeding at the EVAR site, but a 27 mm RAA was detected in the left renal artery. On the previous CT, the RAA had been misinterpreted as a bowel loop because oral contrast had been administered. Thanks to appropriate imaging technique and phase selection, the RAA was accurately identified, and the patient was scheduled fortreatment.

Conclusion: In our patient, a combined approach of EVAR for the AAA and open surgery for the RAA was planned. Appropriate imaging phases and techniques in contrast-enhanced CT examinations are crucial for accurate diagnosis and treatment planning. Currently, it is anticipated that artificial intelligence–assisted radiology reporting methods may help overcome such diagnostic challenges.

Keywords: Renal artery, abdominal aortic aneurysm, image technique

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PP-015

Case report: Open repair of a rare giant main femoral artery aneurysm

Recep Caliskan

Edirne Sultan Murat 1 State Hospital, Edirne, Türkiye

Abstract

Aim: Lower extremity aneurysms are the most common aneurysms, following abdominal aortic and iliac artery aneurysms. These aneurysms are often accompanied by abdominal aortic aneurysms and aneurysms in the contralateral extremity. Femoral aneurysms, both true and false, are most commonly observed in the common femoral artery. The normal diameter of the common femoral artery varies between 8 and 10 mm. An increase greater than 50% is considered aneurysmal dilatation. Approximately 40% of true aneurysms are asymptomatic. They can also cause pain, leg edema, neuropathic pain, motor weakness, skin changes, and ischemic symptoms due to distal embolization. Symptomatic patients are treated regardless of aneurysm diameter, while asymptomatic patients can be followed up to 25 mm. CT angiography is the gold standard for diagnosis. Despite advancements in technology, open repair remains the primary treatment option. Additionally, treatment is possible with endovascular and hybrid techniques. In this case report, we present the open repair of an incidentally detected giant common femoral artery aneurysm.

Material and Methods: A 68-year-old male patient was admitted to the chest diseases department for treatment of a COPD attack. Clinical examination revealed an increase in the diameter of the left lower extremity. A Doppler ultrasound scan revealed a femoral artery aneurysm. CT angiography revealed a true common femoral artery aneurysm, measuring 59 mm in diameter and 103 mm in length, originating from the distal external iliac artery and encompassing the proximal portions of the superficial and deep femoral arteries. The patient had no history of femoral artery intervention, connective tissue disease, or trauma. Due to his known advanced COPD, open repair was performed under spinal anesthesia. An iliofemoral bypass with an 8-mm Dacron graft and a profundoplasty with an 8-mm Dacron graft were performed. The patient was admitted to the ward for follow-up on the first postoperative day and discharged with recovery on the sixth postoperative day.

Results: Although open repair is still the first treatment option for common femoral artery aneurysms, it is also possible to perform repair under spinal anesthesia, especially in groups where general anesthesia is risky.

Conclusion: Although open repair is still the first treatment option for common femoral artery aneurysms, it is also possible to perform repair under spinal anesthesia, especially in groups where general anesthesia is risky.

Keywords: Aneurysm, open repair, common femoral artery, spinal anesthesia

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PP-016

Giant arteriovenous fistula aneurysm: A case report

Baris Cetincay, Ercan Keles, Mert Arslangilay, Sahin Bozok, Omer Faruk Rahman, Daglar Cansu

Bakırçay University Çiğli Regional Education Hospital, İzmir, Türkiye

Abstract

Aim: The sustainability of hemodialysis in patients with chronic kidney disease relies on reliable vascular access. Arteriovenous fistulas remain the most frequently preferred modality; however, long-term complications such as stenosis, thrombosis, and aneurysm may occur. Among these, aneurysms are particularly concerning due to their potential for rupture and catastrophic hemorrhage.

Material and Methods: We present the case of a 72-year-old male who had been undergoing regular hemodialysis via a left brachiocephalic fistula since 2012. His past medical history was significant for diabetes mellitus, hypertension, hyperlipidemia, and a history of chemotherapy for pancreatic cancer in 2008. Over the past year, progressive enlargement of the fistula was observed. Doppler ultrasonography demonstrated extensive thrombosis extending from the subclavian vein to the fistula segment, along with a 28-mm aneurysm. Surgical exploration under axillary block anesthesia was performed. The procedure included thromboendarterectomy and repair of the brachial artery, followed by aneurysm resection. The fistula was subsequently ligated, and a permanent catheter was inserted into the right internal jugular vein to secure ongoing hemodialysis.

Results: The surgical procedure was completed without complication, and hemodialysis was successfully maintained through the newly placed catheter. Review of the literature indicates that aneurysm formation is more frequently encountered in brachiocephalic fistulas, with advanced age, diabetes, and hypertension recognized as major predisposing factors. Surgical resection is consistently reported as a safe and effective therapeutic strategy for large or thrombosed fistulas.

Conclusion: Aneurysms of arteriovenous fistulas represent a potentially life-threatening complication if not detected and managed in a timely manner. Regular surveillance of at-risk patients and prompt surgical intervention in cases of rapid enlargement or skin thinning are essential to prevent rupture, morbidity, and mortality.

Keywords: Vascular access devices, arteriovenous fistula, aneurysm, kidney failure, renal dialysis / methods

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PP-017

When endovascular alone is not enough: Hybrid approach to a rare giant spontaneous iliac pseudoaneurysm

Can Keresteciogluˡ, Sameh Alagha², Ozgur Ciftci²

[1]Yozgat Bozok University, Faculty of Medicine, Department of Cardiovascular Surgery, Yozgat, Türkiye
[2]Yozgat Bozok University, Faculty of Medicine, Department of Cardiology, Yozgat, Türkiye

Abstract

Aim: Iliac pseudoaneurysms are exceedingly rare and potentially life-threatening vascular lesions, usually associated with trauma, iatrogenic injury, or underlying systemic disease. In exceptionally rare instances, they may develop spontaneously, often leading to delayed diagnosis and carrying a high risk of rupture with catastrophic outcomes. We present a rare case of a giant spontaneous external iliac pseudoaneurysm, emphasizing the diagnostic approach, therapeutic strategy, and the complementary role of combined endovascular and surgical management in ensuring a favorable outcome.

Material and Methods: A 60-year-old male with a history of coronary artery disease presented to the emergency room with right lower limb pain, numbness, and weakness. He had previous coronary artery bypass grafting (CABG) surgery four years ago but no history of recent arterial intervention. Physical examination revealed a pulsatile mass in the right lower abdominal quadrant and thrill over the right femoral region, with diminished distal pulses on the right compared to the left. Contrast-enhanced computed tomography (CT) angiography showed a giant 16 × 12 cm pseudoaneurysm originating from the right external iliac artery, exerting mass effect on adjacent iliac vessels. Arterial Doppler ultrasonography confirmed the diagnosis by demonstrating the typical "yin-yang" sign. Considering the high risk of rupture and the unfavorable anatomy for open repair, an endovascular strategy was adopted. Via bilateral femoral access, two covered stents (9.0 × 60 mm and 8.0 × 80 mm) (Abbott Fluency™ Plus Vascular Stent Graft, Abbott Vascular, Santa Clara, CA, USA) were deployed in the right external iliac artery, followed by balloon post-dilatation (Atropos PTA Balloon Dilatation Catheter, BrosMed Medical, Dongguan, China), with no peri-procedural complications.

Results: Completion angiography showed complete exclusion of the pseudoaneurysm without endoleak. Although ischemic symptoms improved, persistent mass effect–related discomfort remained. Therefore, at one month, the patient underwent excision of the thrombosed pseudoaneurysm sac with laparotomy, which revealed no residual perfusion. Postoperatively, compression symptoms resolved completely. At two-month follow-up, CT angiography confirmed normal lower limb circulation, patent covered stents, and no evidence of recurrence. At three-month, patient was free of symptoms and there was no sign of any complications.

Conclusion: This case highlights the importance of early recognition, prompt imaging, and tailored management in giant spontaneous iliac pseudoaneurysms. Endovascular repair provides a safe and effective first-line therapy, while subsequent surgical excision may be necessary for persistent compression symptoms. Hybrid strategies combining endovascular and surgical approaches can achieve excellent outcomes in anatomically complex and high-risk situations.

Keywords: Iliac artery, pseudoaneurysm, endovascular procedures, stents, surgical procedures

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PP-018

A rare childhood entity: Massive jugular vein phlebectasia

Yeter Basbug[1], Volkan Kizilgoz[2], Hamit Serdar Basbug[2], Sukru Arslan[1]

[1]Karamanoğlu Mehmetbey University Faculty of Medicine, Department of Pediatrics, Karaman, Türkiye
[2]Erzincan Binali Yildirim University Faculty of Medicine, Department of Radiology, Erzincan, Türkiye
[3]Karamanoğlu Mehmetbey University Faculty of Medicine, Department of Cardiovascular Surgery, Karaman, Türkiye

Abstract

Aim: Phlebectasia is a word describing an abnormal fusiform or saccular dilatation of a vein that differs from the varicose veins, which implies tortuosity. The most common cause of a neck mass that becomes visible during straining is a laryngocele. However, internal Jugular vein phlebectasia (JVP) also presents similarly and is a rare pathology in childhood. We present a massive internal JVP in a child, based on clinical examination and a Computerized Tomography (CT) image, along with its differential diagnosis.

Material and Methods: An 8-year-old boy was referred to pediatric clinic with a swelling on his right neck side, which becomes visible during straining. During the Valsalva maneuver, the mass was inflated and subsided upon relaxation, leaving no abnormality upon inspection or palpation. History revealed good health and average growth with no operation or trauma. The parents stated that the swelling had been noticeable for four years and had shown a gradual increase. He had been unable to wear a collar as he felt uncomfortable with the constriction and choking sensation whenever he would strain. Physical examination revealed no other visible pathology when he was relaxed. However, when forceful expiratory efforts were made, a massive swelling appeared on the right side of the neck. The mass was smooth and ovoid. It was not pulsatile, and no bruit was heard. No tenderness or pain exists. Computerized Tomography Angiography images, while the boy was straining, revealed a massive right internal jugular vein dilatation.

Results: The diagnosis of internal JVP is made upon ultrasonography and CT angiography. The differential diagnosis of a neck mass includes laryngocele, cystic hygroma, lymphocele, thyroid swelling, cavernous hemangioma, and enterogenous cyst. A thyroglossal cyst, lymphadenopathy, branchial cleft cyst, and dermoid cyst should also be considered in the diagnosis. Internal JVP is a benign condition presenting with the main symptoms of constriction, choking, dizziness, coughing, tongue pain, and cessation of voice. Internal JVP may be associated with Menkes Disease. Massive internal JVP may also cause the classic features of Horner's syndrome that are unilateral miosis, ptosis and anhidrosis. Although these symptoms are rare, there is an absolute indication of surgical treatment in the symptomatic patients. In these patients, longitudinal constriction suture venoplasty plus encapsulation is recommended as a surgical technique.

Conclusion: Internal JVP is extremely rare. The diagnosis is considered in the presence of a neck mass enlarged by the Valsalva manoeuvre and confirmed by imaging. Surgery is only indicated in the presence of complications.

Keywords: Jugular veins, dilatation, abnormalities, vascular malformations, pediatric

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PP-019

Endovascular complex aortoiliac aneurysm repair via combined radiofemoral access: A case report

Mehmet Kirisci, Unal Ozturk, Murat Canak, Mucahit Surucu

Sütçü İmam University Faculty of Medicine, Department of Cardiovascular Surgery, Kahramanmaraş, Türkiye

Abstract

Aim: We aimed to present an endovascular aneurysm repair (EVAR) performed using a combined radial-femoral approach in a complex abdominal aortic and iliac artery aneurysm where the standard femoral artery approach failed.

Material and Methods: An 84-year-old male presented with abdominal pain. Computed tomography angiography revealed an 8 cm infrarenal abdominal aortic aneurysm and a 4 cm saccular aneurysmal dilatation extending from the left common iliac artery to the internal iliac artery. The patient had a history of lumbar spine surgery and coronary artery bypass grafting. The initial retrograde attempt via the left femoral artery failed to cross the iliac aneurysm using hydrophilic guidewires. Subsequently, antegrade access was obtained via a 6F sheath placed in the left radial artery. A hydrophilic guidewire was advanced distally to proximally across the aneurysm and externalized with the aid of a snare. Over the wire, a guiding catheter and stiff guidewire were introduced to deliver the graft system to the implantation site. For the contralateral iliac limb placement, the procedure continued by externalizing the guidewire inserted via the radial artery using a snare retrogradely delivered through the right femoral artery.

Results: The EVAR procedure was successfully completed using combined radial and femoral artery access. The patient was monitored postoperatively without complications and discharged in good health.

Conclusion: When femoral access is insufficient, radial artery access may serve as an effective and safe alternative for EVAR procedures. This case highlights the importance of alternative vascular access strategies in patients with challenging anatomical conditions and surgical histories.

Keywords: Endovascular aneurysm repair, iliac aneurysm, radial artery access, hybrid approach, vascular surgery

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PP-020

Surgical repair of Type Ib/III endoleak after EVAR: A life-threatening complication

Birkan Akbulut, Omer Haldun Tekinalp, Mustafa Gorkem Sarikaya

Antalya Training and Research Hospital, Antalya, Türkiye

Abstract

Aim: The aim of this study is to highlight late complications that may occur after endovascular aneurysm repair (EVAR), to emphasize the importance of regular follow-up in the early diagnosis and treatment of endoleaks, and to demonstrate that surgical repair is a safe and effective treatment option in appropriately selected patients.

Material and Methods: Endoleak is a significant long-term complication observed after EVAR, with important implications for morbidity. Both Type I and Type III endoleaks equalize the intraluminal pressure of the aneurysmal sac with systemic pressure, thereby posing a risk of rupture and requiring urgent intervention.

Results: A 76-year-old male patient with a prior history of EVAR presented to the emergency department with abdominal pain and nausea. Imaging revealed an endoleak. The patient underwent open surgical repair with bilateral graft-iliac interposition. The postoperative course was uneventful, and the patient was discharged on the 5th postoperative day.

Conclusion: Type I/III endoleaks are rare but serious complications. Due to their high risk of mortality, prompt diagnosis and surgical intervention are of vital importance.

Keywords: Endoleak, aortic aneurysm abdominal, aortic diseases

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PP-021

Successful treatment of a jugular vein injury by using a pericardial patch

Mehmet Moda[1], Ozgur Altinbas[2]

[1]Kilis Prof. Dr. Alaeddin Yavasca State Hospital, Department of Cardiovascular Surgery, Kilis, Türkiye
[2]Gaziantep University, Medical Faculty, Department of Cardiovascular Surgery, Gaziantep, Türkiye

Abstract

Aim: Vascular injuries are one of the most common challenging areas in surgery. Various sites can be affected either arterial or venous. Injuries may be life threatening especially occurred in main vascular structures like carotid artery, jugular vein, femoral artery and vein...etc. Several etiologic factors were given in the literature such as gunshot and stab injuries, accidents, and catheter-based injuries. In this study we aimed to present a jugular vein injury treatment by using a pericardial patch that occurred after a vehicle accident.

Material and Methods: A 22 old male was brought to the emergency department by ambulance due to motorcycle accident. He had an injury on his left jugular vein which was excessively bleeding. There was also a right hemothorax detected with PA graph which deteriorates the clinical condition. Initially jugular venous bleeding was buffered; proximal and distal edges were clamped and then sternotomy was performed for the etiology and the treatment of the hemothorax. As there was not any graft in the health care center, 2x2 cm pericardium existed for the repair of jugular vein and was used as a patch for injured site.

Results: Patients stayed 2 days in the intensive care unit and was discharged on the 5th day after the operation without any problem.

Conclusion: Injury of the vascular structures located in the neck region may exist with severe conditions. Prompt and appropriate intervention is because of acute deterioration in the clinical situation. Evaluation and treatment of the patient should be performed systematically. In addition, pericardium can be used as a patch in main vascular injuries if there is an indication of sternotomy and/or not any material that can be used as a graft in the facility.

Keywords: Jugular vein, pericardial patch, trauma

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PP-022

Popliteal AV fistulas

Hasan Karayaka, Medine Sarac, Ahmet Erkam Cevik, Ceylan Gurcan, Ilker Ince, Ali Aghayev, Busra Karakoc Kaplan, Mustafa Enes Bostankolu, Eren Can Gunes, Levent Altinay

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: The aim of this presentation is to review the clinical features, diagnostic approaches, and management strategies of popliteal arteriovenous fistulas (AVFs). By presenting two cases—one successfully treated with endovascular intervention and the other with open surgery—we aim to highlight the strengths and limitations of each therapeutic approach and emphasize the importance of individualized treatment planning.

Material and Methods: This study is based on two patients diagnosed with popliteal arteriovenous fistulas (AVFs). Both patients underwent clinical evaluation, Doppler ultrasonography, and computed tomography (CT) angiography for definitive diagnosis and anatomical assessment. Treatment strategies were determined according to patient characteristics and fistula anatomy. One patient was managed with an endovascular approach using a covered stent, while the other underwent open surgical repair with fistula ligation and bypass grafting. Clinical outcomes, postoperative recovery, and follow-up findings were recorded and compared.

Results: Both patients underwent successful surgical management of popliteal arteriovenous fistulas. In the first case, endovascular repair with a covered stent achieved complete exclusion of the fistula. In the second case, open surgical repair with fistula ligation and bypass grafting was performed without complications. Postoperative imaging confirmed the absence of residual arteriovenous shunting and demonstrated patent vascular reconstruction in both patients. Clinically, both patients experienced resolution of preoperative symptoms, and no recurrence or complications were observed during follow-up.

Conclusion: Endovascular treatment offers minimal invasiveness and shorter hospital stay but carries risks such as stent migration and uncertain long-term patency. Open surgery, though more invasive, provides durable solutions in young, low-risk patients. Treatment choice should be individualized based on patient characteristics and fistula anatomy. Early diagnosis and appropriate management are critical to preserve distal circulation and prevent long-term complications.

Keywords: Endovascular, surgery, arteriovenosus, fistula

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PP-023

Pharmacomechanical thrombolysis in acute deep vein thrombosis: A successful case

Mehmet Burak Gulcan, Ziya Yildiz, Suleyman Aycan, Abdulselam Karaduman, Mehmet Ali Kaygin, Ozgur Dag

Erzurum City Hospital, Department of Cardiovascular Surgery, Erzurum, Türkiye

Abstract

Aim: Our aim is to share our successful clinical outcome and thus contribute to the limited literature in this field.

Material and Methods: We have only one patient in this study, because our study is a case report. We share our successfull pharmacomechanical thrombolysis outcomes in 3 months follow up.

Results: Acute deep vein thrombosis (DVT) is the most common clinical condition among thromboembolic syndromes, often occurring together with pulmonary thromboembolism (PTE). It develops as a result of the Virchow's triad, namely stasis, hypercoagulability, and endothelial injury. It causes redness, swelling, edema, and severe tenderness in the affected extremity. Anticoagulant therapy is essential and indispensable, especially during the first three months of treatment. Additionally, compression therapy is necessary to combat inflammation and reduce the risk of developing post-thrombotic syndrome (PTS). PTS is a typically permanent clinical condition resulting from venous reflux dysfunction that develops chronically. Attention should especially be given to this in younger patients. Studies have shown that interventional procedures performed within the first 14 days, referred to as the acute phase, significantly reduce the likelihood of PTS development in cases of iliofemoral DVT. These procedures can be categorized as catheter-directed thrombolysis and pharmacomechanical catheter-directed thrombolysis. Catheter-directed thrombolysis takes longer compared to pharmacomechanical thrombolysis and is associated with a higher risk of bleeding. In femoropopliteal DVT cases, studies have not demonstrated any significant difference between medical treatment and interventional procedures regarding the development of PTS. Therefore, in particular, for young patients with acute iliofemoral DVT, pharmacomechanical methods offer promising outcomes. We intervened in a 37-year-old female patient with iliofemoral DVT using transcatheter pharmacomechanical thrombolysis and observed significant clinical improvement and symptomatic relief in the affected extremity within days. At the 3-month follow-up, marked clinical regression and recanalization were noted on control DUS. We believe that our work will contribute to the literature regarding the pharmacomechanical technique.

Conclusion: In conclusion, acute iliofemoral deep vein thrombosis (DVT) is a serious thromboembolic condition that requires timely and effective intervention to prevent long-term complications such as post-thrombotic syndrome (PTS). While anticoagulant therapy remains the cornerstone of treatment, pharmacomechanical catheter-directed thrombolysis performed in the acute phase offers significant advantages, especially in young patients, by accelerating symptom relief, enhancing vein recanalization, and reducing the risk of PTS. This report contributes valuable clinical evidence to the growing body of literature advocating for early interventional management in appropriate cases.

Keywords: Postthrombotic syndrome, venous thrombosis, pulmonary embolism, thrombolytic therapy

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PP-024

Pulmonary thromboembolism in a postpartum patient using a subcutaneous contraceptive implant

Esen Asanbaev

Akdeniz University, Antalya, Türkiye

Abstract

Aim: Pulmonary thromboembolism in a postpartum patient using a subcutaneous contraceptive implant.

Material and Methods: 26-year-old female.The patient presented to the emergency department with a 4-day history of pain localized to the right hip, which progressively extended distally to the right lower extremity, accompanied by discoloration, paresthesia in the toes, and exacerbation of pain.She reported a cesarean section delivery performed 12 days prior.An urgent lower extremity venous Doppler ultrasound was planned and performed.Venous Doppler usg of the right lower extremity:The right CFV, SFJ, and GSV extending from the proximal to the mid-thigh segment, as well as the DFV, SFV, and popliteal vein, exhibited increased vessel diameters, were non-compressible, and showed absent color flow signals. Hypoechoic thrombus material was visualized within the lumens.The patient was admitted to the cardiovascular surgery ward with a diagnosis of acute deep vein thrombosis . Anticoagulation therapy was initiated with Enoxaparin 2X1mg/kg doz daily. CT pulmonary angiography findings:Acute thromboembolic occlusions consistent with pulmonary embolism were identified in the branches of the right lower lobe pulmonary artery, specifically in the posterior and lateral segments.

Results: Due to persistent symptoms, intravenous heparin infusion was commenced on day 10 of treatment.On day 14, the patient underwent removal of the subcutaneous implant.Follow-up studies, including lower extremity venous Doppler ultrasound and CT pulmonary angiography, were scheduled.Follow-up CT pulmonary angiography report: No evidence of pulmonary thromboembolism was detected.Bilateral lower extremity venous Doppler ultrasound findings:On the right side, echogenic fibrinous material was observed at the proximal segment of the GSV with minimal extension to the CFV, SFV, and SFJ levels. Recanalized venous flow signals were detected within the lumen. The mid and distal segments of the right SFV demonstrated caliber reduction with preserved vascular flow signals. The right popliteal vein appeared patent with normal lumen diameter.On the left side, partial compressibility was noted in the CFV, femoral vein, and SFV with recanalized flow signals evident within the lumen. Heterogeneous echogenic fibrinous material, consistent with chronic venous thrombotic sequelae. The mid and distal segments of the left SFV exhibited caliber narrowing without detectable vascular flow signals. The left popliteal vein lumen was unremarkable.

Conclusion: In conclusion, while the use of subcutaneous implants for contraception during the postpartum period is considered an effective and safe method for breastfeeding mothers, the risk of complications should be minimized through appropriate timing and regular follow-up. Patient education and a multidisciplinary approach can lead to optimal outcomes.

Keywords: Pulmonary thromboembolism, deep vein thrombosis, pulmonary thromboembolism

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PP-025

Traumatic aortoiliac aneurysm treated with endovascular repair: A case report

Mert Celik[1], Ferhat Er[2], Aykut Sahin[2]

[1]Erciş Şehit Rıdvan Cevik State Hospital, Van, Türkiye
[2]Osmangazi University, Eskişehir, Türkiye

Abstract

Aim: Traumatic aortoiliac aneurysms are rare but life-threatening conditions that develop in the abdominal aorta and iliac arteries following blunt or penetrating trauma. They most commonly present in the form of pseudoaneurysms or saccular aneurysms and, if left untreated, are associated with high rates of mortality and morbidity.Due to their rarity, traumatic aortoiliac aneurysms are frequently overlooked at the time of diagnosis. However, given the substantial risk of mortality and morbidity, the possibility of an aortoiliac aneurysm should always be considered in patients with a history of trauma, particularly in the presence of persistent abdominal pain or suspicious imaging findings.In this report, we present the successful endovascular management of a patient who developed a saccular aneurysm of the abdominal aorta and bilateral iliac artery aneurysms following blunt trauma.

Material and Methods: A 64-year-old male patient with a history of blunt abdominal trauma presented to our clinic with complaints of abdominal pain and back pain. On admission, his vital signs were stable. Physical examination revealed palpable bilateral lower extremity pulses, and mild abdominal tenderness was noted.CT angiography demonstrated a saccular bulging at the infrarenal level, approximately 25 mm distal to the renal arteries, as well as an aneurysm measuring approximately 110 mm in the right common iliac artery and another measuring approximately 51 mm in the left common iliac artery (Figures 1 and 2).Following these findings, an endovascular procedure was planned. The patient was transferred to the angiography suite, and both femoral arteries were surgically explored. A 6F sheath was placed in the left femoral artery, and systemic heparinization was administered at a dose of 100 IU/kg. Under fluoroscopic guidance, the CT angiography findings were confirmed. An EVAR graft was deployed distal to the renal arteries. Since aneurysms were also present in both iliac arteries, iliac extension stent grafts were implanted bilaterally.Control angiography confirmed complete exclusion of the saccular bulging of the abdominal aorta and the bilateral common iliac aneurysms by the stent grafts, with no evidence of endoleak. The postoperative course was uneventful, and the patient was discharged in good condition on the fourth postoperative day.

Results: In our case, the patient was successfully treated with an endovascular approach for both the saccular abdominal aortic aneurysm and bilateral iliac artery aneurysms.

Conclusion: This experience supports the evidence that endovascular repair is a reliable and effective treatment option and should be considered the preferred modality in the management of traumatic aortoiliac aneurysms in appropriately selected patients.

Keywords: Endovascular treatment, traumatic aortoiliac aneurysm, saccular aneurysm.

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PP-026

Hybrid approach for TEVAR in a patient with concomitant abdominal aortic aneurysm and hostile iliac arteries

Dilsad Amanvermez Senarslan, Halil Demren, Funda Yildirim

Manisa Celal Bayar University, Faculty of Medicine, Department of Cardiovascular Surgery, Manisa, Türkiye

Abstract

Aim: Endovascular repair of thoracic aortic aneurysms (TEVAR) is the preferred option in high-risk aged patients. However, severe occlusive peripheral arterial disease may prevent transfemoral access. In such cases, hybrid approaches combining open surgical aorta bifemoral bypass and endovascular graft delivery through the prosthetic conduit limbs may provide a feasible solution.

Material and Methods: Case Report: We present a 74 year-old male patient with hypertention, thoracic and abdominal aortic aneurysm (AAA), peripheral arterial disease (PAD) with severe iliac involvement, and chronic kidney disease with elevated creatinine levels. He was referred with persistent back pain, uncontrolled hypertension, and suspicion of impending rupture. Initially, endovascular revascularization of the iliac arteries with covered stents was planned to allow transfemoral TEVAR graft delivery, followed by open AAA repair due to unfavorable neck anatomy. However, heavy calcification, angulation, and chronic renal failure limiting contrast use prevented safe device passage.So, we planned a second operation 3 days after the angiography, in a hybrid operation room. Firstly, an open aortobifemoral bypass with a Dacron Y-graft (20/10 mm) was performed via midline laparotomy, simultaneously treating the AAA and iliac artery occlusions.

Results: The TEVAR device was then successfully advanced through the iliac limb of the bypass graft and deployed in the descending thoracic aorta, achieving complete exclusion of the aneurysm. The patient tolerated the procedures well, the completion angiography confirmed exclusion of the thoracic aneurysm with patent bypass grafts and there was no evidence of endoleak. The patient had only a mild rise in creatinine, with no further complications related to operation.

Conclusion: This case highlights the importance of hybrid procedures combining surgery and endovascular strategies when conventional femoral access for TEVAR is not possible due to severe iliofemoral occlusive disease. Open aortobifemoral bypass can provide durable revascularization of peripheral arterial disease while excluding AAA and enable safe device delivery, offering a lifesaving alternative in selected high-risk patients to overcome hostile anatomy with complex aortic pathology.

Keywords: Aortic aneurysm, endovascular aneurysm repair, hybrid procedures, peripheral arterial disease, postoperative complications

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PP-027

A new ascending aorta

Irem Ozcetin, Hasan Iner, Yuksel Besir, Serkan Yazman, Busra Zehra Karaayak, Suat Ozdal, Ogulcan Cetinkaya, Muhammed Cagri Yalcin, Levent Yilik, Ali Gurbuz

İzmir Katip Celebi University Atatürk Training and Research Hospital, İzmir, Türkiye

Abstract

Aim: Thoracic aortic aneurysms are serious vascular pathologies that are often asymptomatic but carry high mortality when ruptured. With the widespread use of imaging modalities, the rate of incidental detection has increased. This report presents a case of a large descending aortic aneurysm, incidentally diagnosed in a patient presenting to the emergency department with non-specific complaints, and the complex surgical approach applied.

Material and Methods: A 58-year-old patient was admitted to the emergency department with complaints of flank pain, nausea, and vomiting. She had a history of AVR (2005), hypertension, gout, and lumbar disc herniation. During non-contrast CT imaging performed in the emergency department, an incidental descending aortic aneurysm was detected and the patient was referred to our clinic.Radiology report: "There is a marked aneurysmatic dilatation in the descending aorta, with a maximum diameter of 58 mm."Due to her presenting complaints, consultations were made with the relevant specialties and medical treatment was initiated. The patient was admitted to the cardiovascular surgery ward. Routine blood tests, chest X-ray, echocardiography, and thoracoabdominal CTA were performed, and the patient was prepared for surgery. Under optimal conditions, elective thoracic endovascular aortic repair (TEVAR) + debranching operation was planned.Under ITGAA, redo sternotomy was performed. A 12 mm Dacron graft was anastomosed from the proximal ascending aortic aneurysm to the right brachiocephalic artery. Exploration of the left carotid artery revealed severe plaque formation; therefore, the distal right carotid artery was explored. An 8 mm Dacron graft was passed under the left clavicle and anastomosed to the previously placed 12 mm graft from the ascending aortic aneurysm to the right brachiocephalic artery.Thoracic stent grafts were deployed. Control angiography showed no evidence of endoleak. Two mediastinal drains were placed, bleeding control was achieved, and the sternum was closed in accordance with normal anatomy. The patient was transferred to the cardiovascular surgery intensive care unit with inotropic support.

Results: Thoracic aortic aneurysms may remain asymptomatic yet cause life-threatening complications. Elective surgical planning and a multidisciplinary approach are lifesaving in such complex cases. In this case, successful results were achieved through the combination of redo sternotomy, debranching, and TEVAR. The increasing use of endovascular techniques reduces invasiveness and accelerates patient recovery.

Conclusion: In thoracoabdominal aortic aneurysms, individualized, well-planned surgical interventions performed by experienced teams are associated with high success rates. This case demonstrates that an incidentally detected aneurysm can be successfully treated with timely intervention.

Keywords: Thoracic endovascular aortic repair, ascending aorta, aneurysm, debranching

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PP-028

Total absence of inferior vena cava and lower extremity venous thrombosis

Sitki Akin Turan[1], Oguz Arslanturk[1], Ufuk Tutun[2]

[1]Zonguldak Bulent Ecevit University, Zonguldak, Türkiye
[2]Central Hospital, İstanbul, Türkiye

Abstract

Aim: To present a rare case of deep vein thrombosis associated with congenital inferior vena cava (IVC) atresia and discuss the clinical implications of this anomaly in preventing pulmonary embolism.

Material and Methods: A 27-year-old female patient using oral contraceptives for polycystic ovary syndrome presented with a two-year history of intermittent severe back pain requiring repeated hospital admissions without definitive diagnosis. She subsequently developed left leg swelling, pain, and increased diameter accompanied by worsening back pain. Comprehensive evaluation included bilateral lower extremity Doppler ultrasonography, venography, laboratory assessment of D-dimer levels, and coagulation parameters including Protein S, Protein C, and Antithrombin III levels. Echocardiography was performed to exclude congenital heart disease. Therapeutic intervention included pharmacomechanical thrombectomy using angiojet technology from both left popliteal and right femoral venous access points. The case was conducted according to Declaration of Helsinki principles with written informed consent.

Results: Bilateral lower extremity Doppler examination revealed extensive thrombus involving bilateral iliac veins and left lower extremity deep venous system. Laboratory showed elevated D-dimer level at 5007 ng/ml (normal: 0-500 ng/ml), while coagulation parameters including Protein S, Protein C, and Antithrombin III remained within normal limits. Attempted inferior vena cava filter placement revealed unexpected anatomical findings. Venography performed from the right femoral vein access demonstrated a well-developed azygos venous system, tortuous hepatic veins, and congenital underdevelopment with interruption of the infrarenal inferior vena cava. Despite extensive bilateral lower extremity venous thrombosis, the patient remarkably showed no clinical or laboratory signs of pulmonary embolism, with normal oxygen saturation, arterial blood gas analysis, and absence of respiratory symptoms. Pharmacomechanical thrombectomy successfully restored venous flow through both access points. Transthoracic echocardiography was normal, excluding associated congenital heart disease. Physical examination revealed prominent venous collateral circulation in the hip and flank regions, along with mild splenomegaly, suggesting alternative venous drainage pathways and possible splenic embolization serving as protective filtering mechanism.

Conclusion: Congenital IVC anomalies, occurring in 0.6-2% of the population, represent an underreported risk factor for deep vein thrombosis, particularly in young patients. This case demonstrates that IVC atresia may paradoxically provide protection against pulmonary embolism by directing venous flow through alternative pathways, including the spleen acting as a natural filter. The azygos continuation and collateral circulation development prevent direct access to pulmonary circulation. Clinicians should consider IVC anomalies in young patients presenting with iliofemoral deep vein thrombosis, especially when pulmonary embolism is absent despite extensive thrombosis. Early recognition and appropriate management are crucial for optimal patient outcomes.

Keywords: Inferior vena cava atresia, deep vein thrombosis, congenital vascular anomaly, pharmacomechanical thrombectomy

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PP-029

Excision of glomus caroticum invasion the carotid artery

Rabia Saygin, Ilhan Golbasi, Salih Ozcobanoglu

Akdeniz University, Department of Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: Carotid body tumor (CBT), the most common tumor of the carotid bifurcation, presents as a pulsatile mass. Cervical sympathetic chain (CSC) schwannomas are slow growing lesions originating from myelin-producing Schwann ceils. They may appear pulsatile due to the displacement of vascular structures by the non-vascular mass and this may mimic a CBT.

Material and Methods: A case of CSC schwannoma masquerading as CBT in a 44-year-old man presented and discussed here.

Results: A 44-year man presented with 3 x 4 cm swelling on leftside of neck for 2 weeks.There was no history of dysphagia, hoarseness, regurgitation through nose, sore throat, weight loss and earache.Swelling was pulsatile since beginning.This patient was ıv drug user.At the left carotid bifurcation level, a mass lesion glomus tumor containing 38*32*53mm arterial contrast enhancers was seen at the BTA.A mass lesion was reported as glomus caroticum in the posteriorolateral neighborhood of the Ica bifurcation, which was observed to be contrasted on MRI.We completely removed the mass with the operation.The mass eroding the ICA and jugular vein.As a result of histopathology, schwannoma was seen.

Conclusion: By observing the displacement of vessels on CT and MRI, nerve of origin for schwannoma can be predicted.Accurate preoperative diagnosis of nerve of origin iscrucial for planning of nerve plasty. It also makes easier for the surgeon to evaluate postoperative nerve deficit,its rehabilitation; and also preoperative counselling of patient can be done.In this case report as the tumour was from CSC just posterior to carotid body and was vascular in nature, soit was difficult to differentiate from CBT. It is a rare presentation, resembling with CBT, both clinically and onimaging.

Keywords: Schwannoma, glomus body tumor, surgical treatment

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PP-030

Our approach to open abdominal aortic surgery in cases with critical but non-surgical coronary artery disease

Ahmet Erkam Cevik, Medine Sarac, Busra Karakoc Kaplan, Fatih Kaan Kanber, Ali Aghayev, Isa Civelek, Mehmet Emir Erol

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Abdominal aortic aneurysm (AAA) is defined as a dilatation of the abdominal aorta exceeding 3 cm. Although frequently asymptomatic, AAA rupture is associated with high mortality. Surgical indication is based on aneurysm size, growth rate, and presence of symptoms.AAA frequently coexists with CAD, sharing common risk factors such as smoking, hypertension, and atherosclerosis. CAD is one of the main causes of perioperative morbidity and mortality in AAA surgery, necessitating careful preoperative cardiac evaluation.Here, we aimed to present our experience with open surgical repair of AAA in two cases with critical but non-surgical coronary artery lesions.

Material and Methods: Case 1: A 60-year-old male was diagnosed with a 95-mm AAA during follow-up for bladder cancer. Preoperative coronary angiography revealed a non-surgical LAD lesion. No additional cardiac intervention was planned, and AAA repair was prioritized. Case 2: A 70-year-old male presented with abdominal pain persisting for one month. Computed tomography confirmed the presence of AAA. Coronary angiography demonstrated a non-surgical CX lesion. Due to symptomatic AAA, the patient underwent open surgical repair. Following preoperative preparation, both patients received 7,500 units of heparin prior to cross-clamping, targeting an activated clotting time (ACT) > 250 seconds. Tube graft interposition was performed. Proximal anastomoses were fashioned with interrupted pledgeted Ethibond sutures, while distal anastomoses were performed with a continuous technique. Cross-clamp times were recorded as 23 and 21 minutes, respectively. The postoperative course was uneventful. Patients were discharged after intensive care and ward monitoring and referred to the cardiology clinic.

Results: The postoperative course was uneventful. Patients were discharged after intensive care and ward monitoring and referred to the cardiology clinic.

Conclusion: The coexistence of AAA and CAD represents one of the most significant challenges in vascular surgery. Perioperative myocardial infarction risk is a key determinant of surgical mortality. Thus, surgical strategy requires careful balancing between the rupture risk of AAA and the need for coronary revascularization.In our cases, since the coronary lesions did not require revascularization, AAA repair was performed without delay. Consistent with literature findings, open repair of AAA can be safely performed in patients with CAD not requiring surgical intervention. In the presence of critical but non-surgical CAD, open AAA repair can be performed safely with proper cardiac evaluation and a multidisciplinary approach. Close collaboration between cardiology and cardiovascular surgery teams plays a crucial role in reducing perioperative morbidity and mortality.

Keywords: Open abdominal aortic surgery, coronary artery disease, treatment strategia

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PP-031

Successful endovascular and surgical management of a ruptured type b aortic dissection: A case report

Irfan Dinler, Mehmet Karacalilar

Dicle University, Diyarbakır, Türkiye

Abstract

Aim: Aortic dissection is a life-threatening condition that requires prompt diagnosis and management. Type B (Type 3) dissections, according to the Stanford classification, are often managed with endovascular approaches in suitable patients. Thoracic endovascular aortic repair (TEVAR) has become a preferred option due to its minimally invasive nature and reduced complication rates. We present a case of a ruptured Type 3 aortic dissection successfully treated with emergency TEVAR and subsequent surgical exploration.

Material and Methods: A 61-year-old male presented with sudden-onset, stabbing back pain. CT angiography revealed an intramural hematoma extending from just distal to the left subclavian artery down to the right iliac artery. The patient was transferred to our center. Upon admission, he was hemodynamically stable but had a low hematocrit. Chest X-ray showed complete opacification of the left hemithorax, raising suspicion of aortic rupture.Emergency TEVAR was planned. A 40×32×200 mm stent graft was deployed to cover the entry point just distal to the left subclavian artery. Postoperatively, a chest tube was placed, draining 2000 cc of hemorrhagic fluid. On day 2, due to continued bleeding and hematocrit drop, surgical exploration via left lateral thoracotomy was performed. Approximately 1500 cc of hematoma was evacuated. A 4-cm tear in the thoracic aorta with complete adventitial separation was identified, though there was no active bleeding. A synthetic sealant was applied between the intimal and adventitial layers to reinforce the area.

Results: The patient's hematocrit stabilized, chest tube output ceased, and lung atelectasis improved. He was discharged in good condition on postoperative day 8.

Conclusion: In complicated Type B aortic dissections, especially with suspected rupture, rapid diagnosis and immediate intervention are critical. This case illustrates the life-saving role of TEVAR and the importance of clinical suspicion, even when imaging is inconclusive. A hybrid approach combining endovascular and surgical management can be vital for successful outcomes in selected cases.

Keywords: Ruptured type B aortic dissection, intramural hematoma, thoracic endovascular aortic repair

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PP-032

Traumatic aortoiliac aneurysm treated with endovascular repair: A case report

Mert Celik[1], Aykut Sahin[2], Ferhat Er[2]

[1]Erciş Şehit Rıdvan Cevik State Hospital, Van, Türkiye
[2]Osmangazi University, Eskişehir, Türkiye

Abstract

Aim: Traumatic aortoiliac aneurysms are rare but life-threatening conditions that develop in the abdominal aorta and iliac arteries following blunt or penetrating trauma. They most commonly present in the form of pseudoaneurysms or saccular aneurysms and, if left untreated, are associated with high rates of mortality and morbidity.Due to their rarity, traumatic aortoiliac aneurysms are frequently overlooked at the time of diagnosis. However, given the substantial risk of mortality and morbidity, the possibility of an aortoiliac aneurysm should always be considered in patients with a history of trauma, particularly in the presence of persistent abdominal pain or suspicious imaging findings.In this report, we present the successful endovascular management of a patient who developed a saccular aneurysm of the abdominal aorta and bilateral iliac artery aneurysms following blunt trauma.

Material and Methods: A 64-year-old male patient with a history of blunt abdominal trauma presented to our clinic with complaints of abdominal pain and back pain. On admission, his vital signs were stable. Physical examination revealed palpable bilateral lower extremity pulses, and mild abdominal tenderness was noted.CT angiography demonstrated a saccular bulging at the infrarenal level, approximately 25 mm distal to the renal arteries, as well as an aneurysm measuring approximately 110 mm in the right common iliac artery and another measuring approximately 51 mm in the left common iliac artery (Figures 1 and 2).Following these findings, an endovascular procedure was planned. The patient was transferred to the angiography suite, and both femoral arteries were surgically explored. A 6F sheath was placed in the left femoral artery, and systemic heparinization was administered at a dose of 100 IU/kg. Under fluoroscopic guidance, the CT angiography findings were confirmed. An EVAR graft was deployed distal to the renal arteries. Since aneurysms were also present in both iliac arteries, iliac extension stent grafts were implanted bilaterally.Control angiography confirmed complete exclusion of the saccular bulging of the abdominal aorta and the bilateral common iliac aneurysms by the stent grafts, with no evidence of endoleak.

Results: In our case, the patient was successfully treated with an endovascular approach for both the saccular abdominal aortic aneurysm and bilateral iliac artery aneurysms.

Conclusion: This experience supports the evidence that endovascular repair is a reliable and effective treatment option and should be considered the preferred modality in the management of traumatic aortoiliac aneurysms in appropriately selected patients.

Keywords: Endovascular treatment, traumatic aortoiliac aneurysm, saccular aneurysm

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PP-033

Subclavian-carotid steal syndrome presenting with amaurosis fugax: A rare case successfully treated by stenting

Muhammet Turhan, Ayse Zehra Karakoc, Tanzer Tokatlioglu, Pelin Eskin, Hilmi Tokmakoglu

Şehit Prof. Dr. Ilhan Varank Sancaktepe Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Subclavian artery stenosis concomitant with total carotid artery occlusion is a rare condition. Such pathology can lead to cerebral hypoperfusion and upper limb ischemia, manifesting with neurological symptoms, arm pain, and—although rarely—amaurosis fugax.

Material and Methods: A 55-year-old female patient with a history of breast cancer (mastectomy and lymphadenectomy in 2017, followed by chemotherapy and tamoxifen therapy), hypertension, and diabetes mellitus presented with progressive visual loss in the left eye in 2022. Ophthalmological evaluation excluded primary ocular disease, and tamoxifen toxicity was initially suspected; thus, the drug was discontinued. In 2023, the patient experienced a transient ischemic attack. Subsequent investigations revealed a proximal stenosis of the left subclavian artery. Endovascular stenting was performed.

Results: Following stent implantation, the patient demonstrated marked clinical improvement. Neurological symptoms regressed, ischemic pain in the left arm resolved, and visual function progressively recovered. One month after the procedure, approximately 90% of her vision had returned.

Conclusion: Concomitant subclavian artery stenosis and carotid occlusion may cause significant neurological symptoms, upper limb ischemia, and visual disturbances. Endovascular treatment of subclavian artery stenosis can restore cerebral and peripheral perfusion, resulting in regression of neurological events and substantial recovery of vision.

Keywords: Subclavian-carotid artery steal syndrome, carotid artery occlusion, endovascular stenting, amaurosis fugax, upper limb ischemia

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PP-034

Surgical management of a shamblin II carotid body tumor without preoperative embolization

Farid Gojayev

Koşuyolu High Specialization Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Carotid body tumors (CBTs) are rare, highly vascularized paragangliomas located at the carotid bifurcation. Their surgical management is often challenging due to the close relationship with major vessels and cranial nerves. Preoperative embolization is controversial, particularly in Shamblin type II tumors. This case aims to present the surgical management of a Shamblin type II CBT excised without preoperative embolization.

Material and Methods: A middle-aged patient presented with a painless cervical mass. Contrast-enhanced computed tomography revealed a hypervascular lesion at the carotid bifurcation, displacing both the internal and external carotid arteries. The tumor was classified as Shamblin type II. Surgical resection was performed under general anesthesia using a longitudinal cervical incision and subadventitial blunt dissection, without the need for vascular reconstruction.

Results: The tumor was completely excised with minimal intraoperative blood loss. The procedure was uneventful, and no vascular or neurological complications occurred. Cranial nerves were preserved, and the patient was discharged on the fifth postoperative day. Histopathological evaluation confirmed paraganglioma. The early postoperative follow-up showed no recurrence or functional deficits.

Conclusion: Surgical excision of Shamblin type II CBTs can be performed safely without preoperative embolization when meticulous surgical technique and preparation are applied. This approach may reduce hospital stay, avoid embolization-related risks, and provide excellent early outcomes.

Keywords: Carotid body tumor, paraganglioma, shamblin classification, subadventitial dissection

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PP-035

Surgical management of thoracoabdominal aneurysm involving major visceral arteries: A case report

Emre Oteyaka[1], Mustafa Sedat Yildiz[2], Didem Melis Oztas[2], Murat Ugurlucan[3], Halil Turkoglu[1]

[1]İstanbul Medipol University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul Medipol University, Faculty of Medicine, İstanbul, Türkiye
[3]İstanbul Biruni University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: A thoracoabdominal aneurysm is a condition of the descending aorta that can lead to life-threatening complications due to the significant branches that arise from the aorta to supply essential organs. The perfusion of the renal, celiac truncus and mesenteric arteries may be compromised due to the severity of the aneurysm. Surgical repair of thoracoabdominal aneurysms and revascularisation of the arteries are significant for establishing blood flow and preventing ischaemic damage to vital organs. Early diagnosis and treatment are crucial to prevent complications that may occur at any time. This case report presents the surgical treatment of a 62-year-old male patient with a thoracoabdominal aneurysm involving the renal, superior mesenteric and celiac arteries.

Material and Methods: A 62-year-old male patient diagnosed with thoracoabdominal aneurysm involving the renal, superior mesenteric, and celiac arteries was evaluated. Preoperative assessment included computed tomography angiography to determine the extent of the aneurysm and involvement of visceral branches. The patient underwent elective surgical repair through a thoracoabdominal approach. Aortic clamping and sequential revascularization of the renal, superior mesenteric, and celiac arteries were performed to maintain visceral perfusion. Intraoperative monitoring included arterial pressure lines, central venous pressure, urine output, and near-infrared spectroscopy for organ perfusion assessment. Postoperative management was carried out in the intensive care unit with close monitoring of hemodynamic stability and end-organ function.

Results: The surgical procedure was completed successfully without intraoperative complications. Revascularization of the renal, superior mesenteric, and celiac arteries was achieved with satisfactory graft flow. Postoperatively, the patient was hemodynamically stable, and renal as well as gastrointestinal functions were preserved. No signs of visceral ischemia or graft-related complications were observed. The patient was discharged on the seventh postoperative day with uneventful recovery.

Conclusion: Thoracoabdominal aneurysms involving visceral branches require prompt diagnosis and meticulous surgical management to prevent life-threatening ischemic complications. This case highlights the importance of early intervention and effective revascularization techniques in preserving vital organ function and achieving favorable outcomes.

Keywords: Thoracoabdominal aneurysm, aortic surgery, revascularization

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PP-036

Why surgical repair in patients with traumatic arteriovenous fistula?

Halil Demren, Funda Yildirim

Manisa Celal Bayar University, Department of Cardiovascular Surgery, Manisa, Türkiye

Abstract

Aim: A traumatic arteriovenous fistula is a type of vascular injury usually caused by a penetrating injury or crush injury. In this case report we presented the surgical repair of the arteriovenous fistula due to the stabbing injury of the lower extremity.

Material and Methods: 32 years old female patient was admitted to our clinic with the left lower extremity arteriovenous fistula seen after the stabbing injury and her leg was increased in circumference approximately 5-6 cm. She had pain, new collateral formation and on the physical examination the thrill was heard above the affected segment of the extremity. The patient has a 2-3 months of the time period to develop the stabbing injury-fistula formation.

Results: We planned the open surgery for the repair. After the exploration of the left superficial femoral artery above and below the thrilled segment, the heparin was admitted. The fistula openning was repaired from the inside segment of the artery by primary suturing. The arteriotomy was closed. The thrill was not palpated. The collateral vessels were also ligated. The extremity circumference was also decreased during the clinical follow-up. The patient was discharged without any problem.

Conclusion: The patient's female status, small vessel diameter, the development of AVFs within the Hunter canal, and the low patency rates in this segment led us to not to prefer the endovascular intervention. The advantages of surgical repair include single-stage transarterial closure of the fistula and ligation of the associated collaterals, disappearance of the thrill, and a significant rapid resolution of the patient's clinical symptoms.

Keywords: Arteriovenous fistula, trauma, surgery

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PP-037

When suspicion saves lives: Emergent repair of a penetrating main pulmonary artery injury

Servet Turgut[1], Mehmet Rum[2]

[1]Kars Harakani State Hospital, Cardiovascular Surgery Clinic, Kars, Türkiye
[2]Koşuyolu High Specialization Training and Research Hospital, Cardiovascular Surgery Clinic, İstanbul, Türkiye

Abstract

Aim: Cardiac and great vessel injuries are often fatal, with most patients dying before reaching a hospital. While the right ventricle is the most frequently affected site, pulmonary artery injuries are exceedingly rare. We present a unique case of a penetrating pulmonary artery injury taken emergently to surgery based solely on clinical suspicion.

Material and Methods: A 24-year-old male with a stab wound to the left hemithorax presented with hemothorax and severe hemodynamic instability. Following emergent chest tube insertion and active fresh blood drainage, the patient was immediately transferred to the operating room. Median sternotomy revealed two injuries to the main pulmonary artery and an entry-exit defect at the apex of the left lung.

Results: The pulmonary artery was repaired with pledget-reinforced sutures, and the apical lung defect was closed primarily. Hemostasis was achieved, and transfusion support was provided. Postoperatively, infectious parameters were managed successfully, and the patient was discharged uneventfully on the 7th postoperative day.

Conclusion: Pulmonary artery injuries are exceptionally uncommon but carry extremely high mortality. Since these lesions may not always be detected by diagnostic imaging, in hemodynamically unstable patients, strong clinical suspicion alone should justify immediate surgical exploration. Early decision-making, rapid surgical intervention, and effective hemostasis remain the cornerstones of survival.

Keywords: Pulmonary artery injuries, heart injuries surgery, thoracic injuries, emergencies surgery

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PP-038

Rheolytic pharmacomechanical thrombectomy in deep vein thrombosis

Emin Barbarus, Muhammet Huseyin Erkan, Ali Can, Ahmet Komurcu, Ahmet Dolapoglu

Balıkesir University Faculty of Medicine, Department of Cardiovascular Surgery, Balıkesir, Türkiye

Abstract

Aim: Deep vein thrombosis (DVT) is a common pathology in the population and we aimed to report the effectiveness of pharmacomechanical thrombectomy in the treatment of proximal (suprainguinal) deep vein thrombosis in selected cases.

Material and Methods: In two patients who underwent pharmacomechanical thrombectomy, there were complaints of limb circumference difference, edema, and pain resistant to anticoagulant therapy. Our first patient was admitted on the 9th day after symptom onset due to persistent complaints despite follow-up, while our second patient was admitted on the 14th day after symptom onset due to persistent complaints despite anticoagulant therapy received at an external center. While the patient was in the prone position, a 6F introducer sheath was placed into the popliteal vein using the Saldinger technique under ultrasound guidance. The venography showed total thrombosis of the popliteal vein and its proximal segment in both patients, with no blood flow observed. Pharmacomechanical thrombectomy was performed using an AngioGet catheter. The procedure was performed within 7 minutes to reduce the risk of hematuria and acute renal failure. The thrombolytic bolus dose was 5 mg alteplase in one patient and 7 mg alteplase in the other patient. Following the thrombectomy procedure, alteplase infusion at a dose of 1 mg/hour was continued in the intensive care unit (ICU) using a multi-hole infusion catheter. Close monitoring of the procedure site for hematoma, bleeding, and fibrinogen levels was performed in the ICU. Control venography was performed in both patients. Procedure success was defined as thrombus resolution of more than 50%.

Results: Following the procedure performed with the AngioGet thrombectomy catheter, control venography revealed that blood flow had significantly improved in both patients, but residual thrombus was present. Selective catheter-directed infusion with alteplase at a dose of 1 mg/hour was administered in the ICU. The infusion was terminated when fibrinogen levels were found to be low 14 hours after the procedure in one patient and 12 hours after the procedure in the other patient, and the control venography showed near-complete patency. Treatment was continued with anticoagulant therapy. During follow-up, edema and pain complaints had significantly decreased in both patients, and no post-thrombotic syndrome was observed.

Conclusion: In symptomatic proximal DVT patients without contraindications to thrombolytic therapy, the use of rheolytic thrombectomy in combination with catheter-directed thrombolysis is an effective treatment option for both restoring venous patency and relieving symptoms.

Keywords: Deep vein thrombosis, rheolytic, thrombectomy

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PP-039

Technique of using grafts to prevent the development of heart failure in brachial arteriovenous fistulas: A case example

Vural Polat, Ahmet Turan Ince

Sivas Cumhuriyet University, Faculty of Medicine, Cardiovascular Surgery Department, Sivas, Türkiye

Abstract

Aim: In brachial arteriovenous fistulas (AVFs), flow through the brachial artery often increases rapidly. High-flow complications, such as heart failure and venous aneurysms, are common problems. In this study, we present our case in which a polytetrafluoroethylene (PTFE) graft was wrapped around the vein to limit fistula flow.

Material and Methods: A 44-year-old female patient undergoing hemodialysis due to chronic kidney failure had an arteriovenous fistula (AVF) created between the right radial artery and the antecubital vein. A 2-centimeter PTFE graft was longitudinally opened, and V-shaped one-third sections were excised from both edges, leaving the middle one-third intact. The first section was placed over the anastomotic site of the antecubital vein, while the second section was wrapped at a 90° angle around the perforating branch. The previously opened sections were then closed with Prolene sutures, creating a tunnel-like sheath. This approach allowed control of the anastomosis and distal vein diameter, ensuring it would not exceed 5 millimeters in the future.The graft was anastomosed to the radial artery just below the branching point of the brachial artery, after separating the perforating branch of the antecubital vein. This protected the brachial artery from high flow while limiting future venous dilatation with the wrapped graft. Since the distal vein remained open, creating a pseudo end-to-side anastomosis, the flow could otherwise cause venous hypertension and hand/forearm edema. To prevent this, the graft was fashioned into a two-limbed configuration and similarly wrapped around the distal vein, thereby limiting flow to the forearm as well.

Results: The procedure aimed both to prevent widening of the fistula tract and to limit flow to the forearm. The fistula was also directed preferentially toward the cephalic or basilic vein according to the patient's anatomy.The operation was completed without complications. A palpable thrill was noted in the graft flow. In our follow-up of such patients, fistula flow remained markedly stable compared to those without grafts, and brachial fistulas could be used for a long period without complications.

Conclusion: The development of heart failure is an important cause of mortality. By controlling the expansion of the anastomotic line with a graft, the increase in flow can be prevented, thereby reducing the risk of heart failure. With this technique, flow can be limited, which is expected to decrease the likelihood of high-flow heart failure and aneurysm formation. We plan to share our long-term follow-up results in larger case series in the future.

Keywords: Arteriovenous fistula, radial artery, heart failure, polytetrafluoroethylene graft, hemodialysis

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PP-040

The relationship between deep vein thrombosis and thrombophilic risk factors

Meral Ekim[1], Hasan Ekim[2], Sameh Alagha[2], Can Keresteciogl[2]

[1]Bozok University School of Medicine, Department of Medical Biochemistry, Yozgat, Türkiye
[2]Bozok University School of Medicine, Department of Cardiovascular Surgery, Yozgat, Türkiye

Abstract

Aim: Deep vein thrombosis (DVT), defined as thrombosis in the deep veins of the lower extremities, is a multifactorial disease that can lead to serious complications such as pulmonary embolism and postthrombotic syndrome. A predisposition to thrombosis due to hereditary and acquired factors is called thrombophilia. Thrombophilic risk factors predispose to the development and recurrence of DVT. Factor V Leiden (FVL) and prothrombin gene (PT G20210A) mutations are among the primary hereditary thrombophilic risk factors. The aim of our study was to investigate the frequency of FVL and prothrombin G20210A mutations in patients diagnosed with DVT in our region.

Material and Methods: Our study included 161 patients diagnosed with unprovoked DVT in our department between May 2014 and May 2024. The SnapShot® Multiplex System (Applied Biosystems Inc.) was used in our study. The genotypic distributions of wild-type, heterozygous, and homozygous mutations were described as numbers and percentages.

Results: This study included 74 (46%) female and 87 (54%) male patients, ranging in age from 15 to 85 years, with a mean age of 52.21 ± 16.67 years. FVL mutation was detected in 61 (37.8%) patients (12 homozygous, 49 heterozygous). PT G20210A mutation was detected in 18 (11.18%) patients (1 homozygous, 17 heterozygous). Both FVL and PT G20210A mutations were present in 6 (3.7%) patients.

Conclusion: This study demonstrates that the frequency of FVL and PT G20210A carriers in patients diagnosed with DVT living in the Yozgat region is not negligible. Therefore, we believe that increasing awareness of these thrombophilic risk factors for deep venous thrombosis is appropriate.

Keywords: Deep vein thrombosis, thrombophilia, factor v leiden

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PP-041

Right sinus valsalva aneurysm ruptured into the right atrium

Sahin Sahinalp

Van Yüzüncü Yıl University, Van, Türkiye

Abstract

Aim: A sinus of Valsalva aneurysm (SVA) is a rare cardiac anomaly. Enlargement and dilatation of one or more of these sinuses may result in aneurysm formation that can be complicated with either compression-like effects or spontaneous rupture. We present a case of acute heart failure in a male caused by spontaneous rupture of an isoleted right SVA that was diagnosed by echocardiography and Cardiac CT and required surgical treatment.

Material and Methods: A 65-year-old male presented to the emergency department with acute onset dyspnoea and chest pain for seven days. There was no relevant past medical history or significant family history. Blood tests revealed that AST, ALT and kidney functions were extremely high. The patient was observed to have severe right heart failure.Transthoracic echocardiogram (TTE) was performed and showed ejection fraction of 65%, hyperexpansion of the right atrium (RA) and right ventricle, and diastolic flattening of the interventricular septum suggesting volume overload. Colour flow Doppler revealed significant turbulent flow originating from the left ventricular outflow tract and flowing into the right-sided chambers. A systolic-diastolic flow was detected on continuous wave Doppler. Cardiac CT showed rupture of the non-coronary cusp into the right atrium.

Results: Emergency surgery was planned for the patient. The patient underwent aortic root replacement (Bental Procedure) and right atrium repair. AST and ALT values decreased rapidly in the early hours after surgery.

Conclusion: In conclusion, ruptured right SVA is a rare cause of acute heart failure and is considered a life-threatening condition with high mortality and should be kept in mind when other causes are excluded. In our opinion, given the anatomic complexity and proximity to vital valvular structures, surgical repair remains the preferred treatment modality in such cases, offering direct visualization and durable reconstruction with minimized risk to adjacent structures.

Keywords: Sinus valsalva aneurism, ruptured aorta, right heart failure, aortic root replacement

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PP-042

Durability challenges of EVAR: A case of late iliac aneurysm rupture

Zehra Unlu, Umit Kahraman, Osman Nuri Tuncer, Ismet Tanzer Calkavur, Anıl Ziya Apaydin, Hakan Posacioglu

Ege University School of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: EVAR is associated with lower operative morbidity and mortality compared with open surgical repair. However, studies have demonstrated that the early survival advantage observed in patients undergoing EVAR diminishes over time, and a significant proportion of late deaths following EVAR are attributable to aneurysm rupture. In this report, we present the case of a 72-year-old male patient who underwent EVAR for a common and internal iliac artery aneurysm and developed rupture of the internal iliac artery aneurysm six years later.

Material and Methods: Initially, the patient presented to the emergency department with abdominal pain. Computed tomography (CT) revealed a partially thrombosed aneurysmal dilatation, measuring up to 67 mm in diameter, extending from the right common iliac artery to the right internal iliac artery. The distal internal iliac artery was occluded with a vascular plug, and an EVAR procedure extending from the common iliac artery to the external iliac artery was performed. Post-procedural CT demonstrated no endoleak, and the plug was visualized in place.

Results: Six years after the EVAR, the patient was admitted to the emergency department with presyncope and fatigue. CT angiography revealed a fusiform aneurysm measuring approximately 15.5 cm in length, with a maximal diameter of 12 × 12 cm, arising from the distal segment of the right common iliac artery. The previously placed vascular plug was no longer in situ, and active extravasation into the aneurysm sac was identified at this site. The patient was taken for emergency surgery. Upon opening the aneurysmal sac, a bleeding site was identified, caused by displacement of the plug from the distal segment of the right internal iliac artery. The bleeding focus was controlled with Prolene sutures, and the aneurysmal sac was closed by wrapping. Postoperative follow-up was uneventful, and the patient was discharged in stable condition.

Conclusion: Although EVAR may be considered advantageous in elderly and high-risk patients due to its lower perioperative mortality, shorter intensive care unit and hospital stays, long-term outcomes are characterized by higher re-intervention rates resulting from complications such as endoleak, migration, and stent-graft thrombosis. Recent studies have shown comparable long-term survival rates between endovascular and open repair of abdominal aortic aneurysms. Nevertheless, open repair is considered superior in terms of long-term durability, reduced need for re-intervention, independence from anatomical limitations, and its recognition as the “definitive” treatment, particularly in younger and lower-risk patients.

Keywords: Endovascular aneurysm repair, internal iliac artery aneurysm, vascular plug migration, aneurysm rupture, open surgical repair

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PP-043

Outcomes of carotid endarterectomy in a single center: Thirty-day results

Meril Ahmet, Serkan Aygun, Anil Guzeloglu, Salih Saylam, Ekrem Yilmaz, Fatih Yigit, Ahmet Can Topcu, Farid Gojayev, Fuat Buyukbayrak

Koşuyolu High Specialization Education and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: To report 30-day outcomes after carotid endarterectomy (CEA) in a single cardiovascular surgery center and to assess the feasibility of sustaining a CEA program.

Material and Methods: This was a retrospective review of consecutive CEA procedures performed between January and September 2025. Demographics and predefined 30-day endpoints were collected: cardiovascular events (myocardial infarction or clinically significant arrhythmia), new stroke, prolonged intubation (> 24 h), all-cause 30-day mortality, and cranial nerve deficits (facial, hypoglossal, or vagus). Secondary endpoints for long-term feasibility (restenosis and reintervention) are being prospectively recorded.

Results: A total of 32 patients underwent CEA (mean age 67.6 years). Within 30 days, the postoperative new stroke rate was 3.1% (1/32), prolonged intubation was 6.2% (2/32), cranial nerve deficit rate was 6.2% (2/32), cardiovascular event rate was 3.1% (1/32), and 30-day mortality was 3.1% (1/32). Complication rates remained within commonly accepted standards, indicating procedural consistency.

Conclusion: Reassuring short-term outcomes and a 30-day mortality of 3.1% support the feasibility of delivering CEA safely and sustainably in a single-center setting. Ongoing follow-up will inform long-term sustainability with restenosis and reintervention data.

Keywords: Carotid endarterectomy, stroke, cardiovascular events, cranial nerve injury, prolonged intubation

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PP-044

Post-traumatic superficial temporal artery pseudoaneurysm

Yakup Bacak

Akdeniz University Hospital Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: Superficial temporal artery (STA) pseudoaneurysm is a rare lesion that most commonly develops following trauma. It typically presents with complaints of pain and swelling in the affected area, and the presence of a pulsatile mass on physical examination is a key finding. Following clinical examination, the most effective diagnostic methods include soft tissue ultrasonography (USG), computed tomography (CT), contrastenhanced CT, and angiography. In this case report, the diagnosis and treatment of a patient with a posttraumatic STA pseudoaneurysm are presented.

Material and Methods: A 25-year-old male patient presented to the emergency department with swelling in the temporal region following trauma. In the initial evaluation, the lesion in the temporal area was assessed as a hematoma, and the patient was discharged with recommendations. However, due to persistent symptoms, the patient returned three months later, now complaining of throbbing headache and increased swelling. On physical examination, a painful, pulsatile mass was detected on palpation.Soft tissue ultrasonography and computed tomography (CT) were planned for further evaluation. Following imaging studies, a superficial temporal artery (STA) pseudoaneurysm was diagnosed, and surgical intervention was scheduled.Under local anesthesia, an incision was made in the temporal region, and the pseudoaneurysm sac was explored. The pseudoaneurysm sac was evacuated by ligating the proximal and distal segments of the STA. The defects in the superficial temporal artery caused by the pseudoaneurysm were primarily repaired.

Results: The patient, who experienced no complications following the procedure, was discharged on the second day. During follow-up outpatient clinic visits, no recurrence of similar symptoms, hematoma, pseudoaneurysm, or abscess was detected.

Conclusion: Although STA (superficial temporal artery) pseudoaneurysm is rare, it is most commonly caused by trauma or surgical procedures in the temporal region. While it may be asymptomatic, it can also present with pain, swelling, or neurological deficits. The best treatment option is surgical intervention. Surgery is performed to relieve symptoms, eliminate the risk of bleeding, and for cosmetic reasons. Although the clinical diagnosis is relatively straightforward, it should be considered in the differential diagnosis of patients presenting with swelling after trauma.

Keywords: Superficial temporal artery, pseudoaneurysm, trauma

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PP-045

Surgical treatment of ruptured aorto-biiliac aneurysm in 86 year old patient

Omer Tetik, Halil Demren, Alperen Tosun, Dilsad Amanvermez Senarslan, Funda Yildirim

Manisa Celal Bayar University, Department of Cardiovascular Surgery, Manisa, Türkiye

Abstract

Aim: A giant abdominal aortic aneurysm renders surgical treatment much more difficult by deforming the proximal infrarenal aortic neck by shortened length and disturbed angulation and also by altering the iliac arteries as marked tortuosity and aneurysmal dilatation. We describe here the surgical repair of a large infrarenal abdominal aort aneurysm with huge bilateral common iliac artery aneurysm of more than 10 cm in diameter.

Material and Methods: An 86-year-old male patient presented to the emergency department with complaints of abdominal pain and pulsatile mass. After the radiologic evaluation the giant aorto-biiliac aneurysm was diagnosed. Severe angulation was observed in both the prosimal aortic neck and aortic bifurcation. Also the left common iliac aneurysm was bigger than the abdominal aneurysm im size: 105x86 mm versus 65x90 mm, the right common iliac aneurysm was 30x30 mm. The conventional surgery was planned.

Results: The median laparatomy was performed. Both proximal aorta just under the left renal vein level and the two iliac systems with separate external and internal iliac arteries were snarred with nylon tapes. After heparin administration, cross clamp was placed. The aneurysmal sacs were emptied and posterior wall bleedings were checked. Dacron Y greft was used for the anastomosis. The operation was completed without any problems. The patient was discharged on the tenth postoperative day.

Conclusion: Advanced age, a hostile neck, difficult aortoiliac anatomy and huge size of aneurysms more than one segment are not contraindications to open surgery. On the contrary, these types of anatomies often result in a complete cure with surgery.

Keywords: Aortobiiliac aneurysm, surgery, hostile neck, old age

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PP-046

Endovascular treatment in femoropopliteal artery diseases

Serkan Unlu, Fehim Can Sevil, Mehmet Tort, Serkan Gume, Necip Becit

Afyonkarahisar Health Sciences University Hospital, Department of Cardiovascular Surgery, Afyonkarahisar, Türkiye

Abstract

Aim: Femoropopliteal artery diseases are progressive and limb-threatening conditions. Treatment options include medical and surgical approaches. In addition to bypass surgery as a surgical method, endovascular treatment is also available. Endovascular treatment has proven itself in the literature and is widely used as a treatment option.

Material and Methods: Between January 2022 and August 2025, a total of 125 patients underwent peripheral vascular interventions in our clinic. Among these, 70 patients (58.33%) had femoropopliteal artery disease. The median age was 61 years (60.4 ± 23.5). Of these, 15 patients (21.5%) were female and 55 (78.5%) were male. Critical limb ischemia (ankle-brachial index < 0.5) was present in 18 patients (25.71%), while intermittent claudication under 100 meters was observed in 40 patients (57.14%). Chronic total occlusion of the superficial femoral artery was seen in 14 patients (20%). Additional iliac artery pathology causing ≥50% stenosis was present in 25 patients (35.71%), and below-knee arterial disease with ≥50% stenosis was detected in 24 patients (34.28%). Stent occlusion of the superficial femoral artery occurred in 3 patients (4.28%), and pseudoaneurysm in 1 patient (1.42%).

Results: Atherectomy was performed in 47 patients (67.14%), and balloon angioplasty for predilatation in 60 patients (85.70%). Drug-eluting stents were implanted in 55 patients (78.57%). In 3 patients (4.28%), stents were additionally placed due to flow-limiting dissection. The procedure was terminated when sufficient vascular lumen patency was achieved. Post-procedural follow-up showed significant improvement in symptoms and findings. Patients were treated with dual antiplatelet and hyperlipidemia therapy. During follow-up, hematoma not requiring surgery occurred in 2 patients (2.80%), and re-occlusion in 3 patients (4.28%). Femoropopliteal bypass surgery was successfully performed in two of the re-occlusion patients, while one patient (1.42%) underwent embolectomy and complete patency was achieved. Major amputation occurred in one patient (1.42%) during follow-up.

Conclusion: Endovascular treatment is a safe and effective option for the management of femoropopliteal artery disease. Due to its advantages in reducing morbidity and mortality, enabling early mobilization, improving limb survival, and increasing walking distance, endovascular interventions are preferred for both patients and surgeons.

Keywords: Femoropopliteal artery, endovascular, balloon angioplasty, atherectomy

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PP-047

The role and power of ultrasound in AV fistula planning in hemodialysis patients

Emin Barbarus, Ali Can, Muhammet Huseyin Erkan

Balıkesir University Department of Cardiovascular Surgery, Balıkesir, Türkiye

Abstract

Aim: Arteriovenous (AV) fistula is the preferred long-term vascular access method in hemodialysis patients. However, fistula failure remains a significant problem, particularly in patients with small vessel diameters. The aim of this study was to evaluate the predictive power of preoperative ultrasound (USG) in assessing vessel diameters for AV fistula success.

Material and Methods: A total of 30 patients who underwent radiocephalic or brachiocephalic AV fistula creation between 2023 and 2025 and met the study criteria were retrospectively analyzed. Preoperative USG was used to evaluate vascular anatomy, measure artery and vein diameters, and calculate the artery/vein ratio. Patients were categorized into "successful" and "failed" groups according to fistula maturation and usability after surgery.

Results: Fistula maturation was successful in 28 patients and failed in 2 patients. In the successful group, mean artery diameter was 2.93±1.35 mm, vein diameter was 2.34±0.58 mm, and artery/vein ratio was 1.28±0.52. In the failed group, artery diameter was 1.95±0.64 mm, vein diameter was 1.90±0.14 mm, and artery/vein ratio was 1.04±0.41. Statistical analysis showed no significant difference between the groups ($p > 0.05$), but smaller vessel diameters were associated with fistula failure.

Conclusion: Preoperative USG is a valuable tool for predicting AV fistula success. Particularly in patients with artery diameters < 2 mm, the risk of failure increases. The artery/vein ratio alone is not a reliable predictor. Preoperative USG planning plays a critical role in appropriate vessel selection and reducing failure rates.

Keywords: Hemodialysis, arteriovenous fistula, ultrasound, vessel diameter

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PP-048

A rare thrombotic complication of factor V deficiency: DVT in a middle-aged female

Nurhayat Inci, Mehmet Karacalilar

Dicle University, Diyarbakır, Türkiye

Abstract

Aim: Deep vein thrombosis (DVT) is a serious vascular complication characterized by thrombus formation within the venous system. Factor V (FV) deficiency is a rare coagulopathy, with an estimated prevalence of 1:1,000,000. While it typically presents with bleeding tendencies, thrombotic complications have been occasionally reported. This case report discusses a rare instance of FV deficiency identified in a patient presenting with DVT.

Material and Methods: A 43-year-old female presented to the emergency department on July 21, 2024, with pain and swelling in her left leg. Doppler ultrasonography revealed DVT extending from the left iliac vein distally. Laboratory results showed: PT 24.6 s, INR 2.21, aPTT 38.2 s, and normal complete blood count. FV activity was < 6% (normal: 70–120%), while other coagulation factors and anticoagulant proteins were within normal limits. Lupus anticoagulant, anticardiolipin IgM/IgG, homocysteine, APC resistance, and FV Leiden/FII mutations were normal. ANA and anti-dsDNA tests were negative.The patient underwent medical and mechanical thrombolysis, and bemiparin sodium was initiated as anticoagulation. She had no prior history of bleeding, and previous childbirths or minor surgical procedures were uneventful. Follow-up testing confirmed persistently low FV levels (< 6%).

Results: FV deficiency is an autosomal recessive coagulopathy affecting both procoagulant and anticoagulant pathways. Although it primarily presents with bleeding manifestations, thrombotic events may rarely occur. The absence of bleeding history in this patient highlights the heterogeneous clinical presentation of FV deficiency. Potential mechanisms for thrombosis include reduced TFPIα levels and APC resistance, though the precise pathophysiology remains unclear.

Conclusion: This case underscores the clinical significance of FV deficiency in patients presenting with DVT. While FV deficiency typically predisposes to bleeding, thrombotic complications, although rare, may arise. Such cases emphasize the heterogeneous nature of the disorder and the need for individualized management strategies. Reporting additional cases may further elucidate the relationship between FV deficiency and thrombosis and improve patient care.

Keywords: Deep vein thrombosis, rare hemostatic disorders, factor v deficiency

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PP-049

Traumatic injury of the inferior Vena Cava at the iliac bifurcation: A case report

Irfan Dinler, Celal Yavuz

Dicle University, Diyarbakır, Türkiye

Abstract

Aim: Traumatic injuries of the inferior vena cava (IVC) are rare due to its retroperitoneal location and protection by surrounding abdominal structures. However, the IVC is the most commonly injured abdominal vessel, accounting for approximately 25% of abdominal vascular injuries. Despite advances in preoperative care and surgical techniques, IVC injuries still carry a high mortality rate—up to 65%—mainly due to delayed fluid resuscitation, difficulty in diagnosis, and technical challenges during repair.

Material and Methods: A 42-year-old male was referred to our general surgery department after falling from a height of 1.5 meters onto metal rods. Physical examination revealed a penetrating injury to the scrotum. Emergency laparotomy was performed due to suspicion of intra-abdominal penetration. No injury to intraperitoneal or retroperitoneal organs was observed. After hematoma evacuation, active venous bleeding was noted and vascular surgery was consulted intraoperatively. Exploration revealed a posterior defect of the IVC at the level of the iliac bifurcation, extending to both common iliac veins. The injury was not suitable for primary repair.Both common iliac veins were separated from the IVC, and the injured segments were resected. The right common iliac vein was anastomosed end-to-end with the IVC. Due to hemodynamic instability and insufficient length, the left common iliac vein could not be grafted and was ligated.

Results: The patient was closely monitored postoperatively for hemodynamic stability, blood counts, and lower limb edema. He was discharged in good condition on postoperative day 8 with compression stockings and prophylactic anticoagulation. At two-year follow-up, he reported only occasional swelling in the left leg. No deep vein thrombosis or chronic venous insufficiency was detected.

Conclusion: Although IVC injuries are rare, they are the most frequently encountered abdominal vascular trauma and are associated with high mortality. Rapid diagnosis and timely vascular control are crucial. In life-threatening scenarios, saving the patient's life may necessitate sacrificing limb venous flow, as demonstrated in this case.

Keywords: Inferior vena cava, ligated, lower limb edema

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PP-050

Multidisciplinary approach in a case of multiple organ injury

Emine Ece Pala, Nigar Safarli, Umit Kahraman, Cagatay Engin, Tahir Yagdi, Mustafa Ozbaran

Ege University Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Survival after multiple organ trauma is determined by early diagnosis, interclinical coordination, and a multidisciplinary approach. We will present our approach and the satisfactory results of a 22-year-old male patient who was brought to our hospital with multiple organ trauma.

Material and Methods: The patient's ECHO and CT images were examined and the success of the procedure after endovascular treatment was evaluated.

Results: Case Report: The patient was brought to the ER after stabbing wounds. He had 1-minute CPR, was intubated, and had unequal pupils. There was a 3 cm stab wound in the inner right thigh, a 2 cm wound in the outer right thigh, a 1 cm wound in the left chest under the xiphoid, and another wound in the left forearm echocardiography showed pericardial effusion around the RV and LV with compression.The patient was taken to the clinic for surgery. A sternotomy was performed. 0.5 cm incision was made anterior to the right ventricle, which was repaired. An injury was observed near the inferior border of the liver, and no active bleeding was detected. A 0.5 cm serosal injury on the anterior stomach was repaired.On the second postoperative day, the patient underwent a pan-CT scan. CT revealed a thoracic aortic pseudoaneurysm near the left subclavian artery.Under general anesthesia, the patient underwent endovascular stent-graft implantation (TEVAR) of Valiant Thoracic Graft proximal to the left subclavian artery, accompanied by interventional radiologists. The final angiogram showed complete closure of the localized pseudoaneurysm. No endoleak was detected.He was discharged with full recovery on the 22nd postoperative day. A control CT scan was performed on the patient 1 month later and no complications were detected.

Conclusion: Trauma is a leading cause of death in young people. Thoracic trauma causes many hospitalizations and deaths. Heart injuries are often fatal if not treated quickly, with 90% dying at the scene. Fast hospital transfer and early surgery during the “golden hour of shock” greatly improve survival.Survival after multiple organ trauma depends on fast diagnosis and treatment with a team approach. Quick transport to the hospital and good coordination between clinics before surgery or other treatment are very important.

Keywords: Multitrauma, multidiciplinary approach, thoracic endovascular aortic repair

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PP-051

Redo femoropopliteal by-pass in a patient with biological graft rupture

Suat Ozdal, Sahin Iscan, Nuri Utkan Tunca, Serkan Yazman, Oguzhan Colak, Ogulcan Cetinkaya, Hidayet Onur Selcuk, Hami Can, Levent Yilik, Ali Gurbuz

İzmir Katip Çelebi University Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD), particularly in the lower extremities, is a disease that can cause complications that can be symptomatic and even lead to limb loss, affecting daily life. Numerous surgical methods are used in the treatment of PAD. One of these is peripheral bypass surgery. This surgery can be performed with autogenous grafts, as well as biological or synthetic grafts.

Material and Methods: A 75-year-old male patient with a history of femoropopliteal bypass that has been performed in 2016, presented with complaints of leg pain and a pulsatile mass, the largest measuring 8 x 6 cm, that had an acute onset in the medial thigh region. On physical examination, the femoral pulse in the involved extremity was palpable, and the popliteal pulse was biphasic with a handheld Doppler, while the distal pulses in the involved extremity were nonpalpable. Capillary refill time was slightly prolonged, and the dorsum of the foot was cyanotic. Four pulsatile aneurysmal masses were observed along the graft path. CT angiography of the involved extremity revealed signs of rupture and pseudoaneurysm in the existing graft, and the patient underwent surgery.The native artery in the femoral region was located and retracted with nylon tape. After heparinization, a vascular clamp was placed to release the graft. The pseudoaneurysmal areas were explored. Following exploration, the biological graft was observed to have ruptured and self-limited at three separate sites. The hematoma was evacuated. The native popliteal artery was located. Embolectomy was performed distally and proximally by a 3F and a 4F Fogarty catheter. Following embolectomy, the patient was scheduled for perioperative redo femoropopliteal bypass. Redo femoropopliteal bypass was completed with a 6 mm PTFE ring graft. The operation was terminated after triphasic monitoring of distal pulses following the procedure.

Results: The choice of material used in peripheral artery disease surgery is crucial for long-term complications. Although rare, spontaneous biological graft rupture can occur. In this case, spontaneous biological graft rupture and the resulting pseudoaneurysm were prevented by redo femoropopliteal bypass surgery, which prevented potential complications such as limb loss.

Conclusion: Long-term complications such as spontaneous rupture and pseudoaneurysm should be considered in patients presenting with a pulsatile mass and a history of peripheral vascular surgery, as in this case.

Keywords: Biological graft rupture, femoropopliteal bypass, peripheral arterial disease

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PP-052

True radial artery aneurysm without trauma or iatrogenic cause: A rare case presentation

Umut Ata Ugras, Erhan Renan Ucaroglu, Ufuk Turan Kursat Korkmaz, Hakan Sutkurt

Bolu Abant İzzet Baysal University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Radial artery aneurysms are rare vascular lesions that typically occur secondary to trauma or medical interventions. However, true aneurysms without trauma or any identifiable etiology are extremely uncommon and have been reported only in a limited number of cases. We aim to present a case of true radial artery aneurysm managed surgically.

Material and Methods: A 63-year-old male patient with no history of trauma or previous angiographic intervention was admitted with swelling in the left wrist. Physical examination revealed a pulsatile mass. Doppler ultrasonography demonstrated an aneurysmal dilatation of the radial artery. Surgical exploration was performed, and the aneurysm sac was resected. The continuity of the radial artery was restored by end-to-end anastomosis. The excised aneurysm sac was sent for histopathological examination.

Results: Histopathological examination confirmed the diagnosis of a true radial artery aneurysm. The patient's postoperative course was uneventful. Pulsation and swelling resolved completely, and no ischemic complications were observed during follow-up.

Conclusion: True radial artery aneurysms without trauma or medical intervention are extremely rare. They should be considered in the differential diagnosis of wrist swellings with pulsation. Early recognition and surgical management with arterial reconstruction can provide excellent outcomes and preserve limb function.

Keywords: Radial artery aneurysm, true aneurysm, vascular surgery

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PP-053

Recurrent arteriovenous malformation of the left lower extremity: A case report

Esra Barluk, Dilsad Amanvermez Senarslan, Adnan Taner Kurdal, Ahmet Ihsan Iskesen

Manisa Celal Bayar University, Faculty of Medicine, Department of Cradiovascular Surgery, Manisa, Türkiye

Abstract

Aim: Arteriovenous malformation (AVM) is one of congenital vascular malformations (CVMs) due to defective development of the circulation system. AVM is a serious birth defect with profound hemodynamic impact to entire cardiovascular system and peripherally. Early aggressive control is recommended for its potential to progress to become a life or limb threatening conditions. Clinical manifestations include swelling, pain, venous hypertension, and non-healing ulcers due to hyperdynamic shunting, Although endovascular embolization techniques may provide temporary relief, recurrence is not uncommon in cases with multiple AVFs.

Material and Methods: Case PresentationA 41-year-old male was first admitted to the cardiovascular surgery clinic at the age of 26 with complaints of swelling, edema, and pain in the left leg. Imaging revealed multiple fistulous AVM originating from the distal superficial femoral artery (SFA) and popliteal artery. In collaboration with interventional radiology, coil embolization was performed, resulting in symptomatic relief for approximately five years.Three years prior to his recent admission, the patient developed recurrent progressive swelling of the left leg, with palpable thrill around the knee and thigh, accompanied by non-healing ulcers on the anterior tibial surface and toes. Angiography demonstrated multiple AVFs arising again from the distal SFA and popliteal segments.

Results: The patient underwent surgical intervention: a saphenous vein bypass from the mid-SFA to the tibioperoneal trunk was performed, the distal SFA was ligated, and visible AVM fistolous feeding branches were ligated to restrict hyperdynamic flow. Intraoperatively, he experienced significant blood loss (approximately 1600 mL) and received transfusion of 4 units of erythrocyte suspension, 3 units of fresh frozen plasma, and 1 unit of platelet concentrate. The postoperative course was uneventful. The leg diameter decreased, and with vacuum-assisted closure therapy, his wounds gradually healed. He was discharged home and remained stable for six months.However, one year later, he developed recurrent wound infection in the distal leg, which ultimately necessitated below-knee amputation. This case highlights the complexity of managing multiple AVMs of the lower extremity. Endovascular embolization may provide temporary benefit, but recurrence remains a significant challenge. Surgical bypass with arterial ligation can reduce hyperdynamic shunting and improve limb perfusion, but late complications, such as infection and limb loss, may still occur. Careful long-term follow-up is essential.

Conclusion: Recurrent AVM of the lower extremity represent a challenging vascular entity. Despite initial symptomatic improvement with endovascular and surgical management, the risk of recurrence and limb-threatening complications persists. Multidisciplinary approaches and close follow-up are required to optimize outcomes.

Keywords: Arteriovenous fistula, amputation, complications, treatment outcome

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PP-054

Aortopulmonary venous fistula and anomalous circumflex coronary artery: An intraoperative challenge

Gulen Sezer Alptekin, Cihad Sen, Enes Pervane

Kütahya University of Health Sciences, Department of Cardiovascular Surgery, Kütahya, Türkiye

Abstract

Aim: An aberrant systemic artery arising from descending aorta and inserting into one of the pulmonary veins in any segment is very rare clinical entity. Of all, approximately 1-2% of cases with aortopulmonary venous fistulas are congenital while the rest are considered to be subsequent to aortic surgeries.We report a 66 year-old-man diagnosed as aortopulmonary venous fistula concomitant with anomalous circumflex coronary artery which manifests as excessive blood flow in left atrium during mitral valve operation that leads us to investigate for a left to left shunt pathology.

Material and Methods: A 66 year-old-man with effort dyspnea and pretibial edema with clinical impairment level of New York Heart Association (NYHA) class Ill. Severe Mitral regurgitation (MR), posterior eccentric jet and left atrial dilation that refers to a functional MR was detected in echocardiography with a left ventricular ejection fraction of 45%. Preoperative coronary angiography showed no significant atherosclerotic coronary artery disease but revealed anomalous circumflex coronary artery.

Results: Antegrade cardioplegia arrested the heart and followed with intermittent retrograde cardioplegia with Del Nido. The superior transseptal left atriotomy was done under cross-clamping at 32°C. There was an extremely high blood flow in left atrium which makes the operative area hardly visible. The left atrial vent was previously placed via the right superior pulmonary vent. Additional cardiotomy suctions were placed inside the left atrium unattached and inside the left ventricle through the apex. The patient was cooled to 28 'C Replacement of mechanical bileaflet valve (St Jude Medical, No 29) with posterior leaflet preservation was performed.The postoperative period was uneventful. An elective computed tomographic angiography revealed a tortious vessel arising from descending aorta and inserting into pulmonary veins through the segment of right middle lobe (arteriovenous fistula), hilar vascular collateral web and the connection of fistula with circumflex coronary artery The patient is doing well at 8 months with diminished respiratory symptoms, with a retreated clinical impairment level of NYHA class II.

Conclusion: The myocardial preservation involving appropriate cardioplegia, cooling and decompression of left ventricle in unexpected blood flooding inside the cardiac chambers are vital approaches. catheterization in case of coronary anomalous in adult age may be performed preoperatively for excluding other cardiac malformations. The closure of the fistula may be a jeopardy for coronary circulation in this case Our approach is in favor of observing the functional status of the patient for further intervention in early period.

Keywords: Aortopulmonary venous fistula, aberrant systemic artery, left to left shunt

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PP-055

Past procedures and sources of recurrence in patients with recurrent lower extremity varicose veins treated surgically

Tonguc Saba[1], Ali Baran Budak[2]

[1]Başkent University, Ankara, Türkiye
[2]Liv Hospital , İstanbul, Türkiye

Abstract

Aim: To determine the possible causes and location of recurrent varicose veins detected and surgically treated at our center.

Material and Methods: This study included 30 patients with recurrent varicose veins who underwent surgery. Data on past treatment, recurrence time, and procedure performed were collected.

Results: Recurrence was observed in 18 patients after endovascular procedures, 3 patients after cyanoacrylate glue, and 9 patients after surgery.

Conclusion: Endovascular procedures have the highest recurrence rate due to patency of the anterior accessory saphenous vein, while surgical ligation and stripping have the highest recurrence rate due to revascularization from the femoral region.

Keywords: Recurrence, varicose vein surgery, anterior accessory saphenous vein

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PP-056

Coordinated surgical approach in a patient with high-energy polytrauma complicated by iliac artery and vein injury: Case report

Okan Eren Kuguoglu[1], Mustafa Sedat Yildiz[2], Emre Oteyaka[1], Utku Celik[1], Hasan Erdem[1], Bahadir Daglar[1], Halil Turkoglu[1]

[1]İstanbul Medipol University, Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul Medipol University, Faculty of Medicine, İstanbul, Türkiye

Abstract

Aim: The aim of this case report is to present the multidisciplinary management of a patient with severe polytrauma, including vascular injury, multiple fractures, spinal burst fracture, mandibular fracture, and extensive soft tissue necrosis following a high-energy fall, emphasizing the role of coordinated surgical intervention for limb salvage and functional recovery.

Material and Methods: A 35-year-old male presented after a fall from height with a comminuted pelvic fracture, left distal tibia-fibula intra-articular (pilon) fracture, right tibia-fibula shaft open fracture, right calcaneus comminuted open fracture, right talonavicular dislocation, L1 vertebral burst fracture, mandibular fracture, and extensive soft tissue injuries. On admission, the patient was hemodynamically unstable. Immediate cardiovascular and general surgery intervention addressed active bleeding from the left iliac artery, which was reconstructed using a PTFE graft, and the iliac vein, repaired primarily with sutures. Orthopedic management included staged interventions with external fixation for pelvic and tibial fractures, delta frame application for the left pilon fracture, intramedullary nailing for tibial stabilization, and reduction and fixation of the talonavicular dislocation. Repeated debridements, removal of avascular bone, irrigation, and vacuum-assisted closure (VAC) therapy were performed for soft tissue management. Spinal stabilization was achieved via posterior instrumentation and laminectomy for L1 burst fracture under neuromonitoring. Maxillofacial reconstruction included mandibular fixation with plates and screws and bone grafting, and elective tracheotomy was performed due to prolonged intubation.

Results: Hemodynamic stabilization was achieved, and limb perfusion was preserved in both lower extremities. Skeletal and spinal stability were restored, mandibular function was recovered, and progressive soft tissue healing was facilitated through repeated debridements and VAC therapy. No intraoperative complications were observed during major surgical procedures. The patient tolerated staged interventions well, and sequential management allowed for effective control of bleeding, fracture stabilization, and soft tissue recovery.

Conclusion: This case illustrates the critical importance of a coordinated, multidisciplinary approach in the management of complex polytrauma. Prompt vascular repair, staged orthopedic stabilization, spinal decompression, maxillofacial reconstruction, and aggressive soft tissue management can achieve limb salvage, functional recovery, and survival even in patients with extensive multisystem injuries resulting from high-energy trauma.

Keywords: Polytrauma, iliac artery injury, multidisciplinary surgery, vacuum-assisted closure

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PP-057

Two-year follow-up results of patients operated for peripheral artery aneurysms

Medine Sarac, Busra Karakoc Kaplan, Mustafa Enes Bostankolu, Ceylan Gurcan, Ali Aghayev, Ahmet Erkam Cevik, Emre Kaymakci, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Vascular aneurysm is defined as a dilation of a vessel diameter by 50% or more compared to normal. Peripheral artery aneurysms may have serious clinical consequences due to their involvement of the arterial system and their often silent course. Etiological factors include atherosclerosis, trauma, and infections. This study presents the two-year follow-up results of patients who underwent surgery for peripheral artery aneurysms in our clinic.

Material and Methods: We retrospectively reviewed the records of patients operated in our clinic for peripheral arterial disease. Data were retrieved from the hospital database. Preoperative demographic data, aneurysm diameters as reported in imaging studies, clinical status before surgery, postoperative imaging results, and postoperative clinical outcomes were documented.Follow-up evaluations were conducted during outpatient clinic visits and included physical examination, laboratory tests, and Doppler ultrasonography. Computed tomography angiography was performed in selected cases when further imaging was deemed necessary.

Results: Six patients were operated specifically for peripheral artery aneurysms. The average age of patients who underwent the procedure was 64,3±9,4 years,and all of them were men . Comorbidites included diyabetes mellitus,hypertension, hyperlipdemia,smoking history, coronary artery disease .The patients presenting complaints were claducation, palpable mass ,ischemic ulcer.Most aneurysms were located in the popliteal artery, and no upper extremity aneurysms were observed. Specifically, three patients had popliteal artery aneurysms, one patient had a superficial femoral artery aneurysm, one patient had an external iliac artery aneurysm, and one patient presented with bilateral common femoral and bilateral popliteal artery aneurysms All patients underwent surgical exploration. In five cases, aneurysmectomy was followed by graft interposition. In every case, the aneurysmal sac was excised. In the patient with an external iliac artery aneurysm, which was associated with a previously placed stent, sac reduction was performed instead of complete excision.During postoperative follow-up, graft and limb patency was found to be 100%. The early diagnosis of these patients played a major role in this favorable outcome.

Conclusion: Peripheral artery aneurysms are often asymptomatic at the time of diagnosis. They may become clinically evident due to mass effect, thrombosis, or embolization. Although the risk of rupture in extremity aneurysms is relatively low, it increases once the diameter reaches 2 cm or more. Therefore, all peripheral artery aneurysms measuring 2 cm or greater should be surgically treated upon detection. In our clinic, all patients with peripheral artery aneurysms ≥2 cm in diameter underwent open surgical aneurysmectomy. Early diagnosis and treatment are performed successfully in our clinic for patients with peripheral artery aneurysms

Keywords: Peripheral artery aneurysms, peripheral artery disease, surgery

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PP-058

Outcomes of surgical repair vs. thrombin injection in femoral artery pseudoaneurysms following arterial access

Abdullah Masta

Akdeniz University Hospital, Antalya, Türkiye

Abstract

Aim: Femoral pseudoaneurysms most commonly occur as iatrogenic complications following coronary angiographic or endovascular interventions. Several treatment modalities exist. Open surgical repair is an invasive approach, while thrombin injection—gaining popularity in recent years—offers a less invasive and more comfortable alternative for the patient.

Material and Methods: Between January 2024 and July 2025, a total of 30 patients who underwent treatment for femoral pseudoaneurysms at the Department of Cardiovascular Surgery, Akdeniz University Hospital, were retrospectively analyzed.15 patients underwent conventional open surgical repair.15 patients were treated with ultrasound-guided thrombin injection.Pseudoaneurysms with a neck diameter greater than 1 cm were excluded from the thrombin group due to increased risk of recurrence and treatment failure, and these patients were directed to open surgery.

Results: In the thrombin injection group, pseudoaneurysm sizes ranged from 16 mm to 86 mm.Thrombin injection resulted in complete thrombosis and regression in 14 out of 15 patients within 24 hours.One patient (pseudoaneurysm size 70×35 mm with a 7 mm neck) required subsequent surgical repair due to failed thrombosis.In the open surgery group, pseudoaneurysm sizes ranged from 60 mm to 4 cm.Four patients developed surgical site infections, requiring prolonged antibiotic therapy.

Conclusion: Compared to open surgical repair, thrombin injection is advantageous in terms of shorter hospital stay, lower infection risk, and better patient comfort. Although the risk of distal thromboembolism is theoretically higher with thrombin injection, its application in experienced centers and carefully selected patients yields excellent outcomes.

Keywords: Femoral artery, pseudoaneurysm, trombin

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PP-059

Unusual branching of the popliteal artery: High origin posterior tibial artery

Hamit Serdar Basbug[1], Osman Yasar Isikli[1], Hayati Tastan[2]

[1]Karamanoğlu Mehmetbey University Faculty of Medicine, Karaman, Türkiye
[2]Karaman Training and Research Hospital, Karaman, Türkiye

Abstract

Aim: The popliteal artery (PA) is the direct continuation of the femoral artery. It typically divides first into the anterior tibial artery (ATA) near the lower border of the popliteus muscle. The remaining branch, called the tibioperoneal trunk, subsequently divides into the posterior tibial artery (PTA) and the peroneal artery. Variations in its branching pattern, although rare, are of considerable clinical importance. They may influence surgical and endovascular approaches for the vascular reconstructions, and increase the risk of iatrogenic injury during orthopedic surgeries of the knee and leg. According to the studies, PA may demonstrate seven variant branching patterns: hypoplastic or aplastic PTA (5.1%); hypoplastic or aplastic anterior tibial artery ATA (1.7%); trifurcation (1.5%); high origin of ATA (1.2%); hypoplastic or aplastic PTA or ATA (0.8%); high origin of PTA (0.4%); and anterior tibioperoneal trunk (0.1%). Among these, a high origin of the PTA is the rarest anatomical variant affecting a single artery.

Material and Methods: During the examination of the Computed Tomography (CT) angiography of a patient with peripheral artery disease, we encountered an atypical branching pattern of the right PA. Instead of trifurcating at the expected level, the right PTA arose more proximally within the popliteal fossa. After its origin, it coursed distally in its usual anatomical pathway, continuing to supply the posterior compartment of the leg and plantar region of the foot. No other vascular anomalies were observed in association with this variation. The ATA and peroneal artery were otherwise distributed in the usual position.

Results: The identification of a high origin PTA highlights the importance of understanding vascular variations in the lower limb. Preoperative recognition of such anomalies, particularly through imaging modalities such as CT angiography or Magnetic Resonance (MR) angiography, is essential for safe surgical and interventional practice. Failure to anticipate this variation may result in inadvertent arterial injury, inadequate revascularization, or complications during endovascular procedures, bypass grafting, flap harvest, or orthopedic fixation. Increased awareness among vascular surgeons, interventional radiologists, and anatomists can reduce the risk of complications and improve patient outcomes.

Conclusion: This case emphasizes the ongoing relevance of detailed anatomical knowledge in clinical practice and reinforces the necessity of considering vascular variation during both diagnostic evaluation and operative planning.

Keywords: Popliteal artery, posterior tibial artery, blood vessels, vascular malformations

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PP-060

Excessive cerebrospinal fluid drainage for spinal cord protection during thoracoabdominal aortic aneurysm repair with E-nside stent graft

Murat Bastopcu[1], Zeynep Sila Ozcan[1], Gokhan Arslanhan[1], Anil Karaagac[1], Muharrem Kocyigit[2], Ahmet Akyol[3], Koray Guven[4], Sahin Senay[1], Cem Alhan[1]

[1]Acibadem University School of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]Acibadem University School of Medicine, Department of Anesthesiology, İstanbul, Türkiye
[3]Acibadem University School of Medicine, Department of Cardiology, İstanbul, Türkiye
[4]Acibadem University School of Medicine, Department of Radiology, İstanbul, Türkiye

Abstract

Aim: Thoracoabdominal aortic aneurysms(TAAA) pose significant challenges due to their complexity and associated morbidity. Open surgical repair has been the gold standard but carries high risks, particularly in elderly or comorbid patients. Endovascular repair for TAAA has emerged as an alternative treatment, offering reduced operative times and a shorter recovery period. The E-nside Multibranch Stent Graft System, an off-the-shelf, pre-cannulated inner branch device, facilitates endovascular repair with incorporated branch vessels. Spinal cord ischemia(SCI) remains a critical complication, with incidences ranging from 5%-20% in extensive TAAAs, potentially leading to permanent paraplegia. Risk factors include extensive aortic coverage, prior aortic interventions, hypotension, and loss of collateral perfusion. We present our approach for spinal cord protection during the first national case of totally endovascular TAAA repair with the E-nside stent graft.

Material and Methods: We report a 60-year-old female patient with a history of smoking and hypertension, previously treated with thoracic endovascular aortic repair(TEVAR) for a descending thoracic aortic aneurysm. She presented with a Crawford-Extent-II TAAA requiring intervention. A staged approach was employed to optimize spinal cord protection. The first stage involved a left carotid-subclavian bypass to preserve spinal cord perfusion via the vertebral artery, followed by proximal TEVAR extension with three stent grafts. This was performed to prepare a proximal landing zone for the E-nside graft. Prophylactic cerebrospinal fluid (CSF) drainage was maintained for 24 hours postoperatively, with no neurological complications observed. In the second stage, the E-nside stent graft was used for complete aneurysm exclusion, again with CSF drainage in the postoperative period.

Results: The two staged procedures were technically successful. Postoperatively, the patient developed acute renal failure necessitating temporary hemodialysis. She experienced transient paraplegia, which resolved fully within days, attributed to reversible SCI. CSF drainage was continued for 7-days, with a target CSF pressure below 10mmHg. We aimed to stay below this pressure and performed large amounts of CSF drainage if needed to meet this threshold. Imaging during the patient's 6-month follow up confirmed successful aneurysm exclusion without endoleaks or branch occlusions.

Conclusion: This case demonstrates the feasibility of staged endovascular repair using the E-nside stent graft for complex TAAAs in high-risk patients. Staged endovascular procedures mitigates SCI by allowing collateral network development and ischemic preconditioning, thereby limiting the incidence and severity of neurological deficits. The risk of SCI can be effectively managed with CSF drainage and avoidance of hypotension. Off-the-shelf devices like E-nside expand treatment options for TAAA, potentially improving outcomes in broader patient populations.

Keywords: Thoracoabdominal aortic aneurysm repair, spinal cord protection, open surgery

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PP-061

Mini-sternotomy for isolated ascending aorta replacement

Burhan Kucuk[1], Kıvanc Atilgan[1], Fahri Gurkan Yesil[1], Damla Kocaman[2], Burak Emre Onuk[1], Tayfun Aybek[1]

[1]TOBB University of Economics and Technology, Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]TOBB University of Economics and Technology, Faculty of Medicine, Cardiovascular Surgery Clinic Perfusion Department, Ankara, Türkiye

Abstract

Aim: Ascending aorta pathologies are serious clinical conditions characterized by aneurysmal dilatation, dissections, or structural deterioration due to degenerative valve disease in the proximal segment of the aorta. Without timely surgical intervention, these conditions are associated with high morbidity and mortality, potentially resulting in sudden cardiac death, rupture, dissection, or hemodynamic instability. Therefore, ascending aorta surgery is considered one of the highest-priority procedures in cardiovascular surgical practice, both in emergency and elective settings.Nowadays, traditional full sternotomy approaches with large incisions are increasingly being replaced by minimally invasive techniques that aim to enhance patient comfort, shorten recovery time, and reduce surgical morbidity. The use of minimally invasive cardiac surgery (MICS) techniques is growing, offering advantages such as lower complication rates, shorter hospital stays, reduced pain, and improved cosmetic outcomes, particularly in carefully selected patients.

Material and Methods: A 63-year-old asymptomatic patient was referred to our clinic for surgical evaluation after an isolated ascending aortic aneurysm was detected during a routine cardiology follow-up. On follow-up CT, the diameter of the ascending aorta measured 54 mm. The patient was scheduled for isolated ascending aorta replacement via a minimally invasive approach, and all necessary preoperative assessments were completed prior to surgery.The aneurysmal ascending aorta was carefully dissected from surrounding tissues at the supracoronary level and resected. The aortic valve was inspected. Using a 28 mm Dacron graft, proximal and distal anastomoses were performed with 4/0 Prolene sutures, thereby completing the supracoronary ascending aorta replacement. During the procedure, a large portion of the aortic valve's coronary cusp was replaced to prevent recurrent dilation from a prognostic standpoint.

Results: The patient was discharged on postoperative day 5, after 1 day in the intensive care unit and 4 days in the ward.On follow-up echocardiograms at 6 months and 1 year, the diameter of the ascending aorta was measured as 32 mm.

Conclusion: In this case, we aimed to demonstrate that minimally invasive approaches can be safely applied in complex procedures such as isolated ascending aorta replacement, while providing high early patient satisfaction. Surgeries performed through minimal incisions reduce surgical trauma, shorten recovery time, and improve cosmetic outcomes. These findings support that minimally invasive techniques represent an effective and safe alternative in selected patients.

Keywords: Ascending aorta, mini-sternotomy, aortic replacement

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PP-062

Surgical management of neuroblastoma encasing the abdominal aorta in a pediatric patient: A case report

Cihan Yetis, Baris Akca, Cebrail Ozbulut, Mehmet Emin Murat, Mehmet Cengiz Colak

[1]İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Neuroblastoma is the most common extracranial solid tumor of childhood and usually originates from the adrenal medulla or the paravertebral sympathetic ganglia extending from the cervicothoracic region to the pelvis. It is most commonly located in the abdomen, and the most frequent reason for admission is the presence of an asymptomatic abdominal mass. Although surgical excision is the mainstay of treatment, the fragile capsule of the tumor and its tight adhesion to major vascular structures are important factors that increase the risk of surgical morbidity. In this case report, we present the surgical removal of a neuroblastoma mass in close proximity to the abdominal aorta in an 18-month-old child who was admitted with abdominal pain and mass, and we discuss the surgical strategy applied.

Material and Methods: An 18-month-old girl was admitted to an external center with complaints of abdominal mass and pain, and after imaging revealed an intra-abdominal mass, she was referred to our hospital for further evaluation. On physical examination, restlessness and agitation were observed; vital signs were recorded as blood pressure: 80/40 mmHg, heart rate: 136/min, SpO_2: 96%. A palpable, solid mass was detected in the abdomen. Abdominal ultrasonography reported a 10×8×12 cm vascularized mass containing calcification foci, initially considered to be of ovarian origin. Following the evaluation by the pediatric surgery department, a decision was made for surgical intervention. After completion of preoperative preparations, the patient underwent surgery.

Results: During abdominal exploration, the mass and its neighboring structures were assessed. As the abdominal aorta could not be visualized, an intraoperative consultation with cardiovascular surgery was requested. With the involvement of cardiovascular surgery, the abdominal aorta passing through the mass was dissected and visualized, adhesions were carefully released, and the tumor was excised without any vascular injury. Postoperative pathological examination confirmed the diagnosis of neuroblastoma. The patient had an uneventful postoperative course in the intensive care unit and ward follow-up and was discharged.

Conclusion: Neuroblastoma is a deeply located tumor that tends to encase surrounding organs and major vascular structures, making its surgical management challenging. In the surgical planning process, both the efficacy of tumor resection and the risk of potential complications must be considered. Given the difficulty of resectability and the possibility of vascular complications, meticulous evaluation of preoperative imaging findings, a multidisciplinary approach involving cardiovascular surgeons, and appropriate preoperative preparation are key elements for surgical success.

Keywords: Neuroblastoma, abdominal aorta, surgical procedures

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PP-063

Unexpected posterior wall rupture in abdominal aortic aneurysm: An incidental case report

Soysal Turhan[1], Haydar Yasa[2]

[1]University of Health Sciences, Tepecik Education and Research Hospital, Department of Cardiovascular Surgery, İzmir, Türkiye
[2]University of Health Sciences, İzmir Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Abdominal aortic aneurysm (AAA) rupture is a life-threatening emergency with high mortality. Posterior wall rupture is less common than anterior or lateral rupture and may present without the classical triad of hypotension, abdominal/back pain, and pulsatile mass. This study aims to present a case of incidentally detected posterior wall rupture of an infrarenal AAA and emphasize the importance of early diagnosis and appropriate treatment.

Material and Methods: A 74-year-old male patient with hypertension and a history of smoking presented with nonspecific abdominal discomfort and weakness. Physical examination revealed a pulsatile abdominal mass, while laboratory tests were within normal limits. Abdominal ultrasonography identified an infrarenal abdominal aortic aneurysm (AAA), and contrast-enhanced computed tomography confirmed a 6,5 cm aneurysm with mural thrombus and irregularity of the posterior wall, consistent with contained rupture. The patient was hemodynamically stable and was taken to surgery under elective conditions. Through a median laparotomy, the retroperitoneum was opened and no hematoma was observed. The aorta was exposed at the infrarenal level and both common iliac arteries were controlled. Intraoperatively, a wide defect was identified on the posterior wall of the aneurysm with direct visualization of the lumbar vertebral bodies. The infrarenal aorta was replaced using a Dacron Y graft.

Results: The surgical procedure was successfully completed without intraoperative complications. The patient had an uneventful postoperative course, with no complications observed, and was discharged in good condition on the 10th postoperative day.

Conclusion: Posterior wall rupture of an abdominal aortic aneurysm is a rare but extremely dangerous condition. Unlike anterior ruptures that often lead to immediate exsanguination and pre-hospital mortality, posterior ruptures may be temporarily contained by the retroperitoneal space, providing a narrow diagnostic and therapeutic window. However, this containment is unstable and can progress to catastrophic rupture at any moment. Our case illustrates that even in the absence of the classical triad of symptoms—abdominal or back pain, hypotension, and a pulsatile mass—clinicians must maintain a high index of suspicion in patients with large aneurysms or atypical presentations. Imaging, particularly contrast-enhanced computed tomography, plays a decisive role in differentiating contained rupture from frank rupture and in guiding the urgency of intervention. Ultimately, this case emphasizes that rapid recognition, accurate imaging, and timely surgical intervention can transform a potentially fatal event into a survivable condition. Increasing awareness of posterior wall rupture patterns and their radiological indicators may improve outcomes by reducing delays in diagnosis and treatment.

Keywords: Abdominal aortic aneurysm, aortic rupture, posterior wall, vascular surgery

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PP-064

Double-lumen femoral artery pseudoaneurysm: A rare case report

Amine Zumra Hacikoleoglu, Alper Ozbakkaloglu, Omer Faruk Rahman, Baris Cetincay, Onder Turgut Bozkurt, Sahin Bozok

İzmir Bakırçay University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Femoral artery pseudoaneurysm is a potentially life-threatening complication, particularly after percutaneous interventions. Although it typically presents as a single sac, complex structures may rarely occur. In this report, we present the surgical management of a rare case of pseudoaneurysm in which a secondary aneurysmal cavity developed within the primary sac, despite a single puncture site.

Material and Methods: A 75-year-old female patient was admitted with a firm, non-pulsatile mass in the left femoral region. Her medical history included chronic renal failure and atrial fibrillation, for which she had been receiving long-term anticoagulation therapy. Four months earlier, she had undergone diagnostic coronary angiography via the left femoral artery, without reported complications. Doppler ultrasonography performed at our institution revealed an approximately 80 mm pseudoaneurysm. Surgical exploration under spinal anesthesia was carried out. The common femoral artery was controlled, and the pseudoaneurysm sac was excised with evacuation of organized thrombus. Within the main sac, a secondary 20 mm aneurysmal cavity was identified and subsequently cleared. The vascular defect was repaired with primary suture.

Results: The postoperative course was uneventful. Peripheral pulses were palpable, and no wound infection, hematoma, or active drainage was observed. The patient was followed with routine wound care and discharged without complications. Anticoagulation therapy was continued after surgery.

Conclusion: Femoral artery pseudoaneurysm may occur following catheterization procedures, trauma, or spontaneously in patients with connective tissue disorders. At the femoral level, advanced age, long-term use of anticoagulant or antiplatelet therapy, and chronic comorbidities are important contributors to its formation and progression.In the presented case, late admission following a percutaneous intervention and the large size of the pseudoaneurysm at diagnosis were decisive factors in opting for surgical treatment. The intraoperative finding of a secondary cavity within the sac, despite a single puncture site, was remarkable. Long-term anticoagulation and chronic renal failure were considered to have contributed to the delayed growth and complex morphology of the lesion.Surgical repair remains a reliable and effective option in high-risk patients and in cases diagnosed at a late stage. Early diagnosis, the use of non-invasive imaging modalities, and patient awareness are crucial in reducing morbidity and mortality.

Keywords: Aneurysm false, vascular surgical procedures, arteries

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PP-065

Popliteal artery entrapment syndrome

Bengi Polen Gundogdu, Ozan Erbasan, Cengiz Turkay

Akdeniz University Hospital Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: Popliteal artery entrapment syndrome (PAES) is an uncommon condition in which an abnormally positioned or enlarged calf muscle presses on the main artery behind the knee (popliteal artery). The artery becomes trapped, making it harder for blood to flow to the lower leg and foot.

Material and Methods: 60-year-old male patient presented to us with complaints of claudication. The patient's ABI values were within the normal range. CT scans revealed a filling defect in the right popliteal artery due to compression by the medial head of the gastrocnemius muscle. First, the patient was taken to the angiography laboratory and a percutaneous procedure was attempted, but it was not successful. patient underwent surgery, and a saphenous vein was placed in the segment with the filling defect on the CT scan. Compression of the surrounding tissues was eliminated.

Results: The patient's claudication complaint disappeared after the operation, and his flows were evaluated as triphasic in the ultrasounds performed at the 1-year follow-up.

Conclusion: Early and accurate diagnosis should be settled for the patients with popliteal artery entrapment syndrome to ensure an appropriate management as soon as possible. Therefore, the referral of the patients with lower extremity claudication to various outpatient clinics from different specialties should alert the treating physician for popliteal artery entrapment syndrome, even in unusual presentations.

Keywords: Popliteal, entrapment, popliteal artery entrapment syndrome

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PP-066

Basilic vein transposition with concomitant brachial endarterectomy and saphenous vein interposition: A complex case of salvage vascular access

Isa Civelek, Ceylan Gurcan, Busra Karakoc Kaplan, Emre Boysan

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Preservation of autologous vascular access remains a major challenge in patients with multiple failed arteriovenous fistulas (AVFs) and prosthetic grafts. Basilic vein transposition (BVT) is widely regarded as a reliable secondary access; however, its feasibility can be limited in the setting of central venous occlusion or concomitant arterial pathology. In addition, autologous saphenous vein interposition has been reported as an effective alternative when prosthetic grafts are contraindicated, particularly in patients with high risk of infection.

Material and Methods: A middle-aged patient with end-stage renal disease presented after multiple failed upper extremity AVFs and repeated tunneled catheterizations. The most recent right brachial–basilic AV graft thrombosed twice despite surgical thrombectomy. Duplex ultrasonography confirmed complete graft thrombosis with all superficial veins occluded except for the proximal basilic vein. Computed tomography angiography revealed chronic left subclavian vein thrombosis and critical (80–90%) stenosis of the right mid-brachial artery.Due to the sequelae of repeated central venous catheterizations and uncertainty regarding AVF maturation in the presence of central venous obstruction, a staged approach was selected. In the first stage, brachial endarterectomy with saphenous vein patch angioplasty was performed. Subsequently, a 5-cm segment of autologous saphenous vein was interposed between the brachial artery and the proximal basilic vein, as the available basilic vein length was insufficient to permit direct transposition. This reconstruction ensured adequate arterial inflow while maintaining continuity with the remaining patent venous segment. After two months, following the development of AVF maturation, the second stage involved transposition of the basilic vein with distal ligation. Postoperatively, the patient successfully initiated hemodialysis through the newly created access.

Results: This case illustrates the value of combining arterial reconstruction, autologous vein interposition, and staged BVT in highly complex scenarios. The two-stage design was adopted to avoid undertaking a major procedure without confirming adequate venous outflow, thereby reducing the risk of early access failure in the context of chronic central venous occlusion. The use of a short saphenous vein graft addressed the anatomical limitation posed by the insufficient basilic vein length, while avoiding prosthetic material minimized infection risk. Together, these strategies preserved upper extremity access, optimized inflow and outflow, and prevented the need for lower limb vascular access.

Conclusion: Staged BVT with adjunctive saphenous vein interposition and brachial endarterectomy represents a feasible salvage technique in patients with extensive vascular access exhaustion, central venous thrombosis, and concomitant arterial stenosis. This approach highlights the importance of individualized surgical planning to maximize long-term patency and preserve autologous vascular access.

Keywords: Arteriovenous fistula, vascular access for hemodialysis, basilic vein, saphenous vein, end-stage kidney disease

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PP-067

On-pump coronary artery bypass in a high-risk patient with total bilateral carotid occlusion: A case report

Sevi Umaroglu Ozturk, Ibrahim Duvan, Murat Koc, Mustafa Seren, Ferit Cicekcioglu

Ankara Etlik City Hospital Cardiovascular Surgery Department, Ankara, Türkiye

Abstract

Aim: The incidence of stroke ranges from 5% to 7 % in patients undergoing coronary artery bypass surgery for asymptomatic or symptomatic carotid stenosis. The optimal management of patients with coronary artery disease who require surgery for bilateral carotid artery occlusion remains controversial.This case report shows that on-pump coronary artery bypass grafting (CABG) can be effective in patients with unstable angina and complete bilateral carotid artery occlusion, offering an alternative approach when off-pump CABG is unsuitable.

Material and Methods: A 65-year-old man with insulin-treated type 2 diabetes and a history of cerebrovascular events presented with chest pain.Coronary angiography revealed multiple stenoses:70% in the left anterior descending artery (LAD),90% in the LAD distal to the second diagonal artery, 80% in the circumflex artery (CX)and 90% in the proximal (posterior descending artery) PDA. Color Doppler ultrasonography indicated an absence of flow in the right common carotid artery (CCA), right internal carotid artery (ICA), left internal carotid artery (ICA), and left external carotid artery (ECA).Computed tomography (CT) of the neck demonstrated occlusion of the right CCA proximally and the left ICA from the bulb, with 40% stenosis at both vertebral artery origins and 65-70% stenosis in the proximal left subclavian artery.Near-infrared spectroscopy (NIRS) probes were used in the operating room. The initial NIRS rSO2 values were 43 right and 47 left, and increased to 55 after induction.During cardiopulmonary bypass (CPB), the values temporarily decreased to 40.The temperature was reduced to 30°C, and the mean arterial pressure was 80 mmHg.Sequential distal anastomoses were performed using the saphenous vein for the RCA, PDA, CX, and LAD. After 64 min of cross-clamping, the clamp was removed, and the heart resumed its spontaneous activity.The patient was weaned from CPB after 107 min.Postoperatively, low-dose dopamine supported blood pressure.The patient regained consciousness at 6 h, was extubated at 8 h, and was discharged from the ICU after 24 h and hospital on day five without complications.

Results: Total bilateral internal carotid artery occlusion poses significant challenges in CABG because of the risk of perioperative neurological complications.While off-pump CABG is preferred for lower embolic risk, on-pump CABG remains vital in cases of complex coronary anatomy.NIRS cerebral monitoring can reduce the risk of perioperative stroke.On-pump CABG can be safe in patients with severe carotid disease if appropriate monitoring is performed.

Conclusion: On-pump CABG is a feasible option for patients with total bilateral internal carotid artery occlusion,with careful patient selection, precise intraoperative monitoring, and individualized surgical planning being essential.

Keywords: Carotid artery occlusion, coronary artery bypass, cerebrovascular disorders, neurological outcomes

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PP-068

Disseminated intravascular coagulation mimicking sepsis-associated coagulopathy and necrotizing fasciitis following coronary artery bypass grafting: A case report

Cihan Yetis, Baris Akca, Cebrail Ozbulut, Mehmet Emin Murat, Mehmet Cengiz Colak

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Disseminated intravascular coagulation (DIC) is a rare, life-threatening complication characterized by widespread and uncontrolled activation of the coagulation system, resulting in an increased risk of both thrombosis and hemorrhage. It is estimated to occur in approximately 1% of hospitalized patients. During cardiopulmonary bypass, contact of blood with artificial surfaces, inflammatory response, and the use of drugs (heparin, protamine) may predispose to the development of DIC. In this case report, we present a patient who developed DIC following coronary artery bypass grafting (CABG), together with the diagnostic, follow-up, and management strategies employed for this complication.

Material and Methods: A 56-year-old male patient with a history of diabetes mellitus, hypertension, and morbid obesity was diagnosed with multivessel coronary artery disease on coronary angiography performed due to exertional angina. Following routine preoperative examinations that showed no abnormalities, 3-vessel CABG (LIMA-LAD, Ao-Sf-RCA/D) was performed. The postoperative course was uneventful, and the patient was discharged at postoperative 7th day.Twelve days after discharge, the patient was re-admitted with discharge, necrosis, and subcutaneous crepitation at the saphenous vein incision site. On examination, hypotension (80/40 mmHg), tachycardia (135 bpm), widespread petechiae, and necrotic lesions around the sternotomy incision line and umbilical regions were observed. Laboratory tests revealed leukocytosis, anemia, thrombocytopenia (59,000/mm^3), elevated INR (1.53), hypofibrinogenemia (117 mg/dL), elevated D-dimer (3.72 µg/mL), and increased liver enzyme levels. Wound culture grew Staphylococcus haemolyticus.

Results: Empirical antibiotic therapy with meropenem and tigecycline was initiated under the suspicion of necrotizing fasciitis by the infectious diseases. Hematology consultation, based on laboratory data and clinical findings, confirmed the diagnosis of DIC. The patient was treated with apheresis platelet transfusion, fresh frozen plasma replacement, and anticoagulation with low molecular weight heparin. Necrotic tissues were debrided by the plastic surgery team, and daily wound dressings were performed. During intensive care and ward follow-up, hematologic parameters improved, the infection was controlled, and the large skin defect at the saphenous incision site was closed with a skin graft. The patient was discharged on postoperative day 16 without complications.

Conclusion: DIC is an extremely rare but serious complication following CABG that may mimic sepsis or surgical site infections. Early diagnosis, dynamic monitoring of coagulation parameters, infection control and appropriate anticoagulation strategies, with a multidisciplinary approach plays a critical role in reducing mortality and morbidity.

Keywords: Disseminated intravascular coagulation, coronary artery bypass, necrotizing fasciitis

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PP-069

Abdominal aort aneurysm repair in recurrent type 1 endoleak patient: A case report

Mert Can Dinccag, Ahmet Aydin, Melih Alma

Hacettepe University Hospitals Cardiovascular Department, Ankara, Türkiye

Abstract

Aim: The aim of this case report is to highlight the importance of surgical repair with low morbidity and mortality in the management of failed endovascular repairs of complex abdominal aortic aneurysms.

Material and Methods: The patient initially underwent EVAR in 2012 for an infrarenal aortic aneurysm and subsequently underwent triple bypass surgery in 2013. During a period without follow-up, the patient developed a type 1 endoleak and significant stenosis in both limbs of the stent graft. On March 2025, an aortic cuff extension using the chimney technique (involving the left main renal artery) was performed by interventional radiology in an attempt to correct the type 1 endoleak. During the same session, balloon angioplasty and stent implantation were performed in both iliac limbs to address the stenoses. Postoperatively, the patient developed a pseudoaneurysm and compartment syndrome at the left brachial artery access site. Surgical repair of the brachial artery and fasciotomy were performed.One week after discharge, the patient presented to the emergency department with flank pain. CTA imaging revealed findings consistent with a type 1 endoleak in the abdominal aorta, and a slight increase in aneurysm diameter was noted. The patient was discharged and scheduled for close outpatient follow-up. Two months later,repeat CTA revealed further enlargement of the aneurysm sac. The patient was admitted to the hospital for surgical intervention.The patient was taken to the operating room for EVAR conversion. After a midline incision, the abdominal cavity was accessed, followed by retroperitoneal dissection to expose the aorta. Following systemic heparinization, clamps were applied to the suprarenal aorta, bilateral renal arteries, and the distal segment of the EVAR graft. The aneurysmal segment was opened, and a 26-mm tubular vascular graft was anastomosed proximally to the aorta just below the origin of the renal arteries , preserving the renal artery orifices. The distal end of the graft was anastomosed in continuity to the existing EVAR graft. The native aortic tissue was wrapped around the graft.

Results: The patient was monitored in the intensive care unit postoperatively and was transferred to the ward following the return of bowel function. The patient was discharged in good condition on postoperative day 4.

Conclusion: Although endovascular abdominal aortic repair is the primary treatment option for elderly patients with significant comorbidities, open surgical repair remains the preferred option in centers with extensive experience in aortic surgery, particularly in cases involving unfavorable neck anatomy, failed endovascular interventions, or persistent endoleaks unresponsive to repeated procedures.

Keywords: Abdominal aort aneurysm repair, endovascular aortic repair, type 1 endoleak, recurrent abdominal aort aneurysm, open repair

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PP-070

Post-thrombotic syndrome causing chronic inferior vena cava occlusion with extensive ovarian venous collateralization: A rare case report

Isil Cucen Dayi[1], Izatullah Jalalzai[2]

[1]Cardiovascular Surgery Clinic Bagdat Caddesi, İstanbul, Türkiye
[2]Ataturk University Research Hospital Department of Cardiovascular Surgery, Erzurum, Türkiye

Abstract

Aim: Chronic occlusion of the inferior vena cava (IVC) due to post-thrombotic syndrome (PTS) is an uncommon but serious complication of deep vein thrombosis (DVT). In rare cases, extensive collateral venous pathways develop to maintain venous return. Among these, ovarian vein dilation as a major compensatory channel is extremely rare and underreported.

Material and Methods: We report the case of a 33-year-old woman with a history of lower extremity DVT approximately 7 years prior, who presented with progressive bilateral lower limb edema and abdominal wall varicosities. There was no history of recent trauma, immobilization, or malignancy. Physical examination revealed symmetrical pitting edema in both legs and visible dilated superficial abdominal veins predominantly on the right side.Duplex ultrasonography demonstrated absence of normal flow in the infrarenal segment of the IVC, with extensive collateralization. Further evaluation with contrast-enhanced venography revealed chronic total occlusion and fibrosis of the infrarenal IVC, consistent with sequelae of PTS. Strikingly, a markedly dilated right ovarian vein was identified, serving as a primary collateral pathway for venous return to the right atrium. Other paravertebral and superficial collaterals were also visualized.

Results: The patient was assessed for interventional options including percutaneous recanalization and stenting. However, due to technical challenges and hemodynamic stability through collateral flow, conservative management was chosen. She was started on long-term anticoagulation and compression therapy. Clinical follow-up was arranged to monitor symptoms and prevent progression of chronic venous insufficiency.

Conclusion: This case highlights a rare presentation of chronic IVC occlusion secondary to post-thrombotic syndrome, with unusual and significant ovarian vein collateralization acting as a primary venous return route. Recognition of such compensatory pathways is crucial for diagnosis, prognostication, and management decisions. Clinicians should maintain high suspicion in patients with history of DVT and chronic bilateral leg edema, even years after the initial thrombotic event.

Keywords: Collaterals, post thrombotic syndrome, vena cava inferior

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PP-071

Chronic Venous Insufficency

Yusuf Reha Ayan, Necip Becit, Fehim Can Sevil, Mehmet Tort, Serkan Gume

Afyonkarahisar Health Sciences University Department of Cardiovascular Surgery, Afyonkarahisar, Türkiye

Abstract

Aim: Chronic venous insufficiency is a common health problem that significantly affects the quality of life. Over the last 20 years, minimally invasive endovenous treatment methods have come to the forefront. These are mainly evaluated under two categories: endovenous laser ablation and radiofrequency ablation. In these methods, a catheter is inserted into the saphenous vein under ultrasound guidance, and venous endothelial damage is induced to achieve vein obliteration. In this study, we aimed to evaluate the outcomes of patients who underwent laser and radiofrequency ablation surgical treatment.

Material and Methods: A total of 120 patients diagnosed with chronic venous insufficiency and who underwent thermal ablation surgery in our clinic between February 2023 and August 2025 were included in the study. Demographic data, procedure duration, and postoperative hospital stay were retrospectively obtained from hospital records. In all patients, a 7F sheath was inserted into a single lower extremity below the knee, and the ablation catheter was advanced to the saphenofemoral junction leaving a safe distance. Tumescent anesthesia was applied to all patients. Postoperatively, all patients received compression therapy as well as angioprotective and venotonic drug treatment.

Results: The median age of the patients included in the study was 53 years (53.4 ± 33.5), with 65 (54.16%) females and 55 (45.84%) males. The mean hospital stay was 1 day, during which patients were followed in the ward. Minor bleeding occurred in 4 patients (4.33%), and paresthesia was observed in 2 patients (2.15%). In 100 patients (83.33%), ecchymosis was noted at the surgical site one day after the operation. In follow-up visits, paresthesia resolved. Clinical follow-up showed that symptoms of chronic venous insufficiency improved, and patients' quality of life increased.

Conclusion: Our findings demonstrate that thermal ablation methods can be applied safely with high success and patient satisfaction. Compared to conventional surgery, endovenous laser and radiofrequency ablation provide shorter recovery times, less postoperative pain, and better cosmetic results. Complication rates are low, usually minor, and temporary. In conclusion, with appropriate patient selection, thermal ablation methods represent a minimally invasive, effective, and reliable treatment option that forms the basis of the current approach in the management of chronic venous insufficiency.

Keywords: Chronic venous insufficiency, thermal ablation, endovenous

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PP-072

Clinical experience with shuntless endarterectomy in patients with severe carotid artery stenosis

Veli Burak Tackin, Sahin Kapan, Ismail Kakillioglu, Kubra Gozacik Karakoc, Koray Apaydin, Jeyhun Targuluyev, Nevzat Erdil

Antalya City Hospital, Antalya, Türkiye

Abstract

Aim: Carotid artery endarterectomy is a vascular surgery performed in patients with appropriate indications. This procedure requires a multidisciplinary approach, and it is important to make decisions by carefully considering the risk-benefit balance. The gold standard for the treatment of severe carotid artery stenosis is carotid endarterectomy with or without a shunt. In this study, we will analyze 52 cases of shuntless carotid artery endarterectomy successfully performed in our clinic.

Material and Methods: We performed 52 carotid endarterectomy cases under general anesthesia in our newly opened clinic. All patients were extubated on postoperative day 0 without neurological sequelae.

Results: One patient with a history of gamma knife therapy died on postoperative day 4 due to intracranial hemorrhage. Two patients underwent revision surgery due to bleeding. 51 patients were discharged with full recovery.

Conclusion: A thorough evaluation of patients in the postoperative period is also crucial for assessing the success of the surgery. Mortality and morbidity rates can be reduced in patients with carotid artery stenosis through a multidisciplinary approach and thorough preoperative and perioperative evaluation. These patients can be safely treated with appropriate indications.

Keywords: Carotid endarterectomy, vascular, cerebrovascular

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PP-073

Right axillary artery aneurysm and arteriovenous malformation association: A case report

Omer Arda Uslu, Can Soykan Sabur, Osman Ture, Aykan Atambay, Ebuzer Aydin

İstanbul Medeniyet University PROF.DR. Suleyman Yalcin City Hospital, İstanbul, Türkiye

Abstract

Aim: This case report presents a rare right axillary artery aneurysm associated with a forearm vascular malformation, successfully treated with open surgery. It highlights diagnostic and management challenges, emphasizing the effectiveness of the open surgical approach. The aim is to increase surgeon awareness of this rare association, promoting early diagnosis and intervention to improve patient outcomes and prevent complications.

Material and Methods: A 47-year-old male presented with right arm and back pain, shoulder swelling, and a forearm thrill. Arterial Doppler ultrasonography initially suggested a 42x22 mm arteriovenous malformation (AVM) in the right forearm, prompting further imaging. Computed Tomography (CT) angiography then confirmed a right axillary aneurysm alongside a forearm AVM. Endovascular Digital Subtraction Angiography (DSA) was used to localize the AVM and aneurysm branches extending to the scapula.Surgical intervention involved open surgery under general anesthesia. A right axillary fossa incision provided proximal control of the axillary artery, with distal control at the brachial artery. The median nerve was isolated and protected. Following systemic heparinization, the aneurysm was resected, including ligation of a suspected scapular branch and an additional lateral feeding branch. Healthy arterial segments were anastomosed end-to-end, and a brachial artery saccular aneurysm was closed.

Results: Postoperatively, the patient was in good condition; the surgical wound was clean with palpable distal pulses. Crucially, preoperative arm and back pain resolved completely, with significant reduction in forearm thrill and disappearance of scapular pulsation. Two months later, control Digital Subtraction Angiography (DSA) showed no aneurysm filling towards the scapula. A 20% anastomosis stenosis was noted, with collateral branches. Forearm venous malformations were not treated due to a lack of significant clinical symptoms. Postoperative Doppler indicated significantly dilated arterial/venous structures throughout the upper arm/forearm, with widespread varicose structures and atypical spectral patterns consistent with collateral/fistulous flows, supporting the underlying vascular malformation.

Conclusion: This case demonstrates that open surgical resection and reconstruction is an effective and safe approach for successful treatment of axillary artery aneurysms, particularly when associated with vascular malformations. Despite endovascular options, open surgery remains the preferred standard for most upper extremity aneurysms due to concerns about stent-related complications and long-term patency in mobile regions. Meticulous clinical evaluation, supported by Doppler ultrasonography and angiography, is crucial for accurate diagnosis. Increasing surgeon awareness of this rare association promotes early diagnosis and intervention, improving patient outcomes and preventing severe complications.

Keywords: Axillary artery aneurysm, arteriovenous malformation, open surgery, case report, high flow

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PP-074

Successful management of phlegmasia cerulea dolens in a high-risk patient with multiple comorbidities

Cihan Yetis, Baris Akca, Mehmet Cengiz Colak, Mehmet Emin Murat, Cebrail Ozbulut

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Phlegmasia cerulea dolens (PCD) is a rare but life-threatening severe form of deep vein thrombosis (DVT), characterized by extensive venous obstruction. Despite early and appropriate treatment, progression of the thrombotic process may result in gangrene, amputation, and mortality. The management includes anticoagulants, intravenous thrombolytics, percutaneous interventions, venous thrombectomy, limb elevation, and multimoda lapproaches. This study presents a patient with history of chronic kidney disease (CKD) and gastric cancer diagnosed with phlegmasia cerulea dolens, who developed heparin-induced thrombocytopenia (HIT).

Material and Methods: A 75-year-old male patient was admitted to the emergency department with complaints of pain, swelling, and discoloration of the left lower extremity that had persisted for approximately 20 days. His medical history included CKD, active gastric adenocarcinoma, hemodialysis, and chemotherapy. Vital signs were recorded as blood pressure 110/80 mmHg, heart rate 120/min, and SpO_2 95%. A tunneled hemodialysis catheter was present in the right internal jugular vein. Marked edema, increased limb circumference compared to the contralateral side, absence of distal pulses (dorsalis pedis and posterior tibial arteries), cyanosis, and coldness were observed in the left leg.

Results: Color Doppler ultrasonography revealed subacute DVT extending from the left external iliac vein to the below-knee deep veins. The arterial system was patent. Low molecular weight heparin (LMWH) was initiated, and limb elevation was applied. Due to progressive cyanosis, the patient was evaluated with interventional radiology and transferred to the angiography unit. A vena cava inferior filter was placed via the right femoral vein. As puncture attempts through the left popliteal vein were unsuccessful, tPA was administered through a contralateral catheter from the right femoral vein with aspiration. In the intensive care unit, selective catheter-directed thrombolytic therapy with tPA and heparin infusion was initiated. The procedure was repeated three times at 12-hour intervals, resulting in partial flow restoration within the deep venous system. During follow-up, a marked decrease in platelet count was observed, and hematology consultation was obtained. The patient was diagnosed as HIT, and anticoagulant regimen discontinued. Fondaparinux 2×2.5 mg was initiated. Additional supportive measures included limb elevation and compression therapy. The patient's clinical condition improved, and he was discharged with fondaparinux therapy.

Conclusion: PCD is a rare form of DVT associated with high morbidity and mortality. The presence of comorbidities such as malignancy and CKD complicates the treatment process. However, with appropriate clinical management, favorable outcomes can be achieved even in late-presenting subacute DVT cases in patients with multiple comorbidities.

Keywords: Phlegmasia cerula dolens, deep vein thrombosis, heparin induced thrombosithopenia

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PP-075

Diagnosis of aortic coarctation in a female patient with a history of spontaneous abortion

Mehmet Aslan[1], Ali Coner[2], Umut Serhat Sanri[2]

[1]Alanya Education and Research Hospital, Antalya, Türkiye
[2]Alanya Alaaddin Keykubat University, Antalya, Türkiye

Abstract

Aim: The prevalence of aortic coarctation is 6–8% of congenital heart diseases. The clinical diagnosis is based on the presence of hypertension in arteries proximal to the coarctation and low arterial pressure in distal vessels. In the literature, it has been associated with decreased uterine perfusion, eclampsia, and preeclampsia during pregnancy. Cases of maternal morbidity due to aortic rupture or dissection have also been reported. Surgical or endovascular repair prior to conception may reduce the risk of vascular complications during pregnancy. This case aims to evaluate whether aortic coarctation may have contributed to spontaneous abortion.

Material and Methods: A 20-year-old female patient presented to our clinic with complaints of fatigue and headache two months after occuring a spontaneous abortion at the 6th week of her first pregnancy. On physical examination, refractory hypertension (upper extremity blood pressure > 140/80 mmHg, upper/lower gradient: 90 mmHg), NYHA Class II dyspnea, and filiform femoral pulses were detected. Suspicion raised during transthoracic echocardiography led to computed tomography angiography, which revealed significant aortic coarctation (4 mm lumen) in the proximal descending thoracic aorta.

Results: Endovascular stenting was performed via the right femoral artery. Pre-dilatation was achieved using a 10 mm balloon, followed by post-dilatation with a 16 mm balloon. A PTFE-covered Cheatham-Platinum stent (18×45 mm, Optimus BX) was successfully deployed. Laminar flow was restored, and the pressure gradient was reduced to < 5 mmHg. No intraoperative complications occurred. The patient was discharged after three days of hospitalization with prescriptions for acetylsalicylic acid and ramipril. At the two-week follow-up, she was normotensive, and echocardiographic imaging showed no evidence of restenosis. CT angiography performed at six weeks confirmed stent patency without signs of migration or aneurysm formation. Exercise tolerance had improved.

Conclusion: Recent studies support endovascular stenting as a safe and effective alternative to surgery in adult aortic coarctation, with high procedural success and low complication rates. Furthermore, clinicians should consider the possibility that aortic coarctation may contribute to spontaneous abortion in young female patients.

Keywords: Spontaneous abortion, aortic coarctation, endovascular stent

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PP-076

Ischiatic nerve injury after radiofrequency ablation of lower extremity varicose veins

Cagla Canbay Sarilar, Onur Selcuk Goksel

İstanbul University Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: The treatment of varicose veins are traditional methods like stripping and minimally invasive methods which have become more popular in the past decade. Radiofrequency thermal ablation (RA) is one of the minimally invasive method which is indicated for the treatment of chronic superficial venous insufficiency in lower limb.

Material and Methods: Stripping could be associated with risk of injury in saphenous, sural, tibial and peroneal nerves. Although rates of nerve injury is decreased with endovascular methods, neural injury is still a predominant complication. Surgical removal of the great saphenous vein is associated with saphenous vein injury and the removal of lesser saphenous vein is associated with sural nerve, less commonly peroneal nerve injury.

Results: We reported a 50 year old female patient with ischiatic nerve injury after radiofrequency ablation treatment for great saphenous vein reflux. The patient had suddenly onset pain in the leg and paresthesia after RA. Ipsilateral distal sciatic nerve injury pattern was documented by clinical examination and electromyogram(EMG). In the literature,there were only few case reports regarding to ischiatic nerve injury after radiofrequency ablation.We referred patient to physiotherapy and exercise therapy. Endovenous radiofrequency ablation generally is perfomed under ultrasound guidance and thermal energy nearly 120 C°.

Conclusion: The mechanism of peripheral nerve damage after RA is unclear. The damage may be by thermal injury or local compression of edema. Postprocedural nerve injury is extremely rare. Electromyogram and magnetic resonance imaging are essential to diagnose the nerve injury.

Keywords: Ischiatic nerve injury, venous insufficiency, radiofrequency ablation

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PP-077

Pseudoaneurysm-driven competitive flow leading to functional failure of a femoral dacron graft

Ahmet Suha Arslan

Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: Dacron graft interposition is a widely used method for repairing major vascular injuries, particularly in the femoral artery. Although effective, long-term complications such as pseudoaneurysm formation and graft dysfunction may occur. We present a rare case in which pseudoaneurysmal competitive flow dynamics functionally bypassed a Dacron graft.

Material and Methods: A 58-year-old male presented with chronic swelling and pain in the right thigh accompanied by intermittent claudication. Ten years earlier, he had sustained a firearm injury to the thigh that was repaired with a Dacron graft interposition. Two subsequent operations for recurrent pseudoaneurysms were performed, with no further complications until the current admission. Examination revealed a pulsatile thigh mass with diminished distal pulses. Doppler ultrasound and CT angiography demonstrated pseudoaneurysms at both anastomotic sites of the graft. Remarkably, these pseudoaneurysms carried significant flow, effectively bypassing the graft and maintaining limb perfusion. Laboratory tests revealed no signs of infection and inflammatory markers were normal.

Results: Because of the patient's multiple prior operations and high surgical risk, endovascular treatment was considered. Digital subtraction angiography via a contralateral retrograde approach was attempted. A catheter was advanced from the aortic bifurcation toward the superficial femoral artery, but guidewire passage through the graft was unsuccessful. Further attempts to access the distal superficial femoral artery through the pseudoaneurysm sac failed due to tortuous flow and insufficient catheter support, and the procedure was terminated. Considering the patient's explicit preference to avoid further surgery, together with the adequate perfusion provided by the pseudoaneurysms and the high procedural risk, a conservative management strategy was adopted. The patient was prescribed antiplatelet therapy and followed with regular vascular imaging. At six months, the pseudoaneurysms remained stable, and he had no new symptoms or progression of claudication, with no evidence of limb ischemia.

Conclusion: Anastomotic pseudoaneurysms are recognized complications of vascular grafts, typically related to mechanical stress, infection, or technical factors. This case is unique in that the pseudoaneurysms, rather than the graft itself, provided the primary route of blood flow, essentially rendering the graft redundant. Although the graft remained patent, hemodynamic competition favored the pseudoaneurysms, raising concerns about long-term outcomes of this adaptation. In view of the patient's preference, conservative therapy was considered the most appropriate course.This case highlights the importance of individualized strategies for vascular graft complications and shows how hemodynamic adaptation can sometimes maintain adequate perfusion. Long-term follow-up and further studies are needed to clarify the durability and implications of such compensatory mechanisms.

Keywords: Blood vessel prosthesis, femoral artery, pseudoaneurysm, conservative treatment, endovascular management

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PP-078

Totally percutaneous endovascular aneurysm repair of a giant infrarenal abdominal aortic aneurysm with severe iliac angulation using brachial snare assistance: A case report

Nihat Soylemez, Burak Toprak, Ozkan Karaca, Ahmet Turhan Kilic

Mersin City Education and Research Hospital, Mersin, Türkiye

Abstract

Aim: We present a rare and technically demanding case of endovascular aneurysm repair (EVAR) performed entirely by percutaneous approach in a high-risk elderly patient with a giant infrarenal abdominal aortic aneurysm (AAA) and complex iliac anatomy.

Material and Methods: An 83-year-old male with impaired renal function (baseline creatinine ~1.8 mg/dL) was admitted with severe abdominal pain. Computed tomography angiography (CTA) revealed an infrarenal AAA measuring 87 mm, with tortuous iliac aneurysms extending to the external iliac arteries, creating a pronounced S-shaped configuration with nearly 90° angulation. The proximal neck was short and angulated (67° with 17 mm length). After multidisciplinary evaluation with cardiology and vascular surgery teams, EVAR was deemed the best option due to prohibitive surgical risk.The procedure was performed under conscious sedation using minimal diluted contrast. Bilateral femoral arteries were accessed percutaneously and closed with suture-mediated devices. A 12F sheath was introduced, and the main body of the endograft was advanced from the right femoral artery. Deployment of the contralateral limb was technically challenging due to severe iliac angulation; the guidewire could not be advanced from the left side. Therefore, a left brachial artery access was obtained, and using a snare technique, the guidewire was captured and externalized through the iliac system into the graft body, enabling successful delivery of the contralateral limb and extension pieces. Completion angiography demonstrated complete exclusion of the aneurysm sac with no endoleak.

Results: The patient's postoperative abdominal pain resolved completely. Renal function remained stable, with no deterioration in creatinine levels. Follow-up CTA confirmed durable exclusion of the aneurysm and patent endograft limbs.

Conclusion: This case demonstrates that totally percutaneous EVAR, combined with brachial snare-assisted guidewire capture, can be a feasible and safe strategy for managing giant infrarenal AAAs with hostile iliac anatomy. Such hybrid technical adaptations expand the applicability of EVAR in complex cases and offer a valuable alternative for high-risk elderly patients with limited renal reserve.

Keywords: Abdominal aortic aneurysm, endovascular aneurysm repair, percutaneous access, snare technique, iliac angulation

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PP-079

Infected femoral pseudoaneurysm and arteritis caused by a retained guidewire: An unusual case

Ali Demiray, Yalcin Gunerhan, Serkan Yildirim, Niyazi Gormus

Necmettin Erbakan University, Konya, Türkiye

Abstract

Aim: Endovascular procedures are widely used in the management of vascular diseases. However, these interventions may be complicated by pseudoaneurysm, infection, arteritis, and, in very rare circumstances, retained intravascular foreign body. We report a rare case in which a long guidewire retained after multiple interventions led to an infected femoral pseudoaneurysm and arteritis, eventually requiring surgical exploration and vascular reconstruction.

Material and Methods: A 25-year-old woman with a history of congenital arteriovenous malformation had undergone multiple endovascular interventions. At an outside institution, repeated retrograde procedures through the left femoral approach were performed. Balloon inflation at the deep femoral artery (DFA) level and local administration of Tissel and protamine failed to control bleeding. Over time, a pseudoaneurysm measuring 20 × 25 mm developed with progressive hematoma expansion, and the patient was discharged. She was admitted to our center with ongoing bleeding in the right femoral region and motor weakness of the lower limb. She was not on any antiplatelet or anticoagulant therapy.

Results: Emergency exploration revealed massive hemorrhage from the deep femoral artery (DFA) . During surgery, a 120-cm guidewire was identified within the vessel, which had advanced into the deep femoral artery and perforated the arterial wall, causing active bleeding. The wire was carefully removed. Arteritis and extensive arterial wall damage were observed involving the common femoral artery (CFA), superficial femoral artery (SFA), and deep femoral artery (DFA) . The diseased segment was resected, and reconstruction was performed using a 7-mm Dacron graft, which was anastomosed proximally to a healthy arterial segment. The perforation site in the DFA was repaired. Pathology confirmed infected pseudoaneurysm and arteritis. The postoperative course was uneventful under broad-spectrum antibiotic therapy, and the patient was discharged in good condition.

Conclusion: Although extremely rare, retained intravascular foreign bodies following endovascular procedures can result in severe and life-threatening complications. In this case, a long-retained guidewire perforated the deep femoral artery, leading to infected pseudoaneurysm, arteritis, and massive hemorrhage. This experience underscores the importance of early surgical intervention after unsuccessful endovascular attempts, thorough evaluation of preoperative imaging to identify potential foreign bodies, and careful graft selection supported by a multidisciplinary approach. Ultimately, this case highlights the need for vigilance among clinicians to recognize and prevent such rare but devastating complications.

Keywords: Retained guidewire, pseudoaneurysm, arteritis, vascular surgery

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PP-080

Clamp-induced double-site carotid artery dissection during endarterectomy: A rare iatrogenic complication

Adnan Ak, Mustafa Akbulut

Koşuyolu High Specialization Education and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Carotid endarterectomy (CEA) is the standard treatment for high-grade carotid artery stenosis. Although perioperative stroke is well recognized, iatrogenic clamp-related arterial dissection is exceptionally rare. We present a case of dual-site carotid artery injury occurring during surgery.

Material and Methods: A 71-year-old male with previous coronary artery bypass grafting, transcatheter aortic valve implantation, paroxysmal atrial fibrillation, and a history of transient ischemic attack was admitted for management of symptomatic left carotid artery stenosis. Preoperative angiographic imaging demonstrated 90% stenosis of the left internal carotid artery (ICA) origin and 30% stenosis of the contralateral common carotid artery (CCA). Left CEA with patch plasty was performed under general anesthesia.

Results: Despite an initially uneventful procedure, near-infrared spectroscopy monitoring revealed a decline in cerebral oxygenation during skin closure. Immediate digital subtraction angiography demonstrated clamp-related dissections of both the common and internal carotid arteries. Urgent carotid stenting was performed, restoring vessel patency and cerebral perfusion. The patient was discharged on postoperative day two without neurological deficits.

Conclusion: Clamp-induced carotid artery dissection, especially when involving both CCA and ICA, is an extremely rare but potentially devastating complication of carotid endarterectomy. Awareness of this entity may encourage early suspicion and facilitate timely rescue strategies, thereby minimizing neurological sequelae.

Keywords: Carotid endarterectomy, carotid artery dissection, vascular surgical procedures, stents

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PP-081

Endovascular treatment of pelvic congestion syndrome in a patient diagnosed with FMF and operated on for intussusception

Osman Yasar Isikli[1], Hayati Tastan[1], Hamit Serdar Basbug[1], Gamze Savci[2]

[1]Karamanoğlu Mehmet Bey University Karaman Training and Research Hospital, Department of Cardiovascular Surgery, Karaman, Türkiye
[2]Karamanoğlu Mehmet Bey University Karaman Training and Research Hospital, Department of Obstetrics and Gynecology, Karaman, Türkiye

Abstract

Aim: A 34-year-old female patient presented with leg pain. She has had unexplained abdominal pain for 5 years. She was diagnosed with FMF 3 years ago and received colchicine treatment. She has a history of jejunal intussusception surgery 1 year ago. After the surgery, her complaints did not subside; she described dysmenorrhea and dyspareunia. Sensitivity was observed in the left adnexal examination.We wanted to emphasise that pelvic congestion syndrome (PCS) should not be overlooked.

Material and Methods: Lower extremity venous Doppler was normal. BT angiography and MR angiography revealed dilation of the left ovarian veins. It was decided to perform endovascular embolisation for PCS. Access was gained via the right common femoral vein under local anaesthesia. Using a 0.035 wire and right catheter, images were obtained from the left renal vein followed by the left ovarian vein. Dilatation was seen in the pelvic veins. The catheter was advanced into the ovarian vein. Four 6mm, five 10mm, and three 12mm MultiBEAM® plug embolisation devices were placed. The left ovarian venous structures were seen to disappear. The patient's symptoms subsided, and she was discharged on the first day.

Results: Pelvic congestion syndrome is diagnosed in 40% of women with chronic pelvic pain. The pathophysiological condition in patients may be related to multiple factors. Blood stasis in the pelvis is the main factor. In women, the venous drainage of the reproductive system is parallel to the arterial circulation. Arteries and veins run together within the cardinal ligament. The uterine venous plexus drains before emptying into the internal iliac vein. The right ovarian vein drains directly into the inferior vena cava, while the left ovarian vein drains into the left renal vein. Transcatheter venography is the gold standard for diagnosis. An ovarian vein diameter ≥ 6mm, slowed blood flow ≤3 cm/s, retrograde blood flow, dysmenorrhoea, dysuria, and dyspareunia in the medical history confirm the diagnosis. In suspected nutcracker syndrome, the renal-caval pressure gradient is measured. In healthy individuals, it is ≤1 mmHg. A gradient between 1-3 mmHg is considered borderline. A balloon is applied first. If a gradient of ≥1 mmHg persists, a stent is applied. If the gradient is ≥3 mmHg, a stent is applied directly.

Conclusion: We believe that ovarian vein embolisation (metallic coils, monoethanolamine, polidecanol) performed under local anaesthesia is the gold standard treatment approach for patients with PCS, as it has demonstrated a success rate of 98-100% in randomised trials.

Keywords: Pelvic congestion syndrome, ovarian vein embolisation, metallic coil

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PP-082

Emergency abdominal aortic graft interposition due to subxiphoid gunshot injury

Esra Ozcan, Burak Duman, Busra Temel Yuksel

Ağrı Training and Research Hospital, Ağrı, Türkiye

Abstract

Aim: Gunshot injuries are associated with high mortality and morbidity. Abdominal aortic rupture requires rapid diagnosis and urgent surgery. Subxiphoid gunshot wounds may cause complex injuries involving the liver, major vessels, and spine. We report the emergency surgical management and multidisciplinary treatment of a 20-year-old female with abdominal aortic rupture, hepatic laceration, and T12 vertebral fracture after a subxiphoid gunshot wound.

Material and Methods: Case Report: A 20-year-old female was transferred from an external center intubated, hypotensive (60/40 mmHg), and with Glasgow Coma Scale 3. Transthoracic echocardiography showed left ventricular ejection fraction 65% without pericardial effusion. The entry wound was in the anterior subxiphoid midline, the exit at T12. CT angiography revealed left hepatic lobe laceration, abdominal aortic rupture, and T12 fracture.Urgent laparotomy demonstrated a 4-cm vertical rupture in the posterolateral aspect of the Ishimaru zone 6 abdominal aorta, proximal to the celiac artery. A 14-mm Dacron graft was interposed. After hemostasis, general surgery performed temporary abdominal closure for second look, and the patient was admitted to intensive care with high-dose inotropes and transfusion. On postoperative day 2, with no active hepatic bleeding, the abdomen was definitively closed. The patient was extubated on day 6 after weaning. Platelet transfusion was required for thrombocytopenia. On day 8, neurosurgery repaired the T12 fracture and spinal cord injury. Postoperatively, the patient remained hemodynamically stable. Control CT angiography confirmed graft patency without extravasation. She was later transferred to neurosurgery for ongoing management of paraplegia due to spinal cord injury.

Results: This case highlights that prompt surgery and intensive support can be lifesaving in abdominal aortic rupture from gunshot injury, though concomitant spinal trauma critically determines long-term outcome.

Conclusion: Early surgical intervention, intensive care, and coordinated teamwork among general, neurosurgical, and cardiovascular surgery teams were decisive for survival. Dacron graft interposition is a reliable method for rapid hemorrhage control and restoration of circulation in major vascular trauma.

Keywords: Trauma, abdominal aorta, aortic graft interposition

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PP-083

Extracranial internal carotid artery aneurysm: Surgical approach

Alizamin Yusifli, Arzum Kale, Mehmet Fatih Ayik, Suat Buket

İzmir Medicana International Hospital, İzmir, Türkiye

Abstract

Aim: Extracranial internal carotid artery (EICA) aneurysms constitute a significant clinical concern and are exceedingly rare. The most concerning major complications are rupture and thromboembolism. Treatment options for extracranial carotid artery aneurysms include open surgery, endovascular interventions, and non-operative approaches. While endovascular interventions have gained popularity, surgical treatment—complete excision of the aneurysm sac and arterial reconstruction—remains the gold standard of care. Our aim in presenting this writing is to enrich the literature and reiterate the importance of surgical treatment.

Material and Methods: This case report has been developed through a retrospective examination of the data from 81 year old patient operated on at our hospital, along with a review of the literature.

Results: The patient was successfully awakened in the operating room and extubated. The patient without postoperative complications was discharged with recovery.

Conclusion: Extracranial internal carotid artery (EICA) aneurysms, while rare, represent a serious clinical condition due to their potential to result in severe neurological complications. The gold standard for treatment involves the removal of the aneurysm and restoration of arterial continuity. Open surgery is regarded as the first-line treatment for symptomatic and large aneurysms.

Keywords: Carotid artery aneurysm, surgical treatment, complications

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PP-084

Vision is everything: "Usage of karl storz endoscopy device during pulmonary endarterectomy surgery"

Hakki Tankut Akay, Endri Balla, Arif Okay Karslioglu, Anri Koni, Denizhan Akpinar, Ecem Tugba Yamac, Elshad Mansimzada, Deniz Sarp Beyazpinar, Bahadir Gultekin, Atilla Sezgin

Baskent University Hospital,Ankara, Ankara, Türkiye

Abstract

Aim: The aim of this study is to evaluate the use of Karl Storz endoscopy as an adjunctive tool to improve the quality and completeness of thrombus removal during pulmonary endarterectomy (PEA) in patients with chronic thromboembolic pulmonary hypertension, particularly in the segmental and subsegmental branches of the right and left pulmonary arteries.

Material and Methods: From 16.12.2021–15.08.2023 14 cases of pulmonary endarterectomy were performed also using Karl Storz Endoscopy with these parameters: rigid, 0º angled, straight, 30 cm length and 2 mm width. It has an HD camera attached on the distal part of it which is connected to a monitor and at the same time magnifies the image and provides visualization with a high quality. Vision, quality of surgery and teaching potential were evaluated during this period. Overall impressions and feedback were generated by the surgical team.

Results: All 14 PEA surgeries were completed without any complication. Overall impressions and feedback were positive on the usage of Karl Storz Endoscopy as a useful tool on pulmonary endarterectomy operations. This tool provides a better view of the thrombus that lies on the segmental arteries of right and left pulmonary arteries using an HD camera attached to its distal end and its connection with a monitor. Surgical team agreed that Karl Storz Endoscopy is crucial on the removal of thrombus lying on segmental and subsegmental branches of right and left pulmonary arteries. It also has an important impact as a teaching potential of PEA technique to the trainees.

Conclusion: Karl Storz Endoscopy is a useful part of the surgical tools used in our clinic during pulmonary endarterectomy operations. It provides excellent visualization of segmental and subsegmental branches of right and left pulmonary artery during the removal of thrombus. Secondarily, we found this tool to be important in teaching trainees pulmonary endarterectomy operation technique.

Keywords: Karl storz endoscopy, thrombus, pulmonary hypertension

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PP-085

Compartment syndrome developing after sclerotherapy in an adolescent patient with venous malformation

Cihan Yetis, Olcay Murat Disli, Baris Akca, Mehmet Emin Murat, Mehmet Cengiz Colak

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Venous malformations can occur in various anatomical regions, most frequently in extremities, and pain is the frequent symptom. Treatment options include surgical excision, sclerotherapy, or a combination of both. This report presents the management of venous thrombosis and venous gangrene complications developed following sclerotherapy in an adolescent patient with venous malformation localized in the right forearm.

Material and Methods: A 12-year-old female patient was admitted to our hospital with complaints of pain and swelling localized in the distal right forearm. Anamnesis and physical examination suggested a vascular malformation, which was subsequently confirmed by color Doppler ultrasonography and contrast-enhanced MRI of the right upper extremity, revealing a 3 × 1.5 × 4.5 cm lesion in the volar aspect of distal radioulnar region. Also, upper extremity arteriography was performed to exclude arteriovenous malformation. No arterial component was identified on imaging, and the lesion was diagnosed as a venous malformation. After multidisciplinary evaluation by interventional radiology and cardiovascular surgery, sclerotherapy was planned.

Results: The procedure was performed under ultrasound guidance with micropuncture needle access, and contrast was injected. Imaging showed that the venous malformation communicated with deep veins via superficial channels. After tourniquet and compression were applied, no flow into the deep venous system was observed, and sclerotherapy with 3% polidocanol was carried out. Postoperatively, the patient was admitted to the ward and started on enoxaparin sodium. Four hours later, she developed cyanosis and swelling of right hand with limited wrist and finger movements. Radial and ulnar pulses were palpable and Doppler ultrasonography demonstrated patent arteries but thrombosis of the radial and ulnar veins. Enoxaparin sodium therapy was continued, and limb elevation was initiated.Due to progressive edema and clinical signs of compartment syndrome, orthopedic consultation was obtained, and the patient underwent emergency fasciotomy. With daily wound care and dressing edema, cyanosis, and motor dysfunction improved. Once her clinical status stabilized, fasciotomy closure was performed by the orthopedic team. The patient experienced no further complications during follow-up and was discharged in stable condition.

Conclusion: When evaluating venous malformations, their relationship with the deep venous system should be thoroughly assessed, and sclerotherapy should be performed with great caution. The choice of agents and techniques should be tailored to the degree of venous dilatation. The risk of thrombotic complications potentially leading to impaired limb perfusion, should be kept in mind after sclerotherapy. Therefore, careful monitoring is essential and rapid, effective management of complications plays critical role in limb salvage.

Keywords: Vascular malformations, venous thrombosis, sclerotherapy, compartment syndromes, fasciotomy

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PP-086

Peripheral arterial ischemia associated with vascular tuberculosis

Ekin Ilkeli

Bolu Private Cağsu Hospital, Bolu, Türkiye

Abstract

Aim: It's crucial to keep in consideration that a variety of diseases can look like vasculitis in terms of its clinical, radiological, and histological characteristics. While TB is frequently referred to as the great imitator, it must be taken into account early on in the differential diagnosis of vasculitis.

Material and Methods: 58 years old female patients came at our clinic with bilateral lower extremity pain and toe discolouration. During examination; leg ulcers, digital gangrene and absent peripheral pulses. Distal pulses in lower limbs (both posterior tibial and dorsalis pedis arteries) were absent.Normal femoral and popliteal flow was found by arterial Doppler ultrasonography. The findings of the EMG was consistent with peripheral neuropathy. An x-ray of the patient's chest showed apical scarring, which is consistent of mycobacterial diseases. A sputum smear was positive for acid-fast bacilli, confirming the diagnosis.

Results: Our patient suffered from pulmonary tuberculosis as well as the extremely rare tuberculosis-related leukocytoclastic vasculitis. Antituberculosis medications were gradually initiated. At his last follow-up, the patient was in good condition.

Conclusion: When evaluating a patient who presents with the varied symptoms of suspected vasculitis, a higher index of suspicion and increased knowledge of vasculitis mimics such as tuberculosis are required. Therefore, whenever vasculitis is considered, it is wise to include TB in the differentials.

Keywords: Tuberculosis, leukocytoclastic vasculitis, ischemia

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PP-087

Successful management of multiple femoral stent occlusions with surgical stent removal, kissing heparin-bonded covered stents, and femoro-popliteal dacron graft

Gurkan Demirdizen

Tunceli State Hospital, Tunceli, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is increasingly treated with endovascular interventions such as angioplasty and stenting. However, in-stent restenosis and stent occlusion remain significant challenges, particularly in multilevel disease. When endovascular reintervention fails or is not feasible, surgical options become essential. We present a rare case of multiple femoral stent occlusions successfully managed with surgical stent removal, kissing Heparin- Bonded Covered Stents, and a femoro-popliteal Dacron graft.

Material and Methods: A 60-year-old male presented with bilateral leg pain, pallor, and coldness. His history included percutaneous intervention with multiple stents extending from the right iliac artery to the popliteal artery.Physical examination revealed absent distal pulses bilaterally. Computed tomography angiography demonstrated occlusion of all right iliac-popliteal stents, significant left iliac stenosis, and occlusion of the left SFA. Also on initial neurological examination, the patient demonstrated significant muscle weakness in the lower extremities, with muscle strength graded as 2/5 to 1/5. Additionally, the patient reported urinary and fecal incontinence.

Results: Stent occlusion remains a significant complication after peripheral interventions. In cases of multiple overlapping stents, endovascular recanalization can be technically challenging and often unsuccessful. Re-stent occlusion occurs quite frequently in such interventions. Surgical removal of occluded stents has been described rarely but offers an effective solution when combined with adjunctive revascularization techniques.Surgical exploration through a right femoral incision exposed multiple occluded stents. A 5- cm longitudinal arteriotomy was performed, and three occluded stents were removed en bloc. The artery was repaired using patch angioplasty. Subsequently, kissing Heparin- Bonded Covered Stents were deployed in the bilateral iliac arteries. Finally, a femoro-popliteal bypass with a Dacron graft was performed for the left leg. The patient's right lower extremity distal pulses could be palpated.

Conclusion: Hybrid surgical and endovascular strategies may represent the optimal treatment for complex multilevel PAD, particularly in patients with multiple stent occlusions. Surgical stent removal, combined with iliac kissing Heparin-Bonded Covered stents and femoro- popliteal bypass, can restore limb perfusion effectively and safely.

Keywords: Stent removal, stent occlusion, endovascular tecniques, grefts

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PP-088

Revascularization techniques in subclavian artery stenosis causing recurrent brachial artery embolism: Case report

Adem Reyhancan[1], Salih Tuysuz[2], Mursel Buyukadali[1], Fadil Shehu[1], Fatih Mehmet Isik[1]

[1]Trakya University Hospital, Edirne, Türkiye
[2]Mardin Training and Research Hospital, Mardin, Türkiye

Abstract

Aim: Chronic peripheral arterial disease and acute arterial occlusion in the arteries of the upper extremities are less common than in the arteries of the lower extremities. 1 The underlying cause is usually atherosclerotic lesions in the subclavian artery or emboli of intracardiac origin. 2 Even with correct and timely treatment, acute upper limb ischemia(AULI) can cause various complications such as permanent disability, amputation, recurrence or death. 3 For this reason, once the AULI has been treated, the underlying pathology should be treated with a holistic approach. Surgical thrombectomy, which can initially be seen as aspiration of the thrombus occluding the artery, can cause many complications. In this case report, we would like to present the unexpected clinical outcomes that occurred in a patient in whom we performed embolectomy with a diagnosis of AULI and the hybrid approach we used.

Material and Methods: A fifty-two-year-old female patient was admitted to the emergency room with pain and numbness in her left forearm and hand. On her current application, the left upper extremity from the shoulder was cold and pale, there was hypoesthesia in the hand, and muscle strength was rated 3-4/5. The left axillary, brachial, ulnar and radial pulses were not palpable. The newly obtained CTA showed that the upper extremity arteries from the proximal left subclavian artery onwards were completely occluded, and she was taken for emergency embolectomy. The thrombectomy was performed both proximally and distally. Proximal flow and backflow were good enough and the operation completed. The patient complained of severe headache and diplopia in the 4th hour postoperatively, and neurologic examination revealed left gaze restriction and nystagmus. Cranial imaging revealed pancerebellar ischemia, compression of the 4th ventricle and medulla oblongata. Decompression surgery was performed by neurosurgery on the morning of postoperative day 1. After the decompression surgery, the patient's headache and diplopia regressed.

Results: Cases of vertebrobasilar embolization secondary to subclavian lesions have also been reported. 5 In our case, vertebrobasilar embolism also developed during this process. Therefore, as sufficient revascularization was not achieved, a hybrid technical approach was applied, including bypass, embolectomy, and finally peripheral angiographic intervention methods.

Conclusion: In patients with acute upper extremity ischemia, embolectomy is used as the first-line revascularization method in order to reduce morbidity and decrease the risk of amputation. We believe that in cases where ischemia persists or recurs despite embolectomy, peripheral bypass or endovascular interventional methods should be considered.

Keywords: Endovascular, embolectomy, brachial

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PP-089

Acute brachial artery occluding laceration following pediatric supracondylar humerus fracture fixation: A case report

Gungor Temizkan, Mehmet Asam

Gaziantep University Faculty of Medicine, Gaziantep, Türkiye

Abstract

Aim: This study aims to present the emergency surgical treatment of brachial artery compression and partial laceration following a previously operated supracondylar humeral fracture and to demonstrate the importance of a multidisciplinary approach.

Material and Methods: IntroductionA 5-year-old male patient was referred to our clinic after closed reduction and percutaneous pin fixation for a left supracondylar humeral fracture at an external center due to filiform distal pulses in the left wrist. The patient was immediately taken to the operating room.

Results: FindingsAfter preoperative orthopedic consultation, a 5-cm incision was made in the medial aspect of the left arm under general anesthesia. The brachial artery was explored; no pathology was detected at the incision site. The incision, extended to the artery bifurcation, revealed the brachial artery entrapped between the fracture fragments in the antecubital fossa. With the participation of the orthopedic team, the fixation wires were removed, and the artery was released. Following release, a partial laceration was detected on the lateral side of the brachial artery. The laceration was repaired with 7/0 polypropylene sutures. Following repair, proximal brachial, radial, and ulnar artery pulses became palpable. Revision bone fixation was performed by the orthopedic team. After bleeding control, the layers were closed anatomically. Postoperatively, radial and ulnar pulses were palpable at the wrist. The extremity was placed in a long-arm splint.

Conclusion: Acute arterial compression following humeral supracondylar fracture fixation is a serious complication requiring urgent surgical exploration and revision. Distal perfusion was successfully achieved with release of the brachial artery compression and laceration repair. This case highlights the importance of vascular injury risk and prompt intervention in pediatric supracondylar fracture surgery, and demonstrates the vital role of orthopedic-vascular surgery collaboration in the management of vascular complications.

Keywords: Humeral fractures, brachial artery/injuries, vascular system injuries

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PP-090

Case report: Incidentally detected multiple peripheral arterial aneurysms during coronary angiography

Mehmet Ugurcan Turhan, Yeliz Esra Tas, Tufan Sener, Arif Gucu

İstanbul SBU Haseki Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral artery aneurysms (PAAs) are uncommon vascular abnormalities characterized by localized dilatation of the arterial wall. While frequently asymptomatic, they carry a significant risk of complications, including thromboembolism, rupture, and limb ischemia. The aim of this report is to present a case of multiple peripheral artery aneurysms incidentally diagnosed during coronary angiography, to highlight the diagnostic pathway, management strategy, and the role of early surgical intervention in selected lesions.

Material and Methods: We describe a 60-year-old male patient with no known systemic disease or family history of vascular pathology. During diagnostic coronary angiography, an aneurysmal dilatation of the right common femoral artery was noted. This prompted further evaluation with contrast-enhanced computed tomography angiography (CTA) of the abdominal and lower limb vasculature. Multidetector CTA was performed with multiplanar reconstructions to assess aneurysm morphology, diameter, and thrombotic involvement.Based on the imaging findings, a surgical procedure was performed for the right femoral artery aneurysm under general anesthesia via a longitudinal groin incision. Aneurysmectomy was followed by arterial reconstruction with an interposition polytetrafluoroethylene (PTFE) graft. Operative details, graft patency, and hemodynamic outcomes were documented. Smaller aneurysms in the popliteal arteries were managed conservatively, and a structured follow-up program including clinical assessment, duplex ultrasonography, and CTA was established. Written informed consent was obtained from the patient for publication.

Results: CTA confirmed multiple aneurysms: a 24 mm aneurysm in the right external iliac artery, a 25 mm aneurysm containing intraluminal thrombus in the right common femoral artery, an 18 mm and a 5 mm aneurysm with mural thrombus in the right popliteal artery, and a 13 mm aneurysmal dilatation in the left popliteal artery. The patient underwent successful aneurysmectomy and PTFE graft reconstruction of the right femoral artery. Postoperative recovery was uneventful, and Doppler ultrasonography confirmed good graft patency and restoration of distal flow. The bilateral popliteal artery aneurysms were managed conservatively, with antiplatelet therapy and regular follow-up. At six months, CTA demonstrated preserved graft function without recurrence or progression of untreated aneurysms. The patient remained asymptomatic with no ischemic complications.

Conclusion: This case emphasizes the importance of systemic vascular imaging when a peripheral artery aneurysm is detected, as multiple aneurysms may coexist. Surgical repair remains the cornerstone of treatment for symptomatic or high-risk aneurysms, while smaller and asymptomatic lesions may be managed conservatively. Early recognition, individualized management, and close surveillance are critical in preventing life-threatening complications and improving patient outcomes.

Keywords: Peripheral artery aneurysm, femoral artery aneurysm, popliteal artery aneurysm, computed tomography angiography, surgical management

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PP-091

A rare case of giant extracranial internal carotid artery aneurysm and its surgical treatment

Mehmet Ertugrul, Dilsad Amanvermez Senarslan, Esra Barluk, Funda Yildirim

Manisa Celal Bayar University, Manisa, Türkiye

Abstract

Aim: Aneurysms of the extracranial internal carotid artery are uncommon but can be responsible for serious complications such as thrombosis, embolism, compression symptoms or rupture. The underlying causes of aneurysm include atherosclerosis, fibromuscular dysplasia, trauma, previous carotid artery surgery, infection, dissection, syphilis and a congenital defect. Anatomical location defined according to the schema developed by Attigah et al, using five types of morphological classifications based on the location of the aneurysm along the carotid artery. Type I: Isolated and short aneurysms of the internal carotid artery above the carotid bulb. Type II: Long aneurysms of the internal carotid artery, ranging from the carotid bulb up to the line of Blaisdell. Type III: Aneurysms of the proximal ICA and the carotid bifurcation. Type IV: Aneurysms involving the common carotid artery (CCA) and ICA as Type III, extending far more distally and proximally. Type V: Isolated aneurysms of the CCA. Here we present a giant Type I saccular internal carotid artery aneurysm case and the surgical notes.

Material and Methods: 69 years old female patient was admitted to our clinic as neck swelling, restriction of head motion and painful palpation over the swelling and the history of cerebrovascular event with minor sequela. The preoperative CTA imaging was shown as the left internal carotid artery aneurysm just above the carotid bifurcation. The preparations for the routine operation were made. The standart neck insicion parallel to the sternoclaidomastoid muscle and division of the platysma were performed. The common carotid artery was snarred firstly. Then the aneurysm sac was separated carefully from the cranial nerves 12th and 9th and later external and distal internal carotid artery were snarred. After heparinization and the clamping the arteries, approximately 4-5 cm aneurysmal sac was removed. The both ends of the resected arteries were anastomosed primarily by end to end. The operation was completed by usual fashion.

Results: The removed segment was send for the pathologic investigation. The saccular aneurysm was removed without nerve injury and the mass effect of the aneurysmal sac and the neck motion restriction were also better when compared to preoperative time.

Conclusion: The treatment choice depending on the characteristics of the aneurysm and target arteries, individualized invasive treatments for extracranial carotid artery aneurysm primarily include open surgery, endovascular treatment and hybrid treatment, and they all appear to be safe and effective.

Keywords: Carotid artery, aneurysm, surgery

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PP-092

Management of a ruptured venous cannula in the inferior vena cava

Cemal Kemaloglu, Kadir Sagdic

Antalya Memorial Hospital, Antalya, Türkiye

Abstract

Aim: The aim of this presentation is to share the management of a venous cannula which was broken during decannulation to wean ECMO treatment.

Material and Methods: A 61-year-old male patient (166 cm, weight 95 kg) was diagnosed with sudden severe acute respiratory distress syndrome after bilateral hip prosthesis implantation surgery in another hospital. He was transferred to our intensive care unit (ICU) for ECMO treatment due to hypoxia that could not be corrected despite mechanical ventilation. (ARDS – CT scan – Figure 1)(X-ray – Figure 2). The patient underwent emergency V-V ECMO. The pump and oxygenator were LivaNova™. For drainage, a BioMedicus - Medtronic™ 21Fr (Minneapolis, USA) cannula was placed in the left femoral vein to the level of the distal inferior vena cava. For reinfusion, a Medtronic BioMedicus™ 19Fr (Minneapolis, USA) cannula was placed in the right internal jugular vein. At ECMO initiation, rotation speed was 3000 rpm, ECMO flow was 3.9 L/min, drainage pressure was – 39 mmHg, and there were no signs of poor drainage. The required dose of heparin was given as a continuous infusion.

Results: On the 3rd day of treatment, ECMO gave a low flow alarm and vibration and advanced negative pressure were noticed in the drainage cannula. As a precaution, ECMO flow was reduced to 1200 RPM and flow to 1.1 L/min, and volume replacement was performed rapidly. After these applications, the flow increased to normal flow and no similar problem was encountered again during the treatment process.On the 6th day of ECMO treatment, the decision to wean the patient was made after arterial blood oxygen values improved and ARDS findings disappeared on chest X-Ray images (Figure 3). ECMO support was gradually reduced. The right jugular cannula was removed without any problems. However, there was resistance when the left femoral venous cannula was pulled out but it could be removed later. It was noticed that the tip of the cannula was missing and the circular wires were extending from the intervention site. (Figure 4). The wire was cut from the exit point from the skin and hemostasis was achieved. Venography performed on the patient revealed that venous admission did not cause any blood flow problems (Figure 5). Because the tip of the connula was likely adherent to the inferior vena cava, no complicated surgery was planned.

Conclusion: The patient's 3-month Doppler and 6-month venograms were also normal.

Keywords: Complications, treatment strategia, venous cannula

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PP-093

Childhood congenital vascular malformation in the leg: A rare inborn lesion

Yeter Basbug[1], Volkan Kizilgoz[2], Hamit Serdar Basbug[3], Sukru Arslan[3]

1Karamanoğlu Mehmetbey University Faculty of Medicine, Department of Pediatrics, Karaman, Türkiye
[2]Erzincan Binali Yildirim University Faculty of Medicine, Department of Radiology, Erzincan, Türkiye
[3]Karamanoğlu Mehmetbey University Faculty of Medicine, Department of Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: Vascular malformations are rare anomalies resulting from an inborn error during the vascular network development. They are rare inborn lesions characterized by deficient smooth muscle layer leading to vascular dilatation with impaired functions. Vascular malformations may occur in a spectrum of clinical presentation ranging from ectasia or varicosity to a more complicated lesion that can affect any organ system. Although they are present at birth, they grow proportionally during childhood and adolescence, becoming clinically evident later in life. The symptoms differ depending on location, extension, and size. They may bleed and may result in disfigurement, functional impairment, and pain. In this case report, successful diagnosis and surgical treatment of a child with a congenital vascular malformation (CVM) in his right leg was presented. This case and its detailed intraoperative, postoperative, and radiological images are original as there is no similar example in the available literature.

Material and Methods: A 13-year-old boy applied to the department of pediatrics outpatient clinic with a localized mass on his right leg. Anamnesis revealed that the mass was present and palpable when he was 3-year-old with a hazelnut size and grew proportionally with his growth. The inspection and physical examination demonstrated a painless solid 5x4 cm mass on the anterolateral mid-tibial portion of his right leg. There were no signs of circulatory defect, and pedal pulses were palpable. The contrasted Magnetic Resonance Imaging (MRI) was then planned. The MRI was performed using a 1,5 T MR machine (Magnetom Essenza; Siemens, Erlangen, Germany) and an 8-channel extremity coil.

Results: The child was diagnosed with a CVM located beneath the dermis, superficial to the crural muscles and fascia. The mass was surgically removed with a longitudinal skin incision under local anesthesia. The excised material was sent to the pathology lab. The pathology report demonstrated a benign mesenchymal-origin vascular structure surrounded by a thin fibrous capsule compatible with a CVM. There were no mitosis, necrosis, and atypic structures within the lesion, proving the lesion was not malignant. The boy was discharged postoperative second day with a total cure. The twenty-eighth-day follow-up revealed a clean and healed skin incision with no hematoma inside.

Conclusion: In conclusion, CVMs are a challenge that requires a dedicated multidisciplinary diagnostic approach and therapeutic management, especially in the treatment of children. Establishing an integrated multidisciplinary medical evaluation will lead to diagnose and treat these rare complex vascular entities better. Patient care reaches an optimum standard only in this manner.

Keywords: Vascular malformations, lower extremity, congenital abnormality

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PP-094

Subclavian steal syndrome: A rare cause of posterior cerebral ischemia

Isil Tasoz Ozdas, Gizem Isik Okten, Tuna Demirkiran, Gokhan Erol, Kubilay Karabacak

University of Health Sciences, Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Turkey

Abstract

Aim: Subclavian steal syndrome is a rare vascular syndrome characterized by retrograde flow from the anterior cerebral circulation to the posterior circulation, usually resulting from stenosis or occlusion of the proximal portion of the subclavian artery secondary to atherosclerotic disease. This study presents a case of subclavian steal syndrome treated endovascularly.

Material and Methods: A 55-year-old male patient was consulted to us from the emergency department due to recurrent syncope attacks. His medical history revealed a CABG procedure 11 years ago, hypertension, and active smoking. Two months ago, the patient complained of numbness in the left half of his face. In the head and neck CT angiography performed in the emergency room, 90% stenosis was detected in the right internal carotid artery (ICA) and the left CCA was totally occluded. The interventional radiology clinic implanted a balloon expandable stent in the right ICA. After discharge, the patient's syncope persisted, and the cardiology clinic investigated the etiology, but no malignant arrhythmia was detected. During hospitalization, a myoclonic seizure was observed, and the neurology clinic initiated levetiracetam and discharged him. The patient presented to the emergency department again with syncope, and we were consulted after a CTA revealed an occlusion in the proximal right subclavian artery. On physical examination, the patient's right upper extremity pulses were palpable, and no arterial blood pressure difference was observed between the extremities. Doppler ultrasonography revealed reverse flow in the right vertebral artery. Subclavian steal syndrome was suspected. DSA revealed proximal occlusion of the right subclavian artery and a patent right ICA stent, prompting the decision to undergo endovascular treatment. Following balloon angioplasty, an 8.0x39 mm balloon expandable stent was implanted. The patient was discharged with prescriptions for acetylsalicylic acid, clopidogrel, and atorvastatin. No vascular pathology or cerebrovascular accident was detected during follow-up examinations.

Results: While subclavian steal syndrome is generally asymptomatic, serious complications can be prevented with appropriate treatment once recognized. Early diagnosis is critical for preventing serious complications. It should be noted that subclavian steal syndrome can cause clinical conditions that can be confused with cerebrovascular events.

Conclusion: Subclavian steal syndrome should be considered and included in the differential diagnosis, especially in patients with arm-leg pressure gradients and vertebrobasilar symptoms. Conservative approaches are sufficient in asymptomatic cases, while endovascular intervention or surgery may be necessary in symptomatic patients. Currently, endovascular treatments are gaining prominence due to their low morbidity rates and short recovery times.

Keywords: Subclavian steal syndrome, subclavian stenosis, posterior ischemia, vertebral artery, endovascular treatment

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PP-095

Functional status assessment with the turkish-adapted CIVIQ-20 questionnaire in patients undergoing surgical intervention for chronic venous insufficiency

Muhammet Safa Yigit, Omer Bayezid, Cengiz Turkay, Ilhan Golbasi, Ozan Erbasan, Salih Ozcobanoglu

Akdeniz University Cardiovascular Surgery, Antalya, Turkey

Abstract

Aim: This study carried out the psychometric validation of the Chronic Venous Disease Quality of Life Questionnaire (CIVIQ-20) as a quality of life (QOL) tool for patients with chronic venous disease (CVD).

Material and Methods: Patients aged 18 and above, with CEAP stages ranging from C0s to C6, were included in the study. The diagnosis was established by cardiovascular surgery clinicians through CVD symptoms and visual examination of the lower extremities. Quality of life was assessed using the CIVIQ-20 administered to patients. Reliability, structural validity, and convergent validity of CIVIQ-20 were examined, and QOL of CVD patients was evaluated according to CEAP C stages.

Results: A total of 560 participants who fully completed the CIVIQ-20 were included in the study. CIVIQ-20 demonstrated high reliability, structural validity, and convergent validity; however, the structure of its three dimensions (pain [P], physical [PHY], and psychological [PSY]) was found to be suboptimal. After adjusting for age, body mass index, and number of CVD symptoms, analyses showed that CIVIQ-20 global, P, PHY, and PSY scores progressively decreased from CEAP C0s to C6. These differences were present in both genders. The progressive deterioration in quality of life primarily involved pain and physical items. Across all CEAP stages, P and PHY scores were lower than PSY scores. The global scores for men and women were as follows: C0 – 76.7 and 73.9; C1 – 75.5 and 70.6; C2 – 67.8 and 64.5; C3 – 68.3 and 61.6; C4 – 60.7 and 54.6; C5 – 49.5 and 50.2; and C6 – 41.3 and 46.7.

Conclusion: CVD in the lower extremities has a significant impact on quality of life, both physically and psychologically; physical quality of life components (P and PHY items) have more pronounced importance. CIVIQ-20 is a valuable tool for evaluating the quality of life in CVD patients. Further research is required to confirm the stability of two of its dimensions.

Keywords: Chronic Venous Disease Quality of Life Questionnaire, endovenous laser , chronic venous disease, radio frequency

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PP-096

Providing a catheter-free vascular access in hemodialysis patients with arteriovenous fistula aneurysm

Ferdi Peynirci

Kütahya City Hospital, Kütahya, Turkey

Abstract

Aim: Arteriovenous fistula aneurysms are one of the common complications encountered in hemodialysis patients. They are frequently accompanied by extremity ischemia and result in closure of the arteriovenous fistula (AVF). In our study, we present our series of patients with AVF aneurysms who underwent aneurysm raphe repair, and planned creation of a new AVF prior to aneurysm resection to preserve the catheter-free vascular access.

Material and Methods: Hemodialysis patients with arteriovenous aneurysm who underwent surgery between January 2025 and January 2026 were included in the study. Patient data were retrospectively obtained. Baseline characteristics, reason for operation, procedure performed, site of AVF, and operative characteristics were investigated. The salvaged AVFs, provided catheter-free vascular access and complication were assessed.

Results: A total of 16 patients were included in the study. The mean age was 65.8 ± 8.4. Hypertension was found in 12 patients and 8 patients were diabetic. Reasons for operation were rupture tendency, extremity ischemia, insufficient blood flow and infected thrombosed aneurysm. The existing AVF was salvaged in 8 patients, and catheter-free vascular access was provided in 3 patients by creating a new AVF on the other extremity. All patients were operated under local anaesthesia. Wound infection was seen in 2 of the patients.

Conclusion: Aneurysms are one of the most common complication of the AVFs. Catheter-free vascular access can be achieved in these patients by aneurysm raphe repair or by creating a new planned AVF prior to AVF closure.

Keywords: Arteriovenous fistula, aneurysm, vascular access, catheter, hemodialysis

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PP-097

Recurrent brachial trombosis with right shoulder dislocation: A case report

Mert Can Dinccag, Ahmet Aydin, Mustafa Yilmaz

Hacettepe University Hospitals Cardiovacular Surgery Department, Ankara, Turkey

Abstract

Aim: The aim of this case report is to remind surgeons of the catastrophic consequences that may arise from discrepancies between radiological imaging and its interpretation in acute arterial embolism, and to emphasize the necessity of re-evaluating the patient's history and all imaging studies in cases with recurrent thrombi after embolectomy.

Material and Methods: A 26-year-old male patient was admitted to our clinic with a history of right shoulder subluxation and recurrent right brachial arterial embolism. The patient, who had undergone a recent Latarjet procedure due to right shoulder subluxation and a depressed fracture of the humeral head, presented with weak distal pulses and distal filling provided through collateral circulation. Upon reviewing CT scans obtained at outside centers, in addition to brachial artery emboli, we noted a focal ectasia in the right subclavian artery with peripheral thrombus formation within the ectatic area, which had not been reported in the CT interpretation. The patient had undergone four embolectomy procedures; however, since no intervention had been made to the subclavian artery, arterial embolism recurred each time. The patient was admitted to our service for a hybrid procedure.An endovascular intervention was first performed by the interventional radiology department via the right femoral artery. A 9-mm self-expandable stent was deployed in the focal ectatic segment of the subclavian artery, restoring adequate flow. Subsequently, the patient was transferred to the operating room for an axillo-brachial bypass. The proximal segment of the left great saphenous vein was harvested as a graft. Following proximal and distal embolectomies, an axillo-brachial bypass with the saphenous vein was performed.

Results: "The patient, who was monitored in the intensive care unit for a short period postoperatively and then in the ward, was discharged on the third day with palpable distal pulses."

Conclusion: Acute arterial embolisms are vascular pathologies that threaten limb viability. Independent evaluation of imaging studies by the surgeon, rather than relying solely on radiological reports, is of paramount importance. Particularly in cases of recurrent embolism, investigating for potential embolic sources proximal to the occluded segment plays a critical role in treatment and represents a key consideration for every vascular surgeon.

Keywords: Arterial embolism, axillo-brachial bypass, recurrent embolism, subclavian artery stent, hybrid procedure

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PP-098

Minimally invasive salvage technique using eptfe graft for brachiocephalic arteriovenous fistula aneurysms

Uzeyir Yilmaz

Kastamonu Education and Research Hospital, Kastamonu, Türkiye

Abstract

Aim: This study aims to present and evaluate a minimally invasive surgical technique using an ePTFE graft for the salvage of brachiocephalic arteriovenous fistula (AVF) aneurysms, while maintaining the functionality of the existing vascular access for hemodialysis.

Material and Methods: Between 2017 and 2025, 14 patients (10 males, 4 females; mean age: 54.5 years) underwent surgical treatment for brachiocephalic AVF aneurysms in our Cardiovascular Surgery Department. Surgical indications were thrombosis and AVF dysfunction in 10 patients, spontaneous rupture with active bleeding in 3 patients, and cosmetic concerns associated with anxiety in 1 patient. The aneurysmal segments were resected, and a 6 mm ePTFE graft was interposed between the proximal and distal healthy portions of the cephalic vein through small skin incisions.

Results: All patients successfully resumed hemodialysis via the newly placed graft within 24 hours postoperatively. No perioperative complications such as infection, hematoma, neurological deficit, or ischemia were observed. None of the patients required central venous catheterization or additional interventions. The mean follow-up period was 3 months.

Conclusion: This minimally invasive graft interposition technique provides a safe and effective option for the surgical salvage of brachiocephalic AVF aneurysms, allowing continued use of the same limb for hemodialysis access without the need for alternative vascular routes.

Keywords: Hemodialysis access, brachiocephalic arteriovenous fistula, minimally invasive surgery

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PP-099

Diffuse intramuscular venous malformation of the leg: A rare congenital vascular anomaly

Hamit Serdar Basbug[1], Volkan Kizilgoz[2], Osman Yasar Isikli[1], Hayati Tastan[3]

[1]Karamanoğlu Mehmetbey University, Faculty of Medicine, Department of Cardiovascular Surgery, Karaman, Türkiye
[2]Erzincan Binali Yildirim University, Faculty of Medicine, Department of Radiology, Erzincan, Türkiye
[3]Karaman Training and Research Hospital, Department of Cardiovascular Surgery, Karaman, Türkiye

Abstract

Aim: Venous malformations are hemodynamically inactive slow-flow vascular anomalies resulting from an inborn error in the venous network development. They are rare congenital lesions characterized by deficient smooth muscle layer leading to venous dilatation and impaired vascular functions. Vascular malformations may occur in a broad spectrum of clinical presentation ranging from simple varicosity or ectasia to a more complex lesion that can invade any organ system, especially muscle. The symptoms are variable depending on their location, size, and extension. They may result in bleeding, pain, functional impairment, and disfigurement. In this case report, a young patient having a congenital diffuse intramuscular venous malformation in her left leg was presented, accompanied by detailed radiological and morphological images. This case is original as there is no similar sample in the available literature.

Material and Methods: A 21-year-old female applied to the cardiovascular surgery outpatient clinic with diffuse swelling on her left leg. According to the inspection and physical examination, the left crural diameter was increased starting from ankle to calf relatively compared to the right leg. Distal pulses were palpable, and there were no signs of hypoperfusion or ischemia. The Doppler Ultrasound (DUS) images revealed a partially thrombosed vascular lesion (Figure 2). The contrasted Magnetic Resonance (MR) imaging was then performed. The axial and coronal planes of fat-saturated T1 weighted, fat-saturated T2 weighted, and contrast-enhanced T1 weighted images were included in the standard extremity MR imaging. In the light of these radiological imaging techniques, the patient was diagnosed with an intramuscular VM located extensively deep inside the crural muscles.

Results: The spectrum of vascular anomalies is evolving through the interaction between different medical specialties. For a long while, this subject has been camouflaged by its nomenclature and the perplexing variety of its descriptive terminology. The exact terms have been used for entirely different lesions, causing a misunderstanding of the pathology. For instance, the term "hemangioma" is the most remarkable example applied to all vascular lesions of different causes and clinical presentation. This confusion in the terminology is responsible for misdiagnosis, improper treatment, and misdirected academic studies. Moreover, interdisciplinary dialogue in this subject has been hindered because each specialty has its own nosological framework.

Conclusion: In conclusion, vascular anomalies are a challenge that requires a dedicated multidisciplinary diagnostic approach and therapeutic management. Patient care reaches an optimum standard only when experts establish an integrated medical evaluation in related fields to understand these complex vascular entities better.

Keywords: Vascular malformations, lower extremity, congenital abnormality

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PP-100

Salvaging the lifeline: Single-center outcomes of aneurysmal AV fistula repair in hemodialysis patients

Furkan Burak Akyol[1], Tayfun Ozdem[1], Yigit Tokgoz[1], Namık Nahmadov[1], Emre Kubat[2], Kubilay Karabacak[1]

[1]University of Health Sciences, Gülhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]İskenderun Gelişim Hospital, Hatay, Türkiye

Abstract

Aim: End-stage renal disease patients who require hemodialysis face various complications, with arteriovenous fistula (AVF) aneurysms being one of them. The purpose of this study is to retrospectively evaluate the results of surgical repair of aneurysmal AVFs at a single center, as well as to investigate the effectiveness and safety of surgical intervention for preserving fistula function.

Material and Methods: This study is a retrospective analysis of patients who underwent upper extremity AVF aneurysm repair at Gülhane Training and Research Hospital from January 2023 to August 2025. Data collected included patient demographics, preoperative and postoperative Doppler ultrasound findings (including aneurysm diameter, peak systolic velocity, thrombosis, and stenosis), patency rates, and the need for a postoperative dialysis catheter. The mean preoperative and postoperative flow rates were also calculated.

Results: A total of 26 patients with AVF aneurysms were included in the study; 69.2% (n=18) were male, with a mean age of 61.1 ± 10.4 years. The majority of aneurysms (84.6%) were located in radiosephalic AVFs. Postoperative complications were observed in eight patients, with two requiring intervention (two wound site infections, four bleeding events, and two thrombosis cases). The mean preoperative flow rate was 257.1 ml/min, which significantly increased to a mean postoperative flow rate of 1025 ml/min. During a mean one-year follow-up, all patients successfully continued dialysis via their repaired fistulas, and none required a temporary dialysis catheter.

Conclusion: Surgical repair of aneurysmal arteriovenous fistulas is a safe and effective approach for preventing life-threatening complications while maintaining the long-term functionality of the fistula. This intervention not only salvages the patient's primary vascular access but also significantly improves blood flow dynamics. Our single-center outcomes demonstrate that a tailored surgical approach can successfully resolve aneurysmal complications and ensure the continued use of this gold standard dialysis access.

Keywords: Arteriovenous fistula, aneurysm, hemodialysis, renal insufficiency, vascular surgical procedures

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PP-101

Use of the saphenous vein as a patch and graft in popliteal artery/vein injuries

Suleyman Aycan, Mehmet Ali Kaygin, Ziya Yildiz, Mehmet Burak Gulcan, Mevriye Serpil Diler, Abdulselam Karaduman

[1]Erzurum City Hospital, Erzurum, Türkiye

Abstract

Aim: Popliteal artery and vein injuries in lower extremity trauma are surgical emergencies associated with high amputation risk and significant morbidity. Due to the deep anatomical location and vulnerability of these vessels, combined arterial and venous injuries are common. Early diagnosis, timely surgical intervention, and appropriate graft selection play a critical role in limb salvage. This presentation reports the clinical outcomes of three trauma cases (gunshot and traffic accidents) with popliteal artery and vein injuries successfully treated using autologous saphenous vein grafts. Our findings suggest that the saphenous vein is a reliable and effective option for both arterial and venous reconstruction.

Material and Methods: Three patients with popliteal artery and vein injuries underwent successful vascular repair using saphenous vein grafts.In the first case, a gunshot wound caused absent distal pulses. Intraoperatively, complete transection of the popliteal artery was identified and repaired with saphenous vein transposition. In the second case, following a traffic accident, both artery and vein were injured. Due to the extent of arterial damage, end-to-end anastomosis was not feasible; an interposition graft with the saphenous vein was performed, and the venous injury was primarily repaired.The third case involved a gunshot injury with arterial and venous damage. The artery was repaired with end-to-end anastomosis, and a 7 cm venous defect was managed with a saphenous vein patch.

Results: In all three cases, successful revascularization was achieved using autologous saphenous vein, and all patients were discharged with palpable distal pulses and no limb loss.The first patient was discharged on postoperative day 7 with maintained distal pulses on follow-up. The second patient, who also had bone and nerve injuries, was monitored in the orthopedic unit, and triphasic signals were observed in both dorsalis pedis and posterior tibial arteries. Patient was referred for advanced orthopedic and neurosurgical care. The third case had a delayed presentation due to intercity transfer. After revascularization, compartment syndrome developed, necessitating fasciotomy. The wounds were later closed, and the patient was discharged with intact distal perfusion.

Conclusion: Popliteal artery and vein injuries carry a high risk of morbidity and require urgent intervention. In our cases, autologous saphenous vein use resulted in successful outcomes without limb loss, highlighting its effectiveness in both arterial and venous reconstruction.

Keywords: Saphenous vein graft, trauma surgery, arterial and venous reconstruction, vascular trauma, popliteal vascular injury

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PP-102

Femoral aneurysm in a young patient with Behcet's disease

Betul Nur Keser[1], Buse Oztemel[1], Burak Kocak[1], Kubra Ozturk[2], Ebuzer Aydin[1]

[1]İstanbul Medeniyet University Goztepe Prof Dr. Suleyman Yalcin City Hostipal Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul Medeniyet University Goztepe Prof Dr. Suleyman Yalcin City Hostipal Department of Pediatric Endocrinology, İstanbul, Türkiye

Abstract

Aim: Vascular involvement can be seen in 25% of the patients with Behçet's disease, and venous manifestations such as thrombophlebitis are more common. Arterial involvement occurs most commonly at aorta or pulmonary arteries. Nevertheless, vascular involvement is less common in female and younger patients. We describe an adolescent female with femoral aneurysm, which caused blue toe syndrome.

Material and Methods: A 17-year-old girl previously diagnosed with incomplete Behçet's disease was admitted to the pediatric rheumatology service for further investigation due to lower extremity pain and persistent elevation in acute phase reactants.

Results: A 17-year-old girl previously diagnosed with incomplete Behçet's disease was admitted to the pediatric rheumatology service for further investigation due to lower extremity pain and persistent elevation in acute phase reactants. The physical examination revealed a pulsatile mass in the left inguinal region and the patient was consulted by the cardiovascular surgery department. The ultrasound evaluation demonstrated an aneurysm in the superficial femoral artery (SFA). On physical assessment, the anterior tibial artery (ATA) was palpable, and the posterior tibial artery (PTA) demonstrated a monophasic pattern on color duplex ultrasound. No signs of ischemia were observed. The contrast-enhanced computed tomography (CECT) displayed an aneurysm of 39.5 x 39.4 mm in the SFA (Figure 1). The contrast opacification to the distal was normal. The patient's treatment of cyclophosphamide and steroids was initiated. The multidisciplinary team decided to plan any intervention following remission of the acute exacerbation. Nevertheless, when the patient was admitted to pediatric rheumatology for the second course of treatment, the patient developed blue to syndrome (Figure 2). The control CECT imaging revealed no contrast opacification in the PTA. The patient was taken for emergency intervention. A flexible self-expandable stent graft of 7 x 50 mm was placed in the SFA (Figure 3). Following intravenous administration of tPA, the catheter was placed in the ATP and infusion of tissue plasminogen activator (tPA) was initiated for 24 hours. The clinical signs of blue toe syndrome were observed to be regressed postoperatively. The ATA was palpable and the PTA was evaluated to have a biphasic pattern.

Conclusion: Although vascular involvement commonly affects the venous system, arterial involvement is also seen in Behçet's disease. It may be reasonable to plan the intervention after the exacerbation phase to increase the procedural success. However, emergent interventions may be necessary in case of acute vascular complications.

Keywords: Behcet's disease, femoral aneurysm, blue toe syndrome

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PP-103

A rare condition following low-molecular-weight heparin: Rectus sheath hematoma and rupture

Busra Temel Yuksel

Ağrı Training and Research Hospital, Ağrı, Türkiye

Abstract

Aim: Low-molecular-weight heparin (LMWH) is widely prescribed for prevention and treatment of thromboembolic events. Although generally safe, rare but potentially life-threatening complications may occur. We present a case of a giant rectus sheath hematoma with subsequent rupture into the abdominal cavity during LMWH therapy.

Material and Methods: Case Presentation: A 66-year-old female with chronic obstructive pulmonary disease (COPD) and hypertension presented with left upper extremity ischemia and underwent arterial embolectomy. Postoperatively, enoxaparin and antiplatelet therapy were initiated. On day six, she developed sudden abdominal pain and hypotension. Abdominal CT demonstrated a right rectus sheath hematoma measuring 109×80 mm.Anticoagulant and antiplatelet therapies were discontinued. Despite intensive transfusion support, the patient experienced persistent severe pain, significant hematocrit reduction, hypotension, need for inotropic support, and deterioration in renal function tests. Follow-up CT imaging showed that the hematoma had ruptured into the abdominal cavity, expanding to 155×125 mm. Conservative management by general surgery included close monitoring, analgesia, cold application, and abdominal binder. No surgical or endovascular procedure was undertaken. Hemodynamic stabilization was achieved by the fourth day.During follow-up, inflammatory markers (CRP, LDH, fibrinogen) were elevated. One week later, bilateral lower extremity deep vein thrombosis (DVT) developed, likely due to mass effect and interruption of anticoagulation. Anticoagulation was carefully reintroduced, and the patient was discharged in good condition after two weeks.

Results: Rectus sheath hematoma is a rare but serious complication of LMWH, usually resulting from injury to epigastric vessels due to injection or drug effect. While typically limited to the sheath, extension into the abdominal cavity may precipitate hemorrhagic shock. Advanced age, female sex, hypertension, and chronic cough associated with COPD were relevant risk factors in this case. The secondary occurrence of DVT underscores the dual risks of bleeding and thrombosis during LMWH therapy interruption.

Conclusion: Clinicians should consider rectus sheath hematoma in patients on LMWH presenting with acute abdominal pain and instability. Awareness of risk factors, timely recognition, and careful balancing of bleeding versus thrombosis risk are essential. Patient education on injection technique may help reduce incidence.

Keywords: Low-molecular-weight heparin, rectus sheath hematom, treatment

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PP-104

Endovascular aortic repair in traumatic thoracic aortic transection: A case report

Yesim Guner, Cihad Sen

Kütahya Health Sciences University, Kütahya, Türkiye

Abstract

Aim: Aortic transection is defined as a condition resulting from the complete or partial disruption of the aortic wall. The most common cause is blunt trauma, and it typically occurs at the aortic isthmus level. Blunt thoracic aortic injuries are considered the second most common cause of trauma-related deaths after intracranial hemorrhage, with high mortality rates. In this case report, we present a 17-year-old patient with acute aortic transection following a motorcycle accident.

Material and Methods: A 17-year-old male patient was admitted to the emergency department in poor g condition, intubated, tachycardic, and hypotensive after a motorcycle accident. His Glasgow Coma Score was recorded as 7. Abdominal and pelvic computed tomography (CT) revealed bladder rupture and pubic diastasis, for which he was immediately operated on by orthopedic and urology teams. After surgery, the patient was admitted to the pediatric intensive care unit. Due to persistent hypotension and hemodynamic instability, echocardiography was performed to rule out cardiac injury. The echocardiogram revealed pericardial effusion and hematoma, leading to an urgent thoracoabdominal CT angiography, which demonstrated an aortic transection.

Results: Emergency thoracic endovascular aortic repair (TEVAR) was planned. Under general anesthesia, the procedure was performed in the angiography unit under fluoroscopic guidance. Aortography confirmed a traumatic aortic transection in the descending aorta (approximately 10 mm distal to the left subclavian artery), with dissection and hematoma at the proximal descending aorta, consistent with CT findings. Preserving the left subclavian artery, a thoracic covered stent graft was deployed into the descending aorta via the right femoral artery. Control angiography confirmed patency of the arch vessels, complete coverage of the dissection and irregular aortic contour by the stent graft, and absence of endoleak. The patient's postoperative and follow-up course remained uneventful, with no evidence of stent malposition or endoleak on follow-up CT angiographies at 1 and 6 months.

Conclusion: Traumatic aortic transections, though rare, should always be considered in cases of severe blunt thoracic trauma. Thoracoabdominal CT angiography should be performed without delay in trauma patients with suspected injury. Once the diagnosis is established, rapid treatment planning is essential. In patients with severe blunt thoracic trauma, the possibility of an aortic injury should always be kept in mind during follow-up.

Keywords: Endovascular aortic repair, vascular injuries, thoracic aortic dissection

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PP-105

Aneurysm of the internal jugular vein in a 10-year-old child: A case report

Ilkin Osmanov, Nigar Kazimzade, Kamran Musayev

Central Clinical Hospital, Department of Cardiovascular Surgery, Baku, Azerbaijan

Abstract

Aim: Aneurysm of the internal jugular vein is extremely rare, especially in pediatric patients. This case report explores a unique presentation of such an anomaly in a 10-year-old child, emphasizing the importance of early recognition and intervention.

Material and Methods: A 10-year-old child presented with a rapidly enlarging pulsatile mass over the right side of the neck, associated with intermittent episodes of headaches and sense of pain in his neck. Physical examination revealed a prominent and an engorged right internal jugular vein. Further investigation through Doppler ultrasonography and contrast computer tomography confirmed the diagnosis of fusiform aneurysm of the internal jugular vein measuring 22 x 17 mm at its widest point.

Results: A multidisciplinary approach involving vascular surgeon, radiologist and pediatrician was employed. It was decided to proceed with surgical intervention to correct anomaly, during which the aneurysm was excised, followed by the formation of an end-to-end anastomosis. Postoperative period was uneventful.

Conclusion: The rarity of internal jugular vein aneurysm in pediatric patients poses challenges in management. This case prompts discussion of the diverse clinical presentations, diagnostic considerations, and therapeutic options available for such anomalies. The collaborative effort of various specialties underscores the importance of a comprehensive approach in treatment of complex vascular malformations. This case underscores the significance of an individual surgical approach in the management of internal jugular vein aneurysms and emphasizing the necessity for a multidisciplinary approach. Literature review supports the limited reported cases and various treatment modalities, further highlighting the challenges associated with surgical intervention. Our experience contributes valuable insights into the successful surgical management of this rare vascular anomaly.

Keywords: Aneurysm, jugular veins, child, vascular surgical procedures, case reports

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PP-106

The outcomes of isolated endovascular and combined endovascular and surgical interventions in peripheral artery disease

Murat Eroglu

Kütahya Health Sciences University, Kütahya City Hospital, Department of Cardiovascular Surgery, Kütahya, Türkiye

Abstract

Aim: The management of peripheral artery disease (PAD) has evolved to include a variety of revascularization techniques, ranging from endovascular procedures to traditional open surgery. In a modern vascular practice, both isolated endovascular and combined endovascular and surgical interventions are used to address the diverse presentations of PAD. This study reports on our single-center experience and the clinical outcomes of these two distinct revascularization strategies.

Material and Methods: We conducted a retrospective review of 49 patients who underwent revascularization for PAD at our institution between January 2025 and June 2025. Baseline characteristics, reason for intervention, implemented procedure, and operative characteristics were assessed. The outcomes including postoperative claudication, extremity ischemia, wound healing, extremity amputation, complication and mortality were investigated in the study group.

Results: A total of 49 patients were included in the analysis. The isolated endovascular group, which comprised 39 patients, demonstrated lower rate of postoperative claudication within 3-month follow-up. No statistically significant difference were found in terms of postoperative critical limb ischemia, wound healing and complications. The combined hybrid procedure group, consisting of 10 patients, was typically utilized for more complex, multilevel disease and also showed similar short-term postoperative outcomes except for postoperative claudication. While the hybrid group had a longer hospital stay, this was often correlated with the more severe nature of their underlying disease.

Conclusion: Our institutional experience confirms the efficacy of both isolated endovascular and combined endovascular and surgical interventions in the treatment of PAD. Isolated endovascular procedures are highly effective for less complex lesions, offering the benefit of reduced postoperative claudication. The selection between these strategies is based on patient and lesion characteristics, allowing for a tailored approach to achieve optimal results.

Keywords: Peripheral artery disease, endovascular, hybrid procedure, claudication

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PP-107

Acute arterial embolism secondary to popliteal artery aneurysm: Successful treatment with surgical excision and bypass procedure

Seref Kesici, Gungor Temizkan, Gokalp Guzel

Gaziantep University, Faculty of Medicine, Gaziantep, Türkiye

Abstract

Aim: This study aims to present the surgical management of a case of acute arterial embolism secondary to popliteal artery aneurysm and to share the haemodynamic evaluation during the postoperative period.

Material and Methods: Introduction:Although popliteal artery aneurysms are among the peripheral artery aneurysms, they can become clinically apparent with thromboembolic complications. Distal embolisation associated with aneurysm can cause acute limb ischaemia and requires urgent intervention. This case report describes the surgical process of a 74-year-old male patient who underwent surgery due to acute arterial embolism developing on the basis of a popliteal artery aneurysm.

Results: Surgical exploration was performed under general anaesthesia on the patient who presented with acute ischaemia. Access to the popliteal region was achieved via an incision made behind the left knee of the patient in the supine position. The aneurysmal segment was isolated and cross-clamped. The aneurysm sac was opened and the thrombus inside was cleared. While good pulsatile flow was observed proximally, thrombus was excised up to the mid-crural level using Fogarty catheters advanced distally. As retrograde flow could not be obtained, the aneurysmal sac was excised and an anastomosis was performed with an 8 mm ringed graft replacing a segment of approximately 7–8 cm. The proximal and distal anastomoses were completed with 6/0 Prolene. Pulsatile flow was palpated in the popliteal artery distal to the graft. The layers were closed with a Hemovac drain in place. In the postoperative period, Doppler flow was detected in the anterior and posterior tibial arteries at the mid-crural level. Monophasic flow was observed in the dorsalis pedis artery at the ankle level. During follow-up, the flow pattern in the dorsalis pedis artery developed a biphasic character.

Conclusion: Early surgical intervention is critical in saving the limb in cases of embolic complications associated with popliteal artery aneurysms. Aneurysm excision and recanalisation with a graft provide successful results by ensuring distal perfusion. A multidisciplinary approach to such cases may increase surgical success and improve functional outcomes.

Keywords: Arterial embolism, vascular surgical procedures, arterial aneurysm

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PP-108

Congenital radial artery AVM with venous ulceration in a young female: Successful surgical excision

Hasan Cihan[1], Burak Toprak[2]

[1]Van Education and Research Hospital, Van, Türkiye
[2]Mersin Education and Research Hospital, Mersin, Türkiye

Abstract

Aim: We report a rare case of congenital radial artery arteriovenous malformation (AVM) presenting with progressive enlargement, functional impairment, and aesthetic deformity in a young female patient, successfully managed by surgical excision.

Material and Methods: A 25-year-old female presented with a pulsatile swelling along the radial artery, consistent with congenital AVM, which had progressively enlarged over time. Clinical examination revealed a palpable thrill over the aneurysmal mass, extending into the palm. Radial artery pulse was palpable, and compression of the artery abolished the thrill. Overlying skin showed multiple venous ulcers. Doppler ultrasonography and computed tomography angiography demonstrated AVM morphology with extensive venous networks. The patient had previously been denied surgery due to the high risk of functional loss but accepted the risks during current admission. Surgery was performed under automatic tourniquet control. The radial artery was dissected, and three separate venous connections were identified and ligated. The aneurysmal AVM mass was excised. Extensive bleeding control was achieved using cauterization, and due to intraoperative bleeding difficulties, the skin was loosely approximated and left for secondary healing.

Results: The postoperative course was uneventful. Follow-up examinations revealed preserved hand function, intact distal circulation, and satisfactory cosmetic recovery with healed venous ulcers.

Conclusion: This case demonstrates that surgical resection of congenital radial artery AVMs, though technically challenging and associated with intraoperative bleeding risks, can be successfully performed with careful planning. Surgical excision may restore both functional and cosmetic outcomes in selected high-risk patients.

Keywords: Arteriovenous malformation, radial artery, congenital avm, surgical excision, case report

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PP-109

Comparison of the MCV/RDW ratio in acute arterial embolism and stable chronic peripheral arterial disease: A single-center, Retrospective analysis

Murat Yucel, Hakan Comakli

Ankara Bilkent City Hospital, Cardiovascular Surgery Department, Ankara, Türkiye

Abstract

Aim: Mean corpuscular volume (MCV) and red blood cell distribution width (RDW) are hematological indicators of erythrocyte morphology and systemic inflammation/iron metabolism. However, the diagnostic and prognostic value of the MCV/RDW ratio in acute arterial embolism (AAE) remains unclear. This study aimed to comparatively evaluate whether pre-intervention measured MCV/RDW differs between AAE (< 24 h) and stable peripheral artery disease (PAH; Rutherford 1–3, no infection in the last 4 weeks) and to assess its discriminatory power.

Material and Methods: We conducted a single-center, retrospective, comparative case series study (Ankara Bilkent City Hospital, January 2019–January 2025). Two groups were analyzed: AAE within 24 hours of symptom onset (n=50; diagnosed by duplex ultrasonography, CT angiography, or DSA) and stable PAD (Rutherford 1–3; no infection in the previous 4 weeks; n=50). A complete blood count was performed before any intervention, anticoagulation, or transfusion. RDW, RDW-CV (%), the and ratio of MCV [fL]/RDW-CV [%] were calculated. Patients with recent/acute infection, active malignancy, immunosuppression/corticosteroids, B12/folic acid deficiency, iron deficiency (ferritin < 30 ng/mL or TSAT < 20%), hypothyroidism, advanced liver disease, transfusion within 30 days, major surgery within 3 months, pregnancy, and advanced CKD (eGFR < 30 mL/min/1.73 m²) were excluded. To reduce bias (no propensity matching), we applied time standardization (pre-intervention sampling), restriction/exclusion, and multivariate adjustment (stratification by age, sex, BMI, smoking status, hypertension, diabetes, hyperlipidemia, and CRP).

Results: One hundred patients were included (50 with AAE and 50 with PAD). MCV/RDW was higher in AAE: 6.0 [5.5–6.6] vs 5.4 [4.9–5.9]; p=0.008; Hodges–Lehmann difference +0.55 (AAE–PAD). The MCV was 88 [85–92] vs. 86 [83–89] (p=0.09) and RDW-CV was 14.7 [13.9–15.5] vs. 16.0 [15.1–16.9] (p=0.002), indicating that the difference in ratios was primarily due to higher RDW In backward LR models, MCV/RDW remained independently associated with AAE along with log-CRP (OR 1.46; 1.05–2.06; p=0.026). The discriminatory power was moderate: full model AUC 0.75 (0.65–0.83); MCV/RDW alone AUC 0.67 (0.57–0.77). The ≥5.7 cutoff value provided 66% sensitivity and 62% specificity, respectively. Calibration was acceptable (Hosmer–Lemeshow p=0.62), and bootstrap internal validity yielded an optimism-corrected AUC of 0.73.

Conclusion: The MCV/RDW ratio was higher in patients with AAE and provided moderate discriminatory power to distinguish AAE from stable PAD. It should be considered an adjunct biomarker alongside clinical and imaging data rather than a standalone decision-making tool. The observed difference is largely attributable to the high RDW in PAD. Prospective, multicenter validation is required.

Keywords: Peripheral arterial disease, embolism, arterial, erythrocyte indices

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PP-110

Carotid stentectomy and carotid embolectomy following subacute carotid stent thrombosis

Selim Durmaz, Emre Pinar, Ali Arda Acar

Adnan Menderes University, Aydın, Türkiye

Abstract

Aim: To report the clinical status of a patient who underwent stentectomy and embolectomy following the development of subacute internal carotid artery stent thrombosis.

Material and Methods: A 76-year-old male patient who developed subacute stent thrombosis four days after undergoing endovascular stenting for carotid artery stenosis data were retrospectively collected. Clinical, laboratory, and radiological data were obtained from patient records and the PACS archive. Dual antiplatelet therapy had been administered preoperatively, and stenting was performed using the Protégé™ RX self-expanding carotid stent system. After the onset of total stent thrombosis, the patient was surgically managed with stentectomy and embolectomy.

Results: The patient was transferred from the intensive care unit to the ward on the first postoperative day for continued follow-up. Early postoperative neurological examination showed no significant changes compared to the preoperative status. As no surgical complications were observed, the patient was discharged on the fifth postoperative day. At two-month follow-up, carotid CT angiography demonstrated absence of flow in the mid-segment of the right ICA on preoperative imaging, while the control study showed reduced contrast passage in the same segment. No significant neurological deterioration was observed, and the patient has been followed under physical therapy and rehabilitation support.

Conclusion: The number of reported cases addressing surgical management of carotid artery stent thrombosis is limited, and no consensus has been established regarding the optimal approach. Surgical planning should consider the timing of thrombosis after stent implantation, whether the stent is located in a surgically accessible segment, and the patient's clinical condition. In the present case, the surgical intervention was performed in the subacute period (21 days after stent implantation), which may have contributed to the incomplete recovery of cerebral perfusion.

Keywords: Carotid artery disease, carotid stent thrombosis, surgery

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PP-111

Cardiovascular surgery vascular congress presentation

Oguzhan Colak, Erturk Karaagac, Nuri Utkan Tunca, Yuksel Besir, Irem Ozcetin, Haci Anil Solak, Hami Can, Cagri Yalcin, Levent Yilik, Ali Gurbuz

İzmir Katip Çelebi University, Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Vascular injuries occurring during interventional procedures are usually the result of damage or disruption to the vessel wall. These complications can manifest as vessel perforation, dissection, laceration, pseudoaneurysm, or hematoma formation. Such complications are considered medical emergencies, and if not treated in a timely manner, they can lead to severe outcomes including limb loss.

Material and Methods: In this case presentation, we aim to share a successful surgical repair of a radial artery injury that developed after an invasive procedure and led to a hematoma in the upper extremity.A 46-year-old male patient underwent an interventional procedure via the right radial artery for percutaneous transluminal angioplasty (PTA) of the celiac artery due to a diagnosis of Nutcracker syndrome. Following the procedure, the patient developed pain and swelling in the right arm and was referred to our clinic. Emergency surgery was performed the same day.Under local anesthesia, a 7 cm longitudinal sagittal incision was made at the midline of the right upper arm at the level of the brachial artery. Intraoperatively, the brachial artery was found to be short, with radial and ulnar arteries originating from the axillary region. A hematoma originating from the radial artery was observed and evacuated.A 2F embolectomy catheter was inserted into the radial artery, and no acute or chronic thrombus was retrieved. The arterial injury was repaired using simple suture technique. Two Hemovac drains were placed adjacent to the radial artery, and the incision was closed in anatomical layers.

Results: Distal pulses were palpable following the arterial repair, indicating successful restoration of blood flow.The patient was monitored in the intensive care unit (ICU) for one day.He was transferred to the general ward the next day.The patient was discharged in good condition on postoperative day 4.No postoperative complications were observed.

Conclusion: In patients who develop hematoma after an invasive procedure, it is of vital importance for the surgeon to consider possible variations and be prepared for them.

Keywords: Hematoma, radial artery repair, invasive procedure, radial variation

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PP-112

When claudication masks a rare malignancy: Aortic pleomorphic sarcoma

Zehra Unlu[1], Aysen Yaprak Kapkin[1], Sedat Karaca[2], Fatih Islamoglu[1]

[1]Ege University School of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye
[2]Şanlıurfa Training and Research Hospital, Department of Cardiovascular Surgery, Şanlıurfa, Türkiye

Abstract

Aim: Aortic pleomorphic sarcomas are exceedingly rare and aggressive vascular malignancies that often present with nonspecific or misleading clinical features. Their diagnosis is frequently delayed due to the overlap of symptoms with more common vascular pathologies. The aim of this case presentation is to emphasize the diagnostic challenge posed by aortic pleomorphic sarcoma when it manifests with isolated ischemic symptoms such as claudication, and to highlight the importance of histopathological examination in reaching the definitive diagnosis.

Material and Methods: We report the case of a 53-year-old male patient who was admitted with isolated left lower extremity claudication. On physical examination, peripheral pulses in the left leg were absent. Duplex vascular ultrasound revealed monophasic arterial flow, raising suspicion of significant arterial disease. CT angiography demonstrated a 48 mm infrarenal abdominal aortic aneurysm extending to the iliac bifurcation, accompanied by a bulge in the left common iliac artery and high-grade stenosis in a short segment. Given these findings, the working diagnosis was iliac artery compression secondary to the aneurysm. The patient was scheduled for surgical repair, and a Y-graft replacement was performed. The aneurysmal segment was routinely sent for histopathological examination, as per institutional surgical protocol.

Results: Histopathological analysis unexpectedly revealed undifferentiated pleomorphic sarcoma of the aorta with a high proliferative index (Ki-67: 65%) and absence of specific immunohistochemical markers. The patient had no systemic or constitutional symptoms suggestive of malignancy in the preoperative period, such as weight loss, fever of unknown origin, or night sweats. There were also no clinical or laboratory findings indicating metastatic spread. Preoperative CT imaging failed to show any mass lesions or metastases. However, postoperative PET-CT revealed widespread metastatic disease involving the lungs, liver, and bones. Following surgery, the patient was referred to oncology and received systemic chemotherapy.

Conclusion: This case illustrates the considerable diagnostic challenge of aortic pleomorphic sarcoma, particularly when presenting with isolated vascular symptoms mimicking occlusive arterial disease. Early recognition is difficult, as conventional imaging may not reveal malignant features preoperatively. Routine histopathological evaluation of excised vascular tissue is therefore crucial in detecting rare malignancies that would otherwise be overlooked. Although surgical resection remains the mainstay of treatment, the prognosis of aortic pleomorphic sarcoma is poor due to its aggressive nature and high metastatic potential. This case underscores the importance of maintaining clinical suspicion in atypical vascular presentations and highlights the indispensable role of pathology in achieving an accurate diagnosis.

Keywords: Aortic pleomorphic sarcoma, claudication, abdominal aortic aneurysm

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PP-113

The importance of medical treatment after peripheral angiography

Hakan Ontas

Balıkesir University, Faculty of Medicine, İzmir, Türkiye

Abstract

Aim: To emphasize the importance of post-procedure medication for patients undergoing peripheral angiography due to peripheral artery disease.

Material and Methods: The study included 20 patients who underwent peripheral angiography of above-knee lesions in 2025. Patients who underwent successful angiography were medically monitored for the first two months after the procedure. All patients were started on Asa, Clopidogrel, and Cilostazol.All patients were started on Asa, Clopidogrel and Cilostazol. Patients were called for outpatient clinic check-ups at 1 week, 1 month and 2 months after the procedure.All patients were nonsmokers but diabetic.

Results: All patients had taken their medications regularly until their first week and first-month follow-up. These patients had palpable peripheral pulses at their examination. However, at their second-month follow-up, distal pulses could not be felt in two of the four patients who had not taken their medications regularly. In the other two, pulses were biphasic with a handheld Doppler. The patients without palpable distal pulses had almost never used their medications in the past month. The other two had taken their medications, albeit irregularly.

Conclusion: As a result, the regular use of medications in the post-procedure period affects the success rate as much as the importance of the peripheral angiography procedure.

Keywords: Medical treatment, peripheral angiography, diabetes

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PP-114

Impact of preoperative red cell distribution width–to–lymphocyte ratio on predicting type II endoleak after EVAR: A prospective observational study

Ozgur Coban, Mete Kubilay Kasap, Nazenin Durak Kasap

Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: To assess whether a novel complete-blood-count–derived ratio—the red cell distribution width–to–lymphocyte ratio (RLR)—can predict the development of type II endoleak within 12 months after elective infrarenal EVAR.

Material and Methods: From January 2022 to May 2025, 60 consecutive patients undergoing elective infrarenal EVAR at our center were enrolled prospectively. Preoperative CBC was obtained within 7 days prior to EVAR. RLR was defined as:RLR = RDW (%) ÷ absolute lymphocyte count (10^9/L)Using ROC analysis, an optimal RLR cutoff of 0.15 was determined. Patients were stratified into:High-RLR (≥0.15; n=24)Low-RLR (< 0.15; n=36)Contrast-enhanced CT angiography was performed at 1 month and 12 months post-EVAR to identify type II endoleaks. Incidence rates were compared by χ^2 test. Multivariate logistic regression adjusted for aneurysm diameter and anticoagulant use was used to evaluate RLR as an independent predictor.

Results: Overall, type II endoleak developed in 8 patients (13.3%). In the High-RLR group, 6/24 (25%) patients had an endoleak versus 2/36 (5.6%) in the Low-RLR group (p=0.04). ROC analysis yielded an AUC of 0.76 for RLR. With cutoff ≥0.15, sensitivity was 75% and specificity 70%. In multivariate analysis, High-RLR remained an independent predictor of type II endoleak (OR 5.1; 95% CI 1.0–25.3; p=0.048).

Conclusion: Preoperative RLR—a simple ratio derived from standard CBC—predicts type II endoleak after EVAR with fair discrimination. Incorporating RLR into preoperative assessment could help identify patients at higher risk for endoleak who may benefit from closer imaging surveillance or adjunctive coil embolization.

Keywords: Endoleak, aortic aneurysm, endovascular, biomarkers

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PP-115

Popliteal artery and vein compression after plate fixation for a distal femur fracture: A case report from the verge of amputation to vascular reconstruction

Gokalp Guzel, Gungor Temizkan, Seref Kesici, Betil Kutlu

Gaziantep University Faculty of Medicine, Gaziantep, Türkiye

Abstract

Aim: This study was designed to present a rare case in which ischemic complications following vascular compression in a patient who underwent surgery for a distal femur fracture were successfully managed with vascular bypass despite the recommendation for amputation.

Material and Methods: IntroductionDistal femur fractures can pose serious orthopedic problems, particularly in the elderly and trauma patients. Surgical treatment often requires internal fixation, but the proximity to vascular structures during these procedures can increase the risk of complications. Compression of the popliteal artery or vein by a surgical implant is an extremely rare but serious complication. This can cause ischemia that can progress to limb loss.

Results: A 65-year-old man who underwent surgery approximately 10 days ago for a left distal femur fracture developed widespread swelling, coldness, severe pain, and necrosis of the first toe in the postoperative period. Evaluation revealed compression of the popliteal artery and vein under the plate. Initially, the distal femur was plated through a medial incision above the knee. Later, due to necrosis and ischemic findings, amputation was recommended. However, with a multidisciplinary approach, the plate was removed, and the artery and vein were bypassed using a saphenous vein graft. Postoperatively, reperfusion was achieved in the left lower extremity, but necrosis persisted in the first toe. Follow-up revealed continued circulation.

Conclusion: Preserving vascular structures is crucial in orthopedic surgery. In this case, ischemic conditions due to compression of the vascular structures progressed to the point of amputation, but timely intervention preserved the extremity. Surgical revisions performed in collaboration with orthopedic and vascular surgery can salvage the extremity in similar cases. Awareness of such rare but significant complications significantly increases surgical success.

Keywords: Popliteal artery, arterial embolism, vascular surgical procedures

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PP-116

Surgical repair of a giant internal carotid artery pseudoaneurysm

Ali Melih Baydogan, Yigit Gunay, Selim Durmaz

Aydın Adnan Menderes University, Aydın, Türkiye

Abstract

Aim: To present the surgical management and outcome of a rare case of giant internal carotid artery (ICA) pseudoaneurysm developing after carotid endarterectomy (CEA)

Material and Methods: A patient who had undergone carotid endarterectomy (CEA) in 1987 presented with a neck mass and difficulty breathing. On examination, a pulsatile mass with a palpable thrill was noted. Imaging with duplex ultrasonography, computed tomography angiography, and digital subtraction angiography (DSA) confirmed a pseudoaneurysm measuring approximately 110 × 100 × 90 mm originating from the extracranial segment of internal carotid artery (ICA) and demonstrated distal ICA occlusion. Flow in the external carotid artery (ECA) was intact, and cerebral perfusion of the right hemisphere was maintained via collateral flow from the contralateral (left) carotid artery system and the posterior circulation via vertebral arteries. An initial attempt at coil embolization failed, and the patient underwent open surgical repair via a cervical approach. Proximal control was achieved by clamping the common carotid artery. A skin incision was made along the pseudoaneurysm, and subcutaneous fascial planes were dissected.The pseudoaneurysm sac was exposed, and retrograde flow into the cavity was identified as originating from the ECA, despite the absence of distal ICA flow. Selective clamping of the ECA was not feasible due to anatomical distortion and fibrosis; therefore, retrograde flow was effectively controlled by selective proximal ICA clamping. The majority of the aneurysmal wall was resected, and the ICA defect was repaired primarily. The residual sac was closed using an appropriate technique, and a negative-pressure drain was placed. Muscular planes were preserved, and the expanded skin flap caused by the aneurysm was excised and closed with subcuticular sutures.

Results: No neurological or other postoperative complications were observed. Postoperative duplex ultrasonography demonstrated complete exclusion of the pseudoaneurysm sac, a patent external carotid artery (ECA), and distal ICA flow remained unvisualized, as noted preoperatively. The patient was discharged seven days after surgery. On follow up, the neck mass had completely resolved, and symptoms of airway compression had disappeared.

Conclusion: Pseudoaneurysms of the ICA are rare but potentially life-threatening complications following CEA and are associated with high risks of rupture, thromboembolism, and local compression. Although endovascular approaches are often considered first-line treatments. Surgical repair remains an important option when endovascular treatment is not feasible or unsuccessful.Prior to surgical intervention in ICA pseudoaneurysms, detailed assessment of arterial anatomy using appropriate imaging modalities, evaluation of distal ICA flow, and determination of cranial perfusion are essential for surgical planning.

Keywords: Carotid artery, aneurysm, carotid endarterectomy

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PP-117

Asymptomatic aortic dissection

Irem Ozcetin, Nuri Utkan Tunca, Erturk Karaagac, Mustafa Enes Bostankolu, Ceylan Gurcan, Oguzhan Colak, Gizem Uysal, Hidayet Onur Selcuk, Levent Yilik, Ali Gurbuz

İzmir Katip Çelebi University Atatürk Training and Research Hospital, İzmir, Türkiye

Abstract

Aim: In patients undergoing surgery for CAD, concomitant aortic pathologies can be significant causes ofmorbidity and mortality. Ascending aortic aneurysm and dissection may be diagnosedpreoperatively or detected intraoperatively. In such cases, modification of the surgical planbecomes mandatory. Here, we present a case initially planned for CABG alone, in whom anascending aortic dissection was detected intraoperatively, and a Bentall procedure with CABG was performed.

Material and Methods: A 51-year-old male patient was scheduled for CABG following the decision of thecardiology-cardiac surgery council due to CAD. He presented to the emergency department withdyspnea and was hemodynamically stable. Echocardiography revealed: LVD: 60 mm, LVS: 40 mm,EF: 60%, IVS: 13 mm, LA: 45 mm, ascending aorta: 38 mm, minimal mitral regurgitation, and grade2 aortic regurgitation. Thoracic CT showed an ascending aortic diameter of 45 mm. Although CABGalone was initially planned, replacement of the ascending aorta, aortic valve exploration, and CABGwere decided due to these findings. Median sternotomy revealed a dilated aortic root with a 5 cmdissection flap extending from the non-coronary cusp to the left coronary ostium. A Bentallprocedure and two-vessel CABG were performed. Due to myocardial edema, the sternum was leftopen. On postoperative day 1, the patient was hemodynamically stable and underwent sternalclosure. After 4 days in the intensive care unit, he was transferred to the ward. The postoperativecourse was uneventful, and the patient was discharged on postoperative day 14 in good condition.

Results: In patients undergoing surgery for CAD, the presence of ascending aortic aneurysm or dissection necessitates a change in surgical strategy. As in this case, when an intraoperative dissection is detected, simultaneous Bentall procedure and CABG may be a safe and effective treatment option. The literature also supports that combined surgical approaches, with proper patient selection and multidisciplinary evaluation, achieve high success rates.

Conclusion: In cases of CAD with concomitant aortic pathology, the surgical approach should be individualized. Preoperative evaluation of the aorta must be thorough in patients scheduled for CABG, and when dissection is encountered intraoperatively, combined surgical procedures can provide successful outcomes.

Keywords: Asymptomatic, aortic dissection, bentall procedure, coronary artery bypass graft

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PP-118

Bilateral femoral and popliteal aneurysms

Medine Sarac, Busra Karakoc Kaplan, Mustafa Enes Bostankolu, Ceylan Gurcan, Ali Aghayev, Ahmet Erkam Cevik, Emre Kaymakci, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Peripheral arterial aneurysms represent the second most common aneurysmal pathology after abdominal aortic aneurysms. Although they are frequently asymptomatic, they may lead to severe complications such as thromboembolism and rupture. Popliteal artery aneurysms constitute the majority of peripheral aneurysms, while femoral artery aneurysms are less common but clinically significant. We report a rare case of a 72-year-old male patient with bilateral femoral and popliteal artery aneurysms, managed with open surgical repair.

Material and Methods: A 72-year-old male with a history of hypertension presented with bilateral lower extremity pain, claudication after approximately 10 meters, and palpable masses in both groins. On physical examination, pulsatile masses were palpated in the femoral and popliteal regions bilaterally, and distal pulses were present.Computed tomography angiography (CTA) demonstrated aneurysms of 5 cm in the left common femoral artery, 5 cm in the right common femoral artery, 3 cm in the left popliteal artery, and 3 cm in the right popliteal artery. Under general anesthesia, bilateral femoral aneurysms were resected, and both common femoral arteries were reconstructed with 10 mm polytetrafluoroethylene (PTFE) graft interposition. In a subsequent session, bilateral popliteal aneurysms were treated with aneurysm resection and 8 mm PTFE graft interposition.The postoperative course was uneventful. Distal pulses remained palpable, and the patient was discharged on dual antiplatelet therapy without complications.

Results: Femoral and popliteal artery aneurysms are uncommon vascular entities, predominantly affecting elderly men, and are associated with considerable morbidity if left untreated. Thromboembolic events and rupture are the most frequent and life-threatening complications. Current guidelines recommend surgical intervention for aneurysms exceeding 2.5 cm in diameter for femoral arteries and 2.0 cm for popliteal arteries.

Conclusion: Treatment strategies include both open surgical repair and endovascular techniques. Open repair, consisting of aneurysm resection and graft interposition, remains the gold standard in patients with bilateral or large aneurysms, due to its proven durability and patency rates. In this case, the presence of bilateral, large-diameter aneurysms favored open surgical management.

Keywords: Bilateral femoral, popliteal aneurysms, atheroscleroz

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PP-119

Chronic venous insufficency

Yusuf Reha Ayan, Necip Becit, Fehim Can Sevil, Mehmet Tort, Serkan Gume

Afyonkarahisar University of Health Sciences, Faculty of Medicine, Department of Cardiovascular Surgery, Afyonkarahisar, Türkiye

Abstract

Aim: Chronic venous insufficiency is a common health problem that significantly affects the quality of life. Over the last 20 years, minimally invasive endovenous treatment methods have come to the forefront. These are mainly evaluated under two categories: endovenous laser ablation and radiofrequency ablation. In these methods, a catheter is inserted into the saphenous vein under ultrasound guidance, and venous endothelial damage is induced to achieve vein obliteration. In this study, we aimed to evaluate the outcomes of patients who underwent laser and radiofrequency ablation surgical treatment.

Material and Methods: A total of 120 patients diagnosed with chronic venous insufficiency and who underwent thermal ablation surgery in our clinic between February 2023 and August 2025 were included in the study. Demographic data, procedure duration, and postoperative hospital stay were retrospectively obtained from hospital records. In all patients, a 7F sheath was inserted into a single lower extremity below the knee, and the ablation catheter was advanced to the saphenofemoral junction leaving a safe distance. Tumescent anesthesia was applied to all patients. Postoperatively, all patients received compression therapy as well as angioprotective and venotonic drug treatment.

Results: The median age of the patients included in the study was 53 years (53.4 ± 33.5), with 65 (54.16%) females and 55 (45.84%) males. The mean hospital stay was 1 day, during which patients were followed in the ward. Minor bleeding occurred in 4 patients (4.33%), and paresthesia was observed in 2 patients (2.15%). In 100 patients (83.33%), ecchymosis was noted at the surgical site one day after the operation. In follow-up visits, paresthesia resolved. Clinical follow-up showed that symptoms of chronic venous insufficiency improved, and patients' quality of life increased.

Conclusion: Our findings demonstrate that thermal ablation methods can be applied safely with high success and patient satisfaction. Compared to conventional surgery, endovenous laser and radiofrequency ablation provide shorter recovery times, less postoperative pain, and better cosmetic results. Complication rates are low, usually minor, and temporary. In conclusion, with appropriate patient selection, thermal ablation methods represent a minimally invasive, effective, and reliable treatment option that forms the basis of the current approach in the management of chronic venous insufficiency.

Keywords: Chronic venous insufficiency, thermal ablation, endovenous

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PP-120

Therapeutic efficacy of catheter-based thrombolysis in acute arterial ischemia

Emin Barbarus, Ahmet Dolapoglu, Ahmet Komurcu, Muhammet Huseyin Erkan

Balıkesir University Department of Cardiovascular Surgery, Balıkesir, Türkiye

Abstract

Aim: Acute limb ischemia is a clinical condition resulting from arterial occlusion, occurring within 14 days of the onset of the first symptoms. In this presentation, we aimed to demonstrate the effectiveness of catheter-directed thrombolysis in acute limb ischemia.

Material and Methods: Catheter-directed thrombolysis was performed in two patients who presented to our clinic with findings of acute arterial ischemia developing in the superficial femoral artery and distally (one patient was Rutherford Stage 2a, the other patient was Rutherford Stage 2b). Clinical situations that could be contraindications for thrombolysis were ruled out during the preoperative evaluation. The patients were taken to the angiography laboratory, where the totally occluded segment was visualized. Total occlusion was observed in the popliteal artery in one patient and in the distal superficial femoral artery in the other. A multi-hole thrombolytic catheter was inserted into the thrombus, and alteplase infusion was started. Alteplase was administered to both patients as a 5 mg bolus and 1 mg/hour infusion (weight-independent dose range), and the maximum dose of 40 mg was not exceeded in either patient. Both patients were followed up in the ICU. Distal arterial flow in both patients began to be recorded monophasically at the 3rd hour. Close monitoring for hematoma, bleeding, and fibrinogen levels was performed in the ICU. No significant decrease in fibrinogen levels was observed during follow-up. Therefore, following the detection of distal peripheral pulses and the complete resolution of ischemic findings, control angiography was performed after a total infusion time of 16 hours in one patient and 25 hours in the other patient. It was observed that the thrombus had dissolved in both patients and that blood flow had reached the most distal region. Subsequently, treatment was discontinued.

Results: Catheter-directed thrombolysis therapy was terminated after imaging in the angiography unit confirmed complete lumen patency, following the restoration of distal pulses and flow, regression of ischemic findings, and improvement in patients' clinical symptoms. Following thrombolytic therapy, patients were initially monitored with low molecular weight heparin(LMWH) and warfarin therapy. Patients were discharged after achieving an effective INR level with warfarin therapy.

Conclusion: Cardiovascular surgeons traditionally view surgical treatment as the first option in cases of acute arterial ischemia. However, based on clinical experience and in line with current publications and guidelines, catheter-directed thrombolysis techniques should be kept in mind as an important treatment option.

Keywords: Acute, extremity, ischemia, thrombolytic

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PP-121

Hybrid treatment of aortic aneurysms and dissections: A single-center experience with 6 cases

Ibrahim Yel, Sedat Ozan Karakisi, Dogus Hemsinli, Erdal Kanbur

Recep Tayyip Erdogan University, Faculty of Medicine, Department of Cardiovascular Surgery Rize, Türkiye

Abstract

Aim: Aortic aneurysms and dissections are associated with high mortality and morbidity. Conventional open surgery provides long-term durability but carries significant perioperative risk, whereas endovascular approaches are limited by anatomical constraints. Hybrid repair, combining surgical debranching with endovascular stent-graft implantation, has been introduced as an alternative for complex aortic pathologies. This study aimed to present the early outcomes of patients who underwent hybrid treatment at our center.

Material and Methods: Between 2020 and 2025, six male patients underwent hybrid repair at our institution. The mean age was 64.1 years (range 28–87). Patient characteristics, procedures performed, and early postoperative outcomes were retrospectively evaluated. Hybrid techniques included proximal and/or visceral debranching followed by thoracic endovascular aortic repair (TEVAR), with or without endovascular abdominal aortic repair (EVAR).

Results: The first patient, an 87-year-old with thoracic and abdominal aortic aneurysms, underwent proximal debranching with TEVAR and EVAR and was discharged without complications.The second patient, a 64-year-old with aortic dissection, presented in the preoperative period with elevated acute phase reactants and positive blood cultures for coagulase-negative staphylococci. He also had a history of supracoronary ascending aortic replacement performed 7 years earlier due to type I aortic dissection. Following proximal and visceral debranching with TEVAR and EVAR, he initially stabilized but died on postoperative day 21 due to aspiration pneumonia.The third patient, a 64-year-old with thoracoabdominal aortic aneurysm, had a history of previous coronary artery bypass grafting, subsequent myocardial infarction with coronary stent implantation, and chronic kidney disease. He underwent visceral debranching and TEVAR but developed multiorgan failure and died on postoperative day 5.The fourth patient, a 77-year-old with aortic dissection, underwent proximal debranching and TEVAR and was discharged uneventfully. The fifth patient, a 67-year-old with type III dissection, underwent visceral debranching and TEVAR and recovered without complications. The sixth patient, a 28-year-old with non-A non-B dissection, underwent proximal debranching and TEVAR and was discharged without complications. Overall, early mortality occurred in two patients (33.3%), while four patients (66.7%) were discharged uneventfully. No neurological complications such as stroke or paraplegia were observed.

Conclusion: Our six-patient series demonstrates that hybrid repair is a feasible alternative for complex aortic aneurysms and dissections, particularly in elderly patients and those with challenging anatomy. However, patients with significant preoperative risk factors are at increased risk of early mortality. The uneventful recovery observed in most patients supports the efficacy of this method. Larger series with longer follow-up are needed to further clarify patient selection and long-term durability.

Keywords: Aortic aneurysm, aortic dissection, hybrid surgical procedures

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PP-122

Delayed gastric paresis in patients undergoing redo aortofemoral bypass

Halil Demren, Mehmet Can Nohutcu, Dilsad Amanvermez Senarslan, Funda Yildirim

Manisa Celal Bayar University Manisa, Türkiye

Abstract

Aim: Second surgeries performed on the same surgical site pose their own risks. In vascular surgery, these risks are more severely affected by adhesions than in other surgical procedures. This complicates exploration and necessitates higher-level proximal vascular access. Redo surgeries, which are challenging for both the patient and the surgeon, can also lead to complications not encountered in conventional surgeries.In this report, we will present two cases of delayed gastric paresis, which developed on the 3rd-4th postoperative day after redo abdominal vascular surgery.

Material and Methods: The 74-year-old and 48-year-old male patients initially underwent aortounifemoral bypass surgery. They subsequently underwent femorofemoral bypass due to graft occlusion. When these grafts also became occluded, they presented to our clinic with claudication. Following preoperative evaluation, the patients were prepared for simultaneous surgery in collaboration with the General Surgery clinic. First, both femoral regions were opened. The femfem grafts were removed. The femoral artery segment on the healthy extremity was repaired. The femoral artery segment on the side with the occluded iliac artery was prepared for anastomosis. Abdominal adhesions were separated by the general surgeons and the omentum was prepared to serve as a cover if necessary. The retroperitoneum was then opened, and the abdominal aorta was snarred in the infrarenal segment. A tunnel was created through the upper segment of the old grafts, preserving the ureter. Aortofemoral bypasses were performed using a Dacron graft of appropriate diameter. Omentum was used as a cover for the areas of the tunnel where there was no retroperitoneal tissue to protect the new graft. Drains were placed. The operation was concluded appropriately.

Results: During the postoperative follow-up, the nasogastric tube was removed after the passage of gas on the second day, and oral intake was resumed. However, nausea, abdominal pain, and bloating recurred within 3-4 days. A plain abdominal radiograph revealed gastric dilatation occupying nearly the entire abdomen, leading to the diagnosis of gastric paresis. Oral intake was stopped. A nasogastric tube was reinserted. The stomach was decompressed, and oral intake was reinstituted, gradually increasing to the initial dose. The patients were discharged on the 10th postoperative day without any complications.

Conclusion: Delayed gastric paresis is a complication we don't see after routine vascular abdominal surgery, but it is seen in abdomens that undergo redo surgery. It's a complication that shouldn't be ignored and should be kept in mind. We wanted to share our experience.

Keywords: Aortofemoral bypass, redo surgery, gastric paresis, complication

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PP-123

Combined graft interposition and aneurysm repair in a case with bilateral renal artery stenosis accompanied by a saccular aneurysm of the right renal artery: A case report

Enes Dogukan Sozbilici, Gulce Imamoglu, Eren Soyaltin, Meltem Cakmak, Muhammet Akyuz, Onur Isik

İzmir City Hospital, İzmir, Türkiye

Abstract

Aim: Renal artery stenosis is one of the most common causes of hypertension. Neurofibromatosis type 1 (NF1) is an autosomal dominant neurocutaneous syndrome that affects the renovascular system and various other parts of the body. In patients with NF1, the most frequently observed vascular abnormality is renal artery stenosis.

Material and Methods: A 17-year-old patient with a history of intermittent flank pain for approximately 10 years and previously evaluated for hypertension at various centers presented to our clinic. CT angiography revealed bilateral renal artery stenosis. A markedly tortuous course was observed in the right renal artery, with an aneurysmal dilatation reaching up to 10 cm in the proximal segment. Additionally, mild stenosis was reported in the left renal arteries. Surgical intervention was planned. Through a midline supraumbilical incision, the abdominal cavity was accessed. The inferior vena cava, right and left renal veins, abdominal aorta, and right renal artery were isolated. Following heparinization, the right renal artery was ligated at its aortic origin and distal to the aneurysm. A 6 mm ringed graft was interposed between the healthy segment of the artery and the abdominal aorta. The aneurysmal sac was excised. No postoperative complications occurred, and a regression in hypertension was observed. Antihypertensive medication doses were gradually reduced.

Results: Patients with a diagnosis of NF1 should be carefully evaluated for hypertension. Although hypertension in these patients often presents as resistant to medical treatment, it is important to note that it may be managed successfully with surgical intervention. In rare cases, renal artery stenosis may be accompanied by aneurysms, posing a life-threatening risk in patients monitored for hypertension without a definitive diagnosis. In our case, the presence of a large aneurysm and hypertension unresponsive to medical therapy prompted surgical intervention. During follow-up, a gradual reduction in the need for antihypertensive medication was observed.

Conclusion: More research should be conducted on diseases that affect vascular structures, such as Neurofibromatosis type 1, and it should not be overlooked that vascular surgery plays a crucial role in the treatment of such conditions.

Keywords: Renal artery stenosis, renal artery aneurysm, neurofibromatosis, hypertension

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PP-124

Candida associated infra-inguinal prosthetic vascular graft infection: A case report

Ahmet Deniz Kaya[1], Ihsan Alur[2]

[1]S.B.U. Bursa High Specialization Training and Research Hospital, Bursa, Türkiye
[2]Private Doruk Hospital, Bursa, Türkiye

Abstract

Aim: In this paper, we wanted to present a case that we operated because of infected graft in which Candida albicans grew.

Material and Methods: A 48-year-old patient who had been operated twice for peripheral artery disease in another health center applied to our out-patient clinic. Femoro-popliteal graft bypass surgery was performed by another surgeon two years ago. One year after the first surgery, the same surgeon revised the old graft and performed end to end anastomosis between graft and native popliteal artery. The patient came to our out-patient clinic with the complaint of bleeding from supra-genual incision in the left lower limb. We decided to remove the old PTFE (polytetrafluoroethylene) graft and perform femoro-popliteal graft bypass with greater saphenous vein.

Results: We discharged the patient on the 14th postoperative day with prescribing oral fluconazole (1*200 mg) for a week in addition to clopidogrel (1*75 mg) and ecopirin (1*100 mg).

Conclusion: As a result, in the patients who have comorbidities such as DM and who will undergo redo-surgery, excessive care should be given in terms of graft infections.

Keywords: Prosthetic vascular grafts, candida infection, infra-inguinal by-pass

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PP-125

Abdominal aortic aneurysm cases presenting with atypical symptoms

Ferruh Elbir, Vehbi Kinay, Bekir Sertten, Dogus Koroglu, Mehmet Erin Tuysuz

Mersin City Training and Research Hospital, Mersin, Türkiye

Abstract

Aim: The relationship between abdominal aortic aneurysm (AAA) and vertebral destruction is a rare but clinically important condition.We think that vertebral restrictions should be considered as a symptom of abdominal aortic aneurysm, and these patients should not be considered asymptomatic. We think that this is a surgical indication for asymptomatic abdominal aortic aneurysm, regardless of diameter.

Material and Methods: Two patients who applied to the outpatient clinic were included in our presentation. Our patients are 78 year old and 67 year old men. 78 year old patient was being followed up with Physical Therapy and NSAIDs for a long time in an external center due to back pain. The patient was admitted to us after an abdominal aortic aneurysm was incidentally detected in the radiological images taken after the patient's pain complaints increased during the treatment process. .Our 67 year old patient, who applied to the outpatient clinic with similar symptoms, was being followed up with long-term NSAID and Physical therapy applications for his long-standing back and waist pain. Primary back pain was associated with the abdominal aortic aneurysm, which was detected incidentally after the application to our outpatient clinic, causing vertebral destruction.

Results: We think that vertebral restrictions should be considered as a symptom of abdominal aortic aneurysm, and these patients should not be considered asymptomatic. We think that this is a surgical indication for asymptomatic abdominal aortic aneurysm, regardless of diameter.

Conclusion: An abdominal aortic aneurysm is a localized, pathological dilatation defined as an enlargement of the abdominal aorta greater than 50% of its normal diameter. An unruptured AAA may be asymptomatic or may cause symptoms such as abdominal pain, low back or back pain, groin pain, a palpable abdominal mass, early satiety, nausea, constipation, and urethral obstruction. A ruptured AAA may present with sudden-onset, severe abdominal or back pain, hypotension (shock), and a palpable abdominal pulsating mass.Atypically, back and back pain in these patients may present with orthopedic and neurological conditions, as well as underlying pathologies.The association between abdominal aortic aneurysm (AAA) and vertebral destruction is rare; It occurs as a result of anatomical and pathophysiological relationship and early intervention is of critical importance in terms of spinal stability and life-saving treatments. A wide range of treatment options are offered, from medical follow-up to corticosteroid treatments for inflammatory conditions, antibiotic treatments for infective conditions, and surgical treatment when necessary.

Keywords: Abdominal aortic aneurysm, vertebral destruction, vertebral erosion

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PP-126

Giant thoracoabdominal pseudoaneurysm

Ahmet Aydin, Melih Alma

Hacettepe University, Ankara, Türkiye

Abstract

Aim: Aortic pseudoaneurysms are uncommon but potentially life-threatening, often occurring after trauma, infection, or previous surgery. Large thoracoabdominal pseudoaneurysms are extremely rare and carry high risk of rupture. Surgical repair remains the definitive treatment in symptomatic or large lesions.

Material and Methods: A 60-year-old male presented with a three-month history of abdominal and back pain accompanied by hematemesis. Previous evaluations at other centers had been inconclusive. CT angiography performed in our hospital revealed a giant thoracoabdominal aortic pseudoaneurysm measuring approximately 13 cm in diameter, extending from just above the diaphragm to the level of the celiac artery. The patient underwent surgery in the lateral decubitus position through a thoracoabdominal incision. Femoral artery and vein were cannulated, and an additional arterial cannula was placed in the thoracic aorta. Cardiopulmonary bypass (CPB) was initiated, and the aorta was clamped proximal to the aneurysm. The pseudoaneurysm sac was opened, and after resection, a tubular graft was interposed between healthy aortic segments. No reimplantation of visceral arteries was required. The patient was weaned off CPB without difficulty. Postoperatively, his symptoms resolved, and he was discharged without complications.

Results: Thoracoabdominal pseudoaneurysms of this size are extremely rare and associated with high morbidity and mortality. Endovascular options may not always be feasible due to anatomical limitations. In selected patients, open repair under CPB with tubular graft interposition can provide a safe and durable solution.

Conclusion: Giant thoracoabdominal pseudoaneurysms are rare but life-threatening conditions. Surgical repair with CPB and tubular graft interposition can be performed safely with excellent outcomes in appropriately selected patients.

Keywords: Thoracoabdominal, pseudoaneurysm, treatment strategia

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PP-127

Surgical repair of a femoral arteriovenous fistula developing after percutaneous pulmonary valve replacement: A case report

Gungor Temizkan, Mehmet Asam, Seref Kesici

Gaziantep University, Gaziantep, Türkiye

Abstract

Aim: This study aims to present a case of an iatrogenic femoral arteriovenous fistula that developed after percutaneous pulmonary valve replacement and required surgical repair, and to discuss diagnostic and therapeutic approaches.

Material and Methods: IntroductionA rare but serious complication of percutaneous cardiac interventions is the development of an arteriovenous fistula in the femoral region. If left untreated, these fistulas carry a risk of high-output heart failure, leg ischemia, or rupture. This case presents a femoral arteriovenous fistula that developed after percutaneous pulmonary valve replacement and was successfully surgically repaired.

Results: An 11-year-old boy underwent surgery under general anesthesia. A 5-cm incision was made in the right femoral region, parallel to the fistula tract. A distinct arteriovenous fistula tract was observed between the femoral artery and vein. The proximal common femoral artery (CFA) was controlled, and after administration of intravenous heparin, the CFA was cross-clamped. The fistula tract was opened, and the superficial femoral artery lumen, which was adherent to the femoral vein, was dissected. Because the traumatized segment was deemed unsuitable for direct anastomosis, the proximal and distal superficial femoral artery ends were prepared, and an end-to-end anastomosis was performed with 6/0 Prolene. The femoral venous defect was sutured with 6/0 Prolene. After the anastomosis, proximal and distal pulses were palpable. After bleeding was controlled, layered closure was performed. In the early postoperative period, the dorsalis pedis and tibialis posterior pulses of the right lower extremity were palpable, and no signs of ischemia were detected.

Conclusion: Procedures requiring large-bore catheters, such as percutaneous pulmonary valve replacement, may increase the risk of a femoral arteriovenous fistula. Surgical repair of symptomatic or large fistulas is a safe and effective treatment method. Surgical repair performed with proximal arterial control, heparinization, and careful dissection can provide successful outcomes and uncomplicated healing. This case demonstrates the successful surgical management of an arteriovenous fistula developing after pediatric percutaneous interventions.

Keywords: Arteriovenous fistula surgery, postoperative complications, femoral artery

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Successful repair of a ruptured thoracoabdominal aortic aneurysm

Busra Zehra Karaayak, Hasan Iner, Sahin Iscan, Yuksel Besir, Hidayet Onur Selcuk, Irem Ozcetin, Suat Ozdal, Haci Anil Solak, Levent Yilik, Ali Gurbuz

İzmir Katip Celebi University Atatürk Training and Research Hospital, İzmir, Türkiye

Abstract

Aim: Thoracoabdominal aortic aneurysm (TAAA) is a rare but life-threatening vascular condition involving both the thoracic and abdominal portions of the aorta. Often asymptomatic until rupture, TAAAs require urgent diagnosis and prompt management due to their high mortality risk. This case report presents the successful open surgical repair of a ruptured TAAA in a 50-year-old male patient.

Material and Methods: A 50-year-old male presented to the emergency department with sudden onset chest and back pain. CT angiography revealed a 4.7 cm lesion adjacent to the descending thoracic aorta, suspicious for thrombus, and a dissection flap extending from the infrarenal aorta to the iliac bifurcation. Aneurysmal dilatation measuring 9 cm was observed at the thoracoabdominal junction. The findings were consistent with Crawford Type II TAAA. Emergency open surgical repair was indicated.The patient was placed in a left thoracotomy position with 30° of leftward pelvic rotation. Right femoral artery and vein cannulation were performed, followed by a left thoracotomy. The aorta was exposed 3 cm distal to the left subclavian artery for proximal anastomosis. The diaphragm was incised anteriorly and laterally, and the peritoneum was opened to access the retroperitoneal aorta. The celiac artery, superior mesenteric artery (SMA), and left renal artery were identified. A site 2 cm proximal to the celiac artery was selected for distal anastomosis.The pericardium was opened, and a vent was placed in the left superior pulmonary vein. Cardiopulmonary bypass was initiated. The aneurysm sac was opened, and thoracic and spinal branches were ligated. A 24 mm Dacron graft was used proximally, and a 30 mm graft was anastomosed distally through the diaphragmatic hiatus. The celiac artery, originating from the false lumen, was reinforced and incorporated into the graft.The operation was completed successfully without intraoperative complications.

Results: The patient remained in the ICU for 25 days and was transferred to the general ward. He was discharged in good condition on postoperative day 44.

Conclusion: Although associated with high morbidity and mortality, open surgical repair remains a viable and life-saving option for ruptured TAAAs when performed in appropriately selected patients.

Keywords: Thoracoabdominal aortic aneurysm, Open surgical repair, crawford type II aneurysm

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PP-129

Surgical endarterectomy and stent excision for in-stent restenosis: A case report

Huseyin Uzandi, Gozde Tekin, Mehmet Kizilay

Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Carotid artery stenting is an established endovascular treatment for carotid stenosis; however, in-stent restenosis remains a major drawback and may require repeat intervention. While balloon angioplasty or re-stenting are common strategies, surgical stent excision combined with carotid endarterectomy (CEA) is rarely reported due to its technical challenges. The aim of this report is to present a case of severe in-stent restenosis successfully treated with surgical excision and patch angioplasty, highlighting the feasibility and outcomes of this approach.

Material and Methods: A 65-year-old female with a history of diabetes mellitus, hypertension, and two prior cerebrovascular events had undergone carotid stenting of the left carotid artery 10 years earlier. She presented with progressive dizziness and recurrent syncopal episodes. Digital subtraction angiography (DSA) revealed 95% in-stent restenosis. Under general anesthesia, a cervical approach was performed. The common, internal, and external carotid arteries were dissected, systemic heparinization was administered, and arteriotomy was carried out. The stent was excised together with endarterectomy, and the artery was reconstructed using a Dacron patch.

Results: The patient was extubated in the intensive care unit without major neurological deficit. Postoperatively, dysphagia and tongue deviation were observed, attributed to cranial nerve edema, and managed conservatively with medical therapy. The symptoms regressed, and the patient was discharged in good condition on postoperative day 5. No perioperative stroke or mortality occurred.

Conclusion: This case demonstrates that surgical stent excision with endarterectomy is a feasible and effective treatment option in patients with severe in-stent restenosis. Despite increased technical difficulty compared with primary CEA, careful surgical technique can ensure favorable outcomes. Considering the long-term durability and low complication rates of CEA reported in current guidelines, surgery should remain the gold standard treatment, while the limitations of endovascular therapy must be carefully weighed in clinical decision-making.

Keywords: Carotid endarterectomy, In-stent restenosis, surgical stent excision

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PP-130

Iatrogenic vascular injury: A rare complication case report

Murat Ari, Orhan Bozoglan, Mehmet Kirisci, Murat Canak

Sütçü İmam University Faculty of Medicine, Department of Cardiovascular Surgery, Kahramanmaraş, Türkiye

Abstract

Aim: With the widespread use of surgical interventions and endotracheal intubation procedures, iatrogenic vascular injuries have become more frequently encountered in clinical practice. In this case report, we discuss the diagnosis, treatment, and outcomes of a rare vascular injury caused by preexisting spinal instrumentation in the cervical region during a difficult intubation.

Material and Methods: A 38-year-old female patient was referred to our clinic from an external center with a preliminary diagnosis of vascular injury following sudden neck swelling and hemorrhage during elective surgery (Total Abdominal Histerectomy and Bilateral Salphingo Ooferectomy) and a difficult intubation attempt. The patient's history revealed spinal instrumentation in the cervical region due to neurofibromatosis.On physical examination, a prominent hematoma, subcutaneous emphysema, and tracheal deviation were noted in the right cervical region. The hemodynamically unstable patient was taken to emergency surgery. Intraoperatively, rupture of the right subclavian artery and vein, thought to be due to tumor invasion, and injuries to the right carotid artery, internal and external jugular veins, presumed to be secondary to cervical instrumentation, were identified. All vascular injuries were successfully repaired with primary surgical techniques. The postoperative course was uneventful, and the patient was discharged in a stable condition.

Results: Migration or malposition of spinal instrumentation after cervical spine surgery can lead to severe vascular complications. Traumatic interventions such as difficult intubation may further increase this risk. While such vascular injuries are typically described as late complications in the literature, acute and life-threatening hemorrhagic events, as seen in this case, are rare but critical. Therefore, in patients with similar surgical histories, thorough preoperative evaluation is essential.

Conclusion: In patients with a history of cervical spine surgery, the risk of iatrogenic vascular injury during invasive procedures must always be considered. Early diagnosis, prompt surgical intervention, and a multidisciplinary approach are vital and can be lifesaving in such cases.

Keywords: Iatrogenic vascular injury, cervical instrumentation, difficult intubation, vascular complication, case report

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PP-131

Popliteal artery injury following total knee arthroplasty (TKA): A rare case report

Abdurrahman Seramet[1], Ozer Gazioglu[2], Serkan Sonmez[1], Volkan Burak Taban[2]

[1]Aksaray University Training and Research Hospital, Aksaray, Türkiye
[2]Aksaray University Faculty of Medicine, Aksaray, Türkiye

Abstract

Aim: Vascular injuries following total knee arthroplasty (TKA) are extremely rare but can have serious consequences when they occur. Popliteal artery injury is one of the most feared complications of TKA, with an incidence reported in the literature to be less than 1%. Although the field of orthopedic surgery is not directly related to the popliteal vascular bundle, this complication can occur, though rarely. In this case, we present a patient who underwent emergency revascularization due to a complete transection of the popliteal artery following knee replacement surgery.

Material and Methods: Case Presentation: A 61-year-old female patient underwent elective TDA at the orthopedic clinic due to osteoarthritis of the right knee(Figure1). In the postoperative period, she developed coldness and severe pain in her right leg. Acute Doppler ultrasound and subsequent CT angiography revealed absent peripheral pulses, interrupted distal flow from the level of the right popliteal artery, and contrast extravasation(Figure2). The patient was urgently explored in the prone position, revealing no injury to the popliteal vein but complete transection of the popliteal artery. Blood flow was restored by interposing a 6 mm ringed PTFE graft between the ends of the popliteal artery(Figure3). Postoperatively, the distal pulses became trifasic; complications were managed without the development of neurological deficit or compartment syndrome in the patient.

Results: .

Conclusion: Popliteal artery injury during TDA is extremely rare but, when it occurs, it is a limb-threatening condition for the extremity. Injury mechanisms include direct laceration with surgical instruments, improper placement of a posterior retractor, or compression of the artery due to excessive extension/hyperextension of the knee. The literature reports that in 96% of cases, the injury was detected during surgery or immediately in the postoperative period, and early intervention usually resulted in successful treatment with stenting or bypass. Early diagnosis is a decisive factor in functional outcome and limb salvage. Therefore, if ischemic findings such as leg pain, pallor, coldness, or loss of pulse develop after TKA, they should not be interpreted as deep vein thrombosis or expected postoperative pain and neglected; popliteal artery injury should be considered, and vascular evaluation and imaging should be performed immediately. This case highlights that popliteal artery injury can occur, albeit rarely, after knee replacement and that the limb can be saved with early surgical intervention. Due to the increasing number of knee surgeries, it is important for both orthopedic and vascular surgery clinics to be aware of such extremity-threatening complications.

Keywords: Total knee arthroplasty, popliteal artery, injury

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PP-132

Our temren aterectomy results using 0.035 mm hydrophilic wire

Turhan Yavuz, Dincer Uysal, Kadir Burhan Karadem, Caner Celik, Omer Buyuktahtakin, Ceyda Yilmaz, Omer Faruk Ozdemir, Ahmet Horzum, Emre Yavuz, Muhammet Olayan, Seyma Karaisli, Erdogan Ibrisim

Süleyman Demirel University Cardiovascular Surgery, Isparta, Türkiye

Abstract

Aim: To demonstrate the ease of use of TEMREN atherectomy using 0.035 hydrophilic wire.

Material and Methods: Normally, atherectomy devices operate with 0.0014 or 0.0018 mm hydrophilic wire. We performed atherectomy with 0.0035 mm hydrophilic wire in 20 cases. It was more comfortable and convenient.

Results: No complications were observed and the procedure time and cost were less.

Conclusion: Normally, atherectomy devices operate using 0.0014 or 0.0018 mm hydrophilic wire. This increases cost by requiring wire changes during the procedure. It also makes it difficult to carry the atherectomy wire, especially in difficult lesions and in the iliac region. When a 0.0035 mm hydrophilic lesion is passed, the procedure becomes easier with atherectomy using this wire. The risk of wire breakage is reduced, and wire changes are unnecessary.

Keywords: Atherectomy, atherectomy, peripheric artery disease

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PP-133

Conversion of a brachial artery-basilic vein fistula to a functional hemodialysis fistula by transposition: Case report

Mehmet Asam, Gungor Temizkan

Gaziantep University Faculty of Medicine, Gaziantep, Türkiye

Abstract

Aim: This study aims to present how a brachial artery-basilic vein fistula, which developed unnoticed due to a previous intervention, was successfully used by transposition of the median basilic vein to the cephalic vein to create a functional fistula tract for hemodialysis.

Material and Methods: Unexpected anatomic findings can be encountered during vascular access surgery, especially in patients with previous interventions. This study demonstrates that unexpected intraoperative findings can be evaluated and converted into effective vascular access.

Results: FindingsA 48-year-old male patient underwent surgery with the plan to create a new arteriovenous fistula in the left antecubital region. He had a history of a previous unsuccessful fistula intervention in the left radial region. When the antecubital incision was opened, significant arterialized flow was observed in the median basilic vein. During dissection, an iatrogenic arteriovenous fistula, likely related to a previous operation, was identified between the brachial artery and basilic vein at the mid-humeral level. The distal portion of this unexpected fistula was ligated. The proximal portion of the median basilic vein was anastomosed to the cephalic vein using 7/0 prolene suture, diverting the existing fistula flow into a new subcutaneous tract to create a functional cephalocalist basilic transposition fistula. A significant postoperative thrill was removed from the fistula.

Conclusion: ConclusionThis case demonstrates that a preexisting and unnoticed iatrogenic arteriovenous fistula can be successfully converted into a functional hemodialysis fistula with appropriate modification. In the face of unexpected intraoperative findings, evaluating the anatomy and utilizing the existing pathological flow can provide effective hemodialysis access.

Keywords: Arteriovenous fistula, vascular surgical procedures, brachial artery, basilic vein

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PP-134

An unusual cause of dyspnea in a 35-year old woman: Massive primary vascular tumor of the carotid artery

Cagla Canbay Sarilar, Birol Akdogan, Muhammed Emir Sahin, Sinan Bulut, Onur Selcuk Goksel

İstanbul University Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Vascular lesions of the head and neck region are complex and diverse.

Material and Methods: We present a young female patient presenting with a mass originating from the ostium of the left common carotid artery extending cranially to the level of carotid bifurcation.A 35-year-old female patient was referred to our clinic with a history of occasional dyspnea and dysphagia and left-sided neck mass after a similar presentation to our clinic 8 years ago.

Results: Radiologically, the tumor originated at the level of the LCCA ostium and extended cranially as high as the bifurcation and encircled it around 360°. Lower-most border of the tumor near the origin of the LCCA was reached by dissecting the omohyoid and sternohyoid muscles partially alleviating the need for a sternotomy allowing en bloc excision. However, at the most caudal border of the tumor, it was not possible to excise it off the carotid wall without rupturing and we had to interpose a 8- mm ringed PTFE graft at this level.

Conclusion: This is an unprecedented presentation of a tumor originating from the carotid artery itself. Final diagnosis is possible following surgical excision and the experienced surgeon should consider the possibility of all the neurovascular complications.

Keywords: Dsypnea, vascular tumor, carotid artery

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PP-135

Carotid endarterectomy in asymptomatic carotid stenosis

Raed Zalloum[1], Ibrahim Krenawi[2], Shady Samy Georgy[2]

[1]Hamad General Hospital,Qatar, Doha
[2]Burjeel Royal Hospital, Abu Dhabi, United Arab Emirates

Abstract

Aim: Carotid endarterectomy (CEA) has continued to play a crucial role in preventing carotid stenosis among patients with asymptomatic carotid stenosis (ACS), a condition characterized by substantial narrowing of the carotid arteries without any recent neurological event. Although CEA has known advantages in the treatment of symptomatic patients, its use in asymptomatic patients is still controversial, with advances in the areas of medical treatment and diagnostic imaging. Joint decision-making between the clinician and patient is highlighted to strike the equilibrium between surgical advantages and the risk an individual has and their life expectancy. Finally, an individual evidence-based approach combining surgery, medical therapy, and patient choices is of vital importance in the management of ACS

Material and Methods: Understanding plaque characteristics and duplex ultrasound scanning has increased stroke diagnosis accuracy and making optimal medical treatment decreases stroke risk in ACS patients (Pavlyha et al, 2025). The support for CEA in ACS treatment depends on analyzing all current ACS research findings provided by Cyréus et al. in 2025. This work explains the health problems behind ACS then studies how CEA reduces stroke occurrence plus traces possible paths to improve treatment results.

Results: Stable plaque patterns on angiography with minor vessel narrowing(< 70%)predict lower chances of ischemic events(Zarins, 2025). Research has proven that carotid endarterectomy(CEA)decreases stroke risk among specific patient groups. Following optimal medicine therapy and CEA the Asymptomatic Carotid Atherosclerosis Study (ACAS) found a 53% lower risk of stroke for five years in patients with stenosis over 60 percent which equates to about 1% less stroke risk per year (Henning, 2025). Results from the ACST confirmed that when done at experienced hospitals with low surgical risks CEA reduced stroke risk over a long period (Leonard et al., 2024). Studies show that surgeons must first choose patients carefully before combining carotid endarterectomy with medical treatments to lower stroke risks.

Conclusion: The ideal patients for CEA depend on how severe their carotid artery blockage is along with their operating risk, their plaque characteristics, and their life expectancy. Effective clinical results depend strongly on performing procedures at centers with high volume and low complication events. To improve cardiovascular health patients need medical management plus treatment of their changeable risk factors. Doctors need to adjust their patient care as new research develops from clinical studies including CREST-2. Our healthcare team bases decisions on research and works together to help ACS patients achieve better health results while living life better long-term.

Keywords: Carotid endarterectomy, asymptomatic carotid stenosis, open surgery

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PP-136

Unusual upper limb neurovascular trauma following a wild boar attack: A case of radial artery and anterior interosseous nerve injury

Baris Akca, Cihan Yetis

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Wild boar attacks are rare and upper extremity injuries in such incidents are even less common, with neuro-vascular injuries being exceedingly rare. Injuries inflicted by wild boars can occasionally be severe, leading to significant rates of morbidity and even mortality. This case presents the management of a patient with penetrating radial artery and anterior interosseous nerve laceration caused by a wild boar.

Material and Methods: A 43-year-old male shepherd was referred to our center following a wild boar attack. He presented with a tourniquet applied to the left arm and reported pulsatile bleeding from the injury site, which was a hard sign of vascular injury. On physical examination, swelling and redness were observed, with no laceration in the patellar region of the left knee joint. The left forearm exhibited an approximately 5 cm active oozing bleeding wound affecting the skin and subcutaneous tissue. The left hand appeared cold and pale, with prolonged capillary refill time but no signs of cyanosis. Radial and ulnar artery pulses were not palpable. Doppler ultrasonography revealed a monophasic flow pattern in the left radial artery at the wrist level, with incomplete luminal filling. Vital signs were stable.

Results: Although he was in good general condition and had stable vital signs, emergency surgery was deemed necessary due to a suspected arterial injury. An extended skin incision of injury was made to expose the distal brachial artery and the bifurcation of the radial and ulnar arteries. A complete transection of radial artery was identified approximately 2-3 cm distally to ulnar bifurcation. Brachial and ulnar arteries were intact and no injury signs like intra-arterial thrombus or adventitial hematoma were observed in the explored area. The radial artery was mobilized proximally and distally, and repaired with an end-to-end anastomosis. The anterior interosseous nerve laceration detected incidentally following vascular repair, and repaired primarily. The postoperative course was uneventful, and no neurovascular abnormalities were noted at the 3-month follow-up.

Conclusion: In patients with wild boar-related injuries, understanding the mechanism and anatomical pattern of injury is essential for appropriate diagnosis and management. While open wounds of the lower limbs are the most prevalent, upper-body lesions can also be severe and should not be overlooked. Moreover, deep or penetrating tusk injuries require special attention due to their potential for neurovascular damage and secondary infections. Improving morbidity and mortality outcomes requires case-by-case evaluation at admission, accurate identification of injury components (vascular, musculoskeletal, neural, etc.), and prioritization of appropriate treatment.

Keywords: Vascular system injuries, forearm injuries, wild boar, penetrating wound, peripheral nerve injuries

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PP-137

Effectiveness of percutaneous transluminal angioplasty (PTA) after arteriovenous fistula occlusion: A retrospective evaluation of post-procedural dialysis access duration and alternative methods

Elif Ates, Muammer Ucar, Aysen Yaprak Kapkin, Emrah Oguz, Ismet Tanzer Calkavur

Ege University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Arteriovenous fistulas (AVFs) are the most durable vascular access method for patientsundergoing hemodialysis. However, progressive stenosis and occlusions over time may leadto loss of fistula function. Percutaneous Transluminal Angioplasty (PTA) is a frequently usedinterventional technique for the treatment of such lesions. In our study, we investigated theduration of post-procedural usability of the same fistula in patients who underwent PTA dueto fistula occlusion, as well as the clinical implications of procedural success.

Material and Methods: In this retrospective study, 184 patients who underwent PTA for fistula occlusion at ourhospital between 2011 and 2025 were evaluated. The post-procedural patency of the samefistula and the number of interventions were recorded. In addition, alternative dialysismethods used in patients whose fistulas were no longer functional after the procedure (e.g.,temporary catheter, new AVF, graft, etc.) were investigated. Patient follow-up was conductedthrough medical records and telephone interviews. A total of 108 patients could not bereached.

Results: In this retrospective study, 184 patients who underwent PTA for fistula occlusion at ourhospital between 2011 and 2025 were evaluated. The post-procedural patency of the samefistula and the number of interventions were recorded. In addition, alternative dialysismethods used in patients whose fistulas were no longer functional after the procedure (e.g.,temporary catheter, new AVF, graft, etc.) were investigated. Patient follow-up was conductedthrough medical records and telephone interviews. A total of 108 patients could not bereached.

Conclusion: PTA is an effective and minimally invasive method for restoring the usability of occludedarteriovenous fistulas. In this study, the post-procedural patency of the fistula was evaluatedand PTA was shown to have a high rate of functional success in the short and mid-term.However, significant shortcomings were observed in the regular follow-up of patients andlong-term monitoring was interrupted due to patients admissions to different centers. Thissituation makes it difficult to objectively assess the true procedural success and durability ofuse. In conclusion, a more organized and closely coordinated follow-up system, supportedby strong inter-center communication, is required to enhance the effectiveness of PTA and toensure the continuity of vascular access. This study may serve as a guide in evaluating thesuccess of PTA in our clinical practice and in optimizing patient management

Keywords: Fistula, arteriovenous fistula , percutaneous transluminal angioplasty, hemodialysis catheter, hemodialysis

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PP-138

Iatrogenic arteriovenous fistula in childhood: Two case reports

Elif Tuzdelen, Timucin Sabuncu

Hacettepe University Hospital, Ankara, Türkiye

Abstract

Aim: Vascular access and blood sampling are commonly performed procedures in pediatric patients. However, the development of iatrogenic arteriovenous fistula (AVF) as a complication of these procedures is rare. This report presents two pediatric cases of AVF occurring after vascular access.

Material and Methods: The first case presented with progressive bilateral swelling and palpable thrill in the brachial region following peripheral vascular access. Diagnosis was confirmed by Doppler ultrasonography, and surgical repair with ligation was performed. The second case developed an AVF in the left brachial region following vascular access during neonatal hospitalization. Diagnosis was again confirmed by Doppler ultrasonography. Surgical exploration was performed, and the fistula segment was resected with ligation.

Results: Both patients recovered without complications following surgical intervention.

Conclusion: Although iatrogenic AVF is rare in childhood, it can lead to serious complications. Surgical approaches include ligation, lateral arteriorrhaphy/venorrhaphy, or resection of the fistula segment with arterial end-to-end anastomosis. While endovascular treatments, such as stent placement or coil embolization, are increasingly preferred in adults, pediatric patients require careful consideration due to risks of stent migration, chronic ischemia, and radiation exposure. Our clinical experience indicates that surgical management provides satisfactory outcomes and recovery in pediatric cases.

Keywords: Iatrogenic arteriovenous fistula, pediatric vascular complications, doppler ultrasonography, surgical management, vascular access

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PP-139

Emergency anastomosis of the internal carotid artery to the external carotid artery: A case report

Halil Bilal Sayi, Adnan Yalcinkaya, Ali Umit Yener

SBU Antalya Training and Research Hospital, Antalya, Türkiye

Abstract

Aim: Carotid endarterectomy(CEA) is a surgical procedure that involves exposing the carotid artery, removing the atherosclerotic plaque, and reconstructing the artery. However, various complications may occur following carotid endarterectomy, including stroke, hemorrhage, and nerve injury. In this report, we present a case from our clinic in which a complication developed after right carotid endarterectomy and the subsequent intervention performed.

Material and Methods: A 63-year-old female patient presented to the emergency department with weakness in the right upper and lower extremities. Carotid Digital Subtraction Angiography(DSA) was performed, which revealed 80–90% stenosis in both the left and right internal carotid arteries(ICAs). Elective right CEA with saphenous patch plasty was performed under general anesthesia. During postoperative intensive care follow-up, at the third hour after regaining consciousness, neurological examination revealed left hemiplegia. Immediate carotid ultrasonography in the ICU demonstrated absent flow in the right ICA and the presence of a perivascular hematoma. The patient was urgently reoperated. After applying vascular clamps, the patch was excised and the thrombus was extracted. Primary closure was deemed unsuitable due to the ICA diameter, and patch plasty was also not feasible considering the emergency and the condition of the ICA. The ICA was transected at the bifurcation of the common carotid arter(CCA). The CCA defect was primarily closed with Prolene. The ICA was then prepared distal to the previous anastomosis and anastomosed end-to-side to the external carotid artery(ECA).

Results: Stroke is a potential complication following carotid endarterectomy. With timely diagnosis and intervention, such complications can be managed without permanent sequelae. In our patient, the stroke was detected at the third postoperative hour. One of the factors contributing to this delay was the need to await the patient's recovery from general anesthesia before neurological examination could be performed. Various surgical techniques for CEA have been described, including the eversion method, primary closure, and patch angioplasty. In our case, we performed patch plasty using the saphenous vein in accordance with our clinical experience.

Conclusion: Stroke in the early postoperative period following carotid endarterectomy represents a serious complication that may lead to life-threatening consequences if diagnosis and treatment are delayed. Patients undergoing carotid endarterectomy must be closely monitored postoperatively. The choice of anesthesia and surgical technique should be determined individually, based on patient characteristics and the surgeon's clinical experience. In appropriate patients, as in our case, revascularization can be achieved by anastomosing the internal carotid artery to the external carotid artery in the event of postoperative complications.

Keywords: Carotid endarterectomy, stroke, anastomosis

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PP-140

Acute arterial occlusion due to compression and surgical treatment in a patient who underwent femoral artery stent grafting due to a complication of the proglide suture-mediated closure device (SMCD):Case report

Aydin Koc

Uşak University, Faculty of Medicine, Department of Cardiovascular Surgery, Uşak, Türkiye

Abstract

Aim: Unstoppable bleeding at percutaneous femoral artery access sites poses a significant problem in all units performing invasive procedures. A number of closure devices have been developed for this purpose. In this case, we emphasized the importance of avoiding pressure on the ipsilateral stent graft placed to stop bleeding after the ProGlide Suture-Delivered Closure Device (SMCD) thread broke during the procedure, and that the stent should be surgically removed if an occlusion develops.

Material and Methods: Acute femoral artery occlusion after transcatheter aortic valve implantation (TAVI) and its treatment process are described.

Results: A 78-year-old male patient presented with shortness of breath and chest pain and was diagnosed with severe aortic stenosis by echocardiography. A decision was made for transcatheter aortic valve implantation (TAVI) for the patient. During the procedure, the threads of two Proglide occluder devices placed in the right femoral artery broke, and therefore bleeding could not be controlled. A 10*38 mm graft-covered atrium V12 Advanta stent graft was implanted from the contralateral region. Since bleeding continued in the control imaging, the stent balloon was dilated and waited. Despite all this, when the bleeding did not stop, occlusion of the femoral artery developed due to the pressure applied to the stent graft. Due to occlusion confirmed by Doppler ultrasound, the patient underwent surgery. The crushed stent graft, which completely occluded the lumen, was surgically removed and the femoral artery was repaired. Full patency and flow were achieved.

Conclusion: Inter-clinic communication is crucial for timely recognition of potential complications and appropriate treatment. Applying excessive pressure to the stent graft placed in vascular injuries is a wrong decision and may cause occlusion due to crushing.

Keywords: Femoral artery occlusion, stent graft, complication

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PP-141

Simultaneous endovascular repair of abdominal aortic aneurysm with renal and celiac artery stenosis

Mehmet Emin Murat, Olcay Murat Disli, Mehmet Cengiz Colak, Ismail Okan Yildirim, Ahmet Turan Kaya

İnönü University Turgut Özal Medical Centre, Malatya, Türkiye

Abstract

Aim: An abdominal aortic aneurysm (AAA) is often found alongside renal artery stenosis (RAS). A personalised approach is required when selecting a treatment for these patients. Endovascular repair has become widely accepted as an alternative to open surgery for infrarenal AAA in recent years. This article presents a case study of a patient with high perioperative risk, resistant hypertension, abdominal pain and concurrent AAA and RAS who was successfully treated with endovascular repair of coeliac artery stenosis (CAS) during the same procedure.

Material and Methods: We present a 72 -year-old male with a 5.7 cm infrarenal AAA, high-grade (> 80%) left and right renal artery stenosis, and severe ostial stenosis of the celiac artery. The patient had resistant hypertension, impaired renal function, and recurrent postprandial abdominal pain. The patient was referred to our clinic for AAA. A CT scan was performed. Preoperative CT angiography revealed anatomy favorable for EVAR and endovascular interventions of both renal and celiac arteries. The procedure was performed in a hybrid operating room under general anesthesia. Celiac artery stenting was performed with a balloon-expandable stent, restoring visceral perfusion. Renal artery stenting was subsequently completed with a balloon-expandable stent. Endovascular aneurysm repair (EVAR) was then performed using a bifurcated aortic endograft. Intraoperative angiography confirmed satisfactory stent deployment, preserved renal and celiac artery flow, and complete exclusion of the aneurysm.

Results: The patient tolerated the combined procedure without complications. Renal function stabilized postoperatively, blood pressure control improved, and abdominal symptoms resolved. Follow-up imaging at confirmed patency of renal and celiac stents, with no evidence of endoleak or graft migration.

Conclusion: This case highlights the feasibility of simultaneous EVAR with renal and celiac artery stenting. The main advantages include single-session treatment, reduction of repeated vascular access, and minimization of total contrast exposure. Nevertheless, the procedure requires careful planning, high technical expertise, and meticulous intraoperative imaging to prevent complications such as branch vessel occlusion, endoleak, or visceral ischemia. Simultaneous endovascular repair of AAA combined with renal and celiac artery stenting is a viable and effective option in selected high-risk patients with multivessel atherosclerotic disease. This strategy may become increasingly relevant as endovascular technology evolves, but further studies are needed to confirm long-term outcomes.

Keywords: Abdominal aortic aneurysm endovascular repair renal artery stenosis celiac artery stenosis simultaneous intervention

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PP-142

Chronic type A dissections and acute-on-chronic "Triple lumen": Challenging case

Tamer Cebe, Kubra Gozacik Karakoc, Anil Akbas

SBU Batman Training and Research Hospital, Batman, Türkiye

Abstract

Aim: Chronic type A aortic dissections are rare, and the development of an acute-on-chronic component resulting in a triple-lumen anatomy is extremely uncommon, occurring in approximately 1% of cases. Such presentations pose substantial diagnostic and surgical challenges, demanding timely recognition and intervention. This report combines current literature with our experience managing a complex case.

Material and Methods: Recent literature from the past five years was reviewed to assess diagnosis, imaging, and management strategies for chronic type A dissections. Emphasis was placed on the role of CT angiography, echocardiography, and individualized treatment planning. A case from our center featuring an acute-on-chronic triple-lumen dissection was presented, highlighting surgical approach and outcome.

Results: Literature demonstrates that timely surgical intervention significantly improves survival in chronic type A dissections, although technical complexity influences perioperative morbidity and mortality. In our case, urgent surgery was successfully performed, with no major postoperative complications.

Conclusion: Acute-on-chronic triple-lumen presentations, despite their rarity, require prompt recognition and rapid surgical decision-making. Regular imaging follow-up and early intervention remain critical for reducing mortality in these high-risk patients. This case underscores the importance of multidisciplinary management and the surgical team's role in achieving successful outcomes in complex chronic dissection scenarios.

Keywords: Chronic type A dissection, acute-on-chronic, triple lumen, surgical management

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PP-143

Cerebral protection with a new shunt technique during carotid endarterectomy

Ugur Cetingok[1], Ahmet Bulent Saritas[2]

[1]Etlik City Hospital, Ankara, Türkiye
[2]Sincan Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: In this article, we present a new endovascular carotid-carotid shunt technique in a carotid endarterectomy case and discuss its advantages and safety.

Material and Methods: As a result of the evaluation of a 67-year-old male patient with complaints of vertigo and syncope, it was decided to perform carotid endarterectomy. The contrast enhanced computed tomography (CECT) was showed total occlusion in the right internal carotid artery and 90% stenosis in the left bulbus and internal carotid artery. The operation was performed with local anesthesia of the neck region to monitorization neurological functions during endarterectomy. Following conventional exploration, heparinization was achieved to maintain an ACT ≥ 250s. By manually examining the vessel, the location of the calcific plaque and the normal vascular structure were determined. Considering the area where vascular clamps would be placed proximal to the plated CCA region and distal to the ICA region, two 6F radial introducer sheats were placed towards the proximal CCA and distal ICA wih seldinger technique. The side tubes of each introducer sheats were connected to provide proximal-to-distal intraluminal flow. Vascular clamps were placed and classical endarterectomy and patchplasty were performed comfortably.

Results: The use of this shunt did not prevent clear visualization of the surgical field. The procedure was performed safely and comfortably. Shunt flow measured by doppler ultrasound was adequate (373 ml/min). Total cross clamp time was 22 minutes. No complications occurred during carotid endarterectomy.

Conclusion: Patients with a contralateral carotid occlusion (CCO) have higher stroke and mortality rates when undergoing carotid endarterectomy (CEA). The surgeons preferentially shunt patients with a CCO, which remains largely driven by the belief that carries a higher risk of stroke during CEA. There is no definitive consensus on the use of a carotid shunt to maintain cerebral perfusion during carotid endarterectomy. Some surgeons use a shunt in every case, while others use it in no case. Others prefer to use a shunt in specific situations. A wide variety of techniques are used to assess cerebral perfusion and function during carotid endarterectomy. These include electroencephalogram (EEG), somatosensory evoked potential (SSEP) detection, transcranial Doppler (TCD) measurements, continuous cerebral hemoglobin oxygen saturation measurement with near-infrared spectroscopy (NIRS), and carotid stump pressure measurements. Awake observation of neurological status remains the gold standard of measuring cerebral perfusion. The use of the conventional shunts may slow down surgery and even hinder surgical performance in especially in patients with poor exposure (high carotid bifurcation, short neck).

Keywords: Carotid endarterectomy, carotid shunt, stroke

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PP-144

SMA and celiac artery aneurysm surgical treatment

Anil Girgin[1], Ceren Sayarer[1], Ozalp Karabay[1], Tarkan Unek[2]

[1]Dokuz Eylül University Research and Application Hospital, Department of Cardıovascular Surgery, İzmir, Türkiye
[2]Dokuz Eylül University Research and Application Hospital, Department of General Surgery, İzmir, Türkiye

Abstract

Aim: Visceral artery aneurysms are rare but carry a high mortality risk when rupture occurs. The simultaneous presence of multiple aneurysms involving major visceral vessels such as the superior mesenteric artery (SMA), celiac trunk, and hepatic artery is extremely uncommon in the literature. In addition, the coexistence of a rare replaced right hepatic artery variation further complicates both diagnostic assessment and surgical/endovascular treatment planning. This case report presents the diagnostic evaluation and surgical management of a patient with concurrent aneurysms of the celiac artery, SMA, and replaced right hepatic artery.

Material and Methods: A 63-year-old woman presented with chronic abdominal pain and unintentional weight loss. During diagnostic work-up, incidental aneurysms of the celiac artery and SMA were detected, and she was referred to the cardiovascular surgery clinic. Selective celiac and SMA angiography revealed a 16 × 17 mm saccular aneurysm at the celiac trunk bifurcation involving the origin of the left gastric artery, ectatic changes of the gastroduodenal and pancreaticoduodenal branches, and a replaced right hepatic artery variant. Additional findings included a 4 mm saccular aneurysm of the replaced right hepatic artery, a 2 cm long and 10 mm wide fusiform aneurysm of the proximal SMA, and a 19 × 12 mm bilobed saccular aneurysm of the SMA ileocolic branch.Given the presence of multiple visceral artery aneurysms, a multidisciplinary team of cardiovascular surgery, interventional radiology, and general surgery decided on surgical treatment.

Results: The patient was taken to the operating theatre for surgery. The SMA and celiac arteries were dissected via median laparotomy by the general surgeon. Following systemic heparinisation, the SMA branches were clamped, an arteriotomy was performed, and the aneurysmal segment was resected with primary closure using continuous prolene sutures. Following haemostasis, the aneurysmal segment of the celiac trunk was similarly resected and repaired primarily. After confirming haemostasis, a drain was placed and the abdomen was closed anatomically. In the postoperative period, the patient remained haemodynamically stable and was monitored in the intensive care unit.

Conclusion: Multiple visceral artery aneurysms, particularly when associated with rare arterial variations, pose significant diagnostic and therapeutic challenges. This case represents a complex vascular condition rarely reported in the literature, characterized by concurrent aneurysms of the celiac artery, SMA, and replaced right hepatic artery. Early diagnosis, detailed angiographic evaluation, and multidisciplinary surgical planning are critical to reducing mortality and morbidity in such patients.

Keywords: Visceral artery aneurysm, celiac trunk, replaced right hepatic artery, vascular surgery

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PP-145

Emergency aortoiliac graft repair due to type 1 endoleak: A surgical response to an evar complication

Busra Zehra Karaayak, Serkan Yazman, Hasan Iner, Erturk Karaagac, Muhammed Cagri Yalcin, Suat Ozdal, Hami Can, Oguzhan Colak, Levent Yilik, Ali Gurbuz

[1]İzmir Katip Çelebi University Atatürk Training and Research Hospital, İzmir, Türkiye

Abstract

Aim: Endoleaks are complications that may occur after EVAR (Endovascular Aortic Repair) due to persistent blood flow into the aneurysm sac as a result of incomplete sealing by the endograft. This continued perfusion keeps the aneurysm sac under pressure and poses a risk for potential rupture. In particular, Type 1 and Type 3 endoleaks are considered high-pressure leaks and often require urgent surgical intervention. In this case report, we aim to present a successfully treated patient with aortoiliac graft wrapping performed due to a Type 1 endoleak detected after EVAR.

Material and Methods: A 70-year-old male patient had previously undergone EVAR for an abdominal aortic aneurysm. During the routine follow-up at postoperative month 2, a Type 1 endoleak was detected on CT angiography, and surgical intervention was planned. Through a Güm-Gam incision, the retroperitoneal space was accessed via a transperitoneal approach. A balloon occluder was introduced via the right femoral artery to achieve temporary proximal control. Following systemic heparinization, the aneurysm site was explored. No leakage was observed from the proximal landing zone of the aortoiliac graft. A 10 mm Dacron graft was anastomosed proximally to the existing aortoiliac graft. The distal end of the graft was anastomosed to the left common iliac artery. An aortocaval fistula was detected intraoperatively and repaired primarily (Figure 3). Two drains were placed. After achieving hemostasis, anatomical closure of the layers was performed.

Results: The patient was transferred to the intensive care unit following the operation. After 13 days of ICU monitoring, the patient was moved to the general surgery ward. On postoperative day 33, the patient was discharged in good condition.

Conclusion: In patients with endoleak following EVAR, timely surgical intervention based on appropriate indications can be life-saving. Aortoiliac graft wrapping, as performed in this case, represents a safe and effective treatment option in selected patients.

Keywords: Endovascular Aortic Repair, type 1 endoleak, aortoiliac graft repair, endovascular complication, open aortic surgery

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PP-146

Successful hybrid management of a middle aortic syndrome

Fəxrəddin Ələkbərov, Kamran Musayev, Kamran Ahmadov

Central Clinic Hospital, Baku, Azerbaijan

Abstract

Aim: Midaortic syndrome (1:1,000,000) is a rare condition in children that presents with persistent high blood pressure and requires surgical intervention.Not only genetic diseases (Williams syndrome, type I neurofibromatosis, and Alagille syndrome), but also vascular inflammatory diseases (Takayasu arteritis) play an important role in its etiopathogenesis.

Material and Methods: An 8-year-old child presented to our center with complaints of high, persistent arterial pressure and headaches. Physical examination revealed BP of 195/125 mm Hg. Echocardiography revealed normal aortic arch and isthmus, tortuosity of the descending aorta, and turbulence in this region. CT angio revealed severe stenosis of the abdominal aorta – midaortic syndrome with stenosis of the ostium of both renal arteries. The aorta was stenotic at a distance of 20.0 mm.

Results: After multidisciplinary discussion, our decision was to perform hybrid management of this complex pathology. At first, an aorta-aortic bypass was performed surgically using a 9 mm Dacron graft. The proximal end was anastomosed to the supracoeliac region of the aorta, and the distal end was anastomosed to the infrarenal region (both on side-to-end fashion). In the second stage, balloon angioplasty of both renal arteries was performed to relieve the stenosis of the renal arteries.In the postoperative period, arterial pressure was able to be controlled at normal levels (120/75).

Conclusion: Midaortic syndrome is a rare vascular anomaly and is observed in children with persistent, high blood pressure. 45-55% of patients with Midaortic syndrome die by the age of 30-40, which in turn highlights the importance of early diagnosis and proper treatment of Midaortic syndrome. Depending on the location and severity of the stenosis, surgical intervention, balloon angioplasty, or hybrid interventions may be needed. Such hybrid approach could be an option for surgical management of this complex and rare pathology.

Keywords: Midaortic syndrome, child, aorta-aortic bypass, case reports

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PP-147

Factors affecting the selection of access site in endovascular interventions

Ugur Cetingok[1], Kasim Karapinar[2]

[1]Etlik City Hospital, Ankara, Türkiye
[1]Ankara Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: As vascular access is the first and last step in every endovascular treatment, its' safety and efficacy is essential. The entry site highly affects the success of endovascular intervention. The goal of the the study is to improve arterial access in endovascular treatment by advancing clinical decision making.

Material and Methods: Between 2023 and 2025, 232 patients (196 male, mean age 69 years) with peripheral arterial disease, arterial aneurysm and carotid disease was performed percutaneous endovascular treatment. Traditionally femoral access was the standard access technique for endovascular procedures. Upper extremity access (UEA) was preferred for cannulation of inferior aortic side branches or to facilitate guidance of the stent graft during the procedure in endovascular aortic procedures, or for the treatment of peripheral lesions where popliteal and femoral access were not suitable.The proximal brachial artery was the most used access location. Overall, the selection of an UEA location should be based on the patient's characteristics and procedural needs. For procedures requiring a sheath size from 10 to 12 French a general recommendation could be made to choose an open medial brachial access, as this vessel is located superficially, usually has a sufficient diameter and has shown a reduced risk of postinterventional neuropathy. If the patient had peripheral artery disease in the upper extremities or needed larger or multiple sheaths, the first segment of the axillary artery or the distal segment of the subclavian artery was preferred as the access site. The radial artery was preferred for procedures requiring a small sheath. Popliteal access was preferred in cases where femoral antegrade access was not suitable (flush or proximal lesions of superficial femoral artery) or contralateral access was not suitable (presence of lesions requiring intervention in the contralateral common femoral artery (CFA), superficial femoral artery (SFA), popliteal artery (PA) or crural arteries, narrow-angle aortic bifurcation, etc.). Pedal access, with or without proximal access was preferred in the treatment of lesions in the CFA, SFA, PA or crural arteries where access to the lesion was not possible.

Results: Hematoma developed in 5 patients, infection in 1, and pseudoaneurysm in 2. Technical success was 98.5%.

Conclusion: An individual access strategy for each patient should be set up, considering the sheath size to be used, the comorbidities of the patient and the arterial circumstances.

Keywords: Endovascular treatment, access site, peripheral arterial disease

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PP-148

Toast method in pelvic congestion

Turhan Yavuz, Dincer Uysal, Kadir Burhan Karadem, Caner Celik, Omer Faruk Ozdemir, Seyma Karaisli, Ahmet Horzum, Omer Buyuktahtakin, Ceyda Yilmaz, Muhammet Olayan, Emre Yavuz, Erdogan Ibrisim

Süleyman Demirel University Cardiovascular Surgery, Isparta, Türkiye

Abstract

Aim: The benefit of placing a larger diameter plug at the top and bottom in pelvic congestion.

Material and Methods: A total of 20 cases underwent the TOST method. To prevent embolic risk and achieve complete occlusion, vascular plugs one size larger than the vessel diameter were deployed at both the proximal and distal ends of the target segment

Results: No complications were observed in any cases. complete occlusion was achievement and there was no reflux.

Conclusion: In pelvic congestion, the size of the vein may decrease. When a plug of the same diameter is placed, it can rarely cause embolism, especially small diameter plugs. Or, it may not provide complete occlusion. Sometimes, there may be a risk of embolism, especially in the renal vein. We have tried to prevent this complication with this method. This is the first time this method has been used.

Keywords: Pelvic congestion, plug, invasive treatment

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PP-149

Reverse balloon-assisted tracking technique for atraumatic catheter withdrawal in radial artery spasm: A clinical observation and hypothesis

Hakan Gocer[1], Ahmet Baris Durukan[2]

[1]Private Edremit Korfez Hospital, Balikesir, Türkiye
[2]İstinye University, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: One of the most elegant and effective mechanical approach to overcome radial artery spasm during cannulation is BAT technique, where a deflated low-profile monorail coronary balloon is positioned that its distal portion protrudes slightly beyond the catheter tip, effectively "blunting" the edge of the catheter during advancement over a 0.014" guidewire. This soft, tapered configuration reduces endothelial trauma and allows the catheter to pass through spastic, tortuous, or small-caliber radial arteries with greater ease. A similar mechanical irritation and spasm can also occur during catheter withdrawal, when the rigid, often sharp catheter tip rubs against the vasospastic arterial wall, potentially provoking or perpetuating spasm. Here, we explain BAT technique use during catheter withdrawal.

Material and Methods: We have applied a "Reverse BAT" technique during catheter removal in patients experiencing radial artery spasm. In cases where a 0.014" coronary guidewire and a low-profile monorail coronary balloon are already in place (e.g., following a coronary balloon angioplasty or stenting), the balloon can be deflated and partially retracted into the catheter shaft by approximately 50%, creating a mono-block system with a soft, tapered leading edge during withdrawal. This system is then carefully withdrawn as a unit over the wire.

Results: We hypothesized that this reverse adaptation confers multiple advantages:The soft balloon tip cushions the interaction between the catheter and the arterial wall, minimizing shear stress and nociceptive stimulation responsible for spasm.It prevents direct contact of the catheter's sharp edge with the intima, thus reducing endothelial injury.Utilizing the existing balloon and wire system eliminates the need for additional devices, offering a simple, cost-effective, and practical solution.This approach may reduce patient discomfort and facilitate safer, atraumatic catheter removal, especially in patients with refractory radial spasm.

Conclusion: Though formal studies on this reverse application are lacking, the physiological rationale aligns closely with the established benefits of the original BAT technique during catheter advancement. Given the prevalence of radial artery spasm and its impact on procedural success and patient satisfaction, we propose that this reverse BAT technique warrants further systematic evaluation.

Keywords: Radial artery access, reverse BAT technique, complications, treatment

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PP-150

Chimney TEVAR for descending aortic thrombosis involving the left subclavian artery ostium in a patient with chronic lymphocytic leukaemia: A case report

Ali Demiray, Yalcin Gunerhan, Omer Tanyeli, Niyazi Gormus

Necmettin Erbakan University, Konya, Türkiye

Abstract

Aim: Descending aortic thrombosis is a rare clinical entity, usually associated with atherosclerotic disease. When the thrombus extends to the subclavian ostium, acute upper extremity ischemia may occur, often requiring urgent intervention. We present a patient with chronic lymphocytic leukaemia (CLL) who developed massive descending aortic thrombosis with subclavian artery involvement, successfully treated with thoracic endovascular aortic repair (TEVAR) using the chimney stent technique.

Material and Methods: A 61-year-old woman was admitted with pain, pallor, and coolness of the left arm for 12 hours. Her medical history included CLL, type 2 diabetes mellitus, and hypertension. Physical examination revealed absent pulses in the left upper extremity. Laboratory tests demonstrated leukocytosis and elevated C-reactive protein, possibly related to CLL-associated inflammatory activity. Duplex ultrasound identified thrombus in the radial and subclavian arteries. Computed tomography angiography revealed a dense, long-segment thrombus in the descending aorta, extending to the left subclavian artery ostium and partially occluding the radial artery.

Results: Through the right femoral approach, a 28 × 28 × 120 mm stent graft was deployed to cover aortic zones 2–4. Simultaneously, an 8 × 37 mm covered stent was placed in the left subclavian artery via the brachial route using the chimney technique. Balloon angioplasty was performed to optimize perfusion. Subsequent brachial artery embolectomy restored pulsatile inflow and distal backflow from both radial and ulnar arteries.The postoperative course was uneventful, with no neurological complications. Radial and ulnar pulses were palpable, and control CT angiography confirmed patency of the subclavian artery, proper stent position, and adequate distal perfusion. The patient was discharged on the fifth postoperative day with dual antiplatelet therapy. At three-month follow-up, stent graft position remained stable and perfusion of the left arm was preserved.

Conclusion: Patients with CLL are predisposed to thrombotic complications due to hypercoagulability, and concomitant atherosclerosis further increases vascular risk. Descending aortic thrombosis involving the subclavian ostium is rare but demands rapid recognition and urgent treatment. In this patient, timely CT angiography enabled successful planning of TEVAR with the chimney technique and concomitant embolectomy, which preserved subclavian patency and prevented systemic embolization. This experience highlights that endovascular and hybrid approaches represent effective and safe treatment options for complex aortic thrombosis associated with peripheral embolism. Nevertheless, further clinical experience and long-term follow-up are required to establish outcomes and safety in this challenging setting.

Keywords: Thoracic endovascular aortic repair, chimney stent technique, aortic thrombosis, peripheral embolism

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PP-151

Traumatic aortic transection following motor vehicle accident: A case report

Umut Ata Ugras[1], Goktug Agac[1], Bahadir Ismet Erden[1], Erhan Renan Ucaroglu[1], Huseyin Sahinturk[2]

[1]Bolu Abant İzzet Baysal University Faculty of Medicine, Department of Cardiovascular Surgery, Bolu, Türkiye
[2]Bolu Abant İzzet Baysal University Faculty of Medicine, Department of Emergency Medicine, Bolu, Türkiye

Abstract

Aim: Traumatic aortic transection is a rare but life-threatening complication of blunt thoracic trauma, most frequently associated with motor vehicle accidents. This report aims to present a case of aortic transection diagnosed by computed tomography (CT) angiography after traffic accident and successfully treated with thoracic endovascular aortic repair (TEVAR).

Material and Methods: A 59-year-old male patient was admitted to the emergency department by ambulance following a high-energy motor vehicle accident. On admission, he was hypotensive with a Glasgow Coma Scale (GCS) score of 15. Initial chest imaging revealed a left-sided hemothorax. Thoracic CT angiography demonstrated a complete transection of the descending thoracic aorta just distal to the left subclavian artery. The patient was immediately evaluated by a multidisciplinary team including cardiovascular surgery, emergency medicine, and radiology.

Results: Urgent thoracic endovascular aortic repair TEVAR was performed under general anesthesia. A covered stent-graft was successfully deployed at the site of transection. The patient was transferred to the intensive care unit (ICU) in stable condition without any complications, and no complications were observed during ICU follow-up.

Conclusion: Traumatic aortic transection should be considered in patients with severe blunt thoracic trauma after traffic accidents, especially when hypotension and mediastinal findings are present. Early diagnosis with CT angiography and rapid endovascular intervention are essential for survival. TEVAR provides a minimally invasive and safe alternative to open surgery, reducing perioperative morbidity and mortality.

Keywords: Aortic transection, thoracic trauma, thoracic endovascular aortic repair

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PP-152

Complications of abdominal aortic aneurysm after EVAR graft treatment

Utku Celik[1], Ali Aycan Kavala[2], Saygin Turkyilmaz[1]

[1]Medipol Mega University Hospital Cardiovascular Surgery Clinic, İstanbul, Türkiye
[2]Bakırköy Dr. Sadi Konuk Training and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Endovascular grafts are widely used today as a minimally invasive method for the treatment of aortic pathologies.The effectiveness of this method allows many complications that may develop during early and late follow-up to be managed with endovascular techniques.However, in some cases, complications or technical deficiencies may necessitate surgical removal of the endovascular graft and open surgical reconstruction of the aorta. This study retrospectively evaluated the clinical outcomes of patients who underwent surgical removal of their endovascular grafts and reconstructive surgery.

Material and Methods: We retrospectively analyzed seven patients who required endovascular graft removal and underwent surgical treatment at our clinic between January 2021 and June 2024. The mean age of the patients was 68. Six (85.7%) patients were male.

Results: A total of seven patients included in the study underwent surgical endovascular graft explantation. Three of the patients (42.8%) underwent surgery due to clinical findings requiring urgent surgical intervention. When the reasons for surgical explantation of the endovascular graft were evaluated, aortic dissection was detected in three patients (42.8%), endoleak in two patients (28.5%), and graft infection in two patients (28.5%).When surgical reconstruction methods were evaluated, three patients (48.5%) underwent aorto-biiliac graft interposition, one patient (14.2%) underwent aorto-bifemoral graft interposition, and three patients (48.5%) underwent aortic tubular graft replacement.

Conclusion: Surgical explantation of an endovascular graft is a technically challenging and high-risk procedure. However, when performed in experienced centers with a multidisciplinary approach, safe graft removal and successful aortic reconstruction are possible.

Keywords: Abdominal aortic aneurysm, evar complications, greft replacement

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PP-153

Surgical management of ascending aortic aneurysm with anomalous origin of the left carotid artery: A case report

Berfin Cevirme, Ali Cemal Duzgun, Bilalcan Yenikoy

SBU Ankara Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: The presence of ascending aortic aneurysms together with congenital vascular anomalies creates major difficulties for surgeons when planning surgical procedures. We aimed to present a case of ascending aortic aneurysm associated with an anomalous origin of the left carotid artery and describe the surgical approach.

Material and Methods: The 78-year-old male patient showed symptoms of progressive dyspnea and paroxysmal nocturnal dyspnea and orthopnea. The echocardiography and computed tomography angiography tests showed that the patient had a 7.0 cm ascending aortic aneurysm together with an anomalous left carotid artery that originated from the brachiocephalic trunk. A hemiarch replacement strategy was chosen for surgical repair.

Results: The operation was performed under cardiopulmonary bypass with selective right subclavian artery cannulation. The innominate vein was ligated to enhance surgical exposure. The aneurysmal ascending aorta and arch segment were resected and a 34 mm Dacron graft was implanted. The brachiocephalic artery and anomalous left carotid artery were reimplanted in to the main graft via a side branch. The patient was admitted to the intensive care unit postoperatively and extubated on the first postoperative day. On postoperative day 3, he was transferred to the ward with stable hemodynamics. The patient developed mild venous congestion together with left upper extremity edema which received conservative treatment through elevation and compression therapy. On post operative day 10, serous fluid accumulation and sternal dehiscence required surgical revision with sternal cable closure. No infectious complications were detected. The patient responded well to diuretic therapy, mobilized gradually, and was discharged on postoperative day 20 in stable condition without major adverse events.

Conclusion: Our case highlights how crucial it is to modify surgical planning for ascending aortic aneurysms in light of anatomical variations. The innominate vein was ligated to maximize exposure in order to perform the necessary alternative anastomoses, and the graft was customized appropriately. Targeted hemodynamic monitoring and timely resolution of minor issues enabled a good postoperative recovery. These cases demonstrate that with specialized surgical techniques and attentive postoperative care, excellent outcomes can be obtained even with complex anatomy.

Keywords: Aortic aneurysm, thoracic, aortic arch, carotid arteries, innominate vein/ surgery, aorta ascending/ abnormalities

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PP-154

Truncus bicaroticus and aberrant right subclavian artery: A rare case mimicking aortic dissection

Gokhan Arslan[1], Ugur Bozlar[2]

[1]University of Health Sciences, Gülhane Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye
[2]University of Health Sciences, Gülhane Faculty of Medicine, Department of Radiology, Ankara, Türkiye

Abstract

Aim: This case report aims to highlight the diagnostic challenges presented by rare anatomical variations and imaging artifacts that mimic an acute aortic dissection, and to emphasize the importance of careful differential diagnosis.

Material and Methods: A 44-year-old female with a history of gastritis presented to the emergency department with sudden and severe back and chest pain. An initial contrast-enhanced computed tomography (CT) scan of the thoracic aorta was performed. Subsequent echocardiography and a repeat CT scan were used to further evaluate the initial findings.

Results: The initial CT scan revealed two congenital aortic arch anomalies: a bovine arch, where the common carotid arteries (CCA) originate from a common trunk, and an aberrant right subclavian artery (arteria lusoria). The scan also showed a suspicious flap-like structure in the ascending aorta, raising concern for aortic dissection. However, subsequent echocardiography and a repeat CT scan did not confirm the dissection, indicating that the initial flap was a pulsation artifact. The patient's symptoms were ultimately attributed to gastritis and resolved with antacid therapy.

Conclusion: This case demonstrates the critical importance of distinguishing true pathology from imaging artifacts. The combination of rare anatomical variations (truncus bicaroticus and arteria lusoria) and a pulsation artifact created a diagnostic dilemma that closely mimicked aortic dissection. A meticulous diagnostic approach using multiple imaging modalities is essential to prevent misdiagnosis and unnecessary interventions.

Keywords: Aortic dissection, imaging artifacts, truncus bicaroticus, arteria lusoria, bovine arch

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PP-155

Graft interposition for dissected mega abdominal aortic aneurysm following Type 1 aortic dissection repair

Muzaffer Celiksoz, Abdulkahhar Sisman, Mehmet Selahattin Bayraktaroglu

Ankara Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Graft Interposition for Dissected Mega Abdominal Aortic Aneurysm Following Type 1 Aortic Dissection Repair.

Material and Methods: A patient who had undergone supracoronary graft interposition in 2018 due to acute Type 1 ascending aortic dissection presented to our hospital in 2022 with aneurysmal dilatation of the abdominal aorta and iliac arteries. Contrast-enhanced abdominal aorta and lower extremity computed tomography revealed an infrarenal abdominal aortic diameter of 7 cm, a left iliac artery aneurysm measuring 5 cm, and a right iliac artery aneurysm measuring 4 cm.The patient was scheduled for graft interposition and subsequently underwent aortobifemoral graft interposition.

Results: 3-year follow-up, which is still ongoing, no complications have been observed.

Conclusion: We believe that in abdominal aortic aneurysms developing after Type 1 dissection, performing isolated abdominal aortic surgery can yield favorable outcomes compared to thoracoabdominal surgery, which would otherwise involve complex procedures with high mortality.

Keywords: Type 1 disection, abdominal aortic aneurysm, graft interposition

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PP-156

Seat belt aortic injury; Managed with endovascular treatment in a 17-year-old patient

Akin Arslan, Hakan Sacli, Ugur Ari, Caner Bartu, Salih Salihi, Ibrahim Kara

Sakarya University Faculty of Medicine, Department of Cardiovascular Surgery, Sakarya, Türkiye

Abstract

Aim: Blunt aortic trauma is rarely seen in the pediatric population (0.01% and 0.07% in the United States). An aortic injury caused by a seat belt during a motor vehicle collision is called a "seat belt aorta". We present a 17-year-old patient who suffered an aortic injury due to a seatbelt.

Material and Methods: A 17-year-old man was travelling with a 3-point seat belt on the front passenger seat of the vehicle when two vehicles collided with each other. He was neurologically stable. Glasgow Coma Scale was 15. His heart rate was 110 beats/minute, blood pressure was 115/75 mmHg, and oxygen saturation was 98%. Lap-type seat belt injury was detected on the anterior abdominal wall at the waist belt line. There was no extremity ischemia. Peripheral pulses were palpable. The patient with abdominal pain was first asked for a computed tomography examination. Hematoma areas around the liver and spleen were detected without signs of significant bleeding in the visceral organs. CT scan showed us the seat belt sign; there was an intimal dissection flap image was observed in the abdominal aorta at the infrarenal level, above the aortic bifurcation, consistent with the size of the belt. This image was at the projection of the seat belt injury site on abdominal wall.

Results: Due to the hematoma areas around the liver and spleen; open surgery was considered risky; so on an endovascular aortic repair planned. Right femoral artery exploration was performed under general anaesthesia for arterial access. The left femoral artery was prepared for percutaneous intervention for angiogram. A 20-20 mm diameter x 82 mm in lenght tubular endovascular stent graft [Medtronic Endurant II Stent Graft System (Medtronic Vascular, Santa Rosa, CA, USA)]was placed through the right common femoral artery. The control imaging confirmed that there was no endoleak and major aortic branches perfusion were normal. The procedure was terminated succesfully. Patient discharged healthy and successfully after intensive and day care unit follow up.

Conclusion: Aortic seat belt injury after blunt trauma is rarely seen but potentially life treating condition. Sometimes diagnosis can be delayed if the patient is asymptomatic. But the skin changes due to the seat belt and seat belt sign on computed tomography should be suspected for diagnosis. Surgical intervention using the endovascular aortic repair procedure has yielded successful results with low mortality and morbidity in selected cases.

Keywords: Aortic dissection, seat belt injury, endovascular repair, blunt trauma, EVAR

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PP-157

Successful radiofrequency ablation

Kadir Kaan Gokce

Namık Kemal University, Tekirdağ, Türkiye

Abstract

Aim: Endovenous radiofrequency ablation (RFA) is a minimally invasive and highly effective treatment for chronic venous insufficiency (CVI). However, great saphenous vein (GSV) diameters above 20 mm are rarely treated with RFA due to technical challenges and the risk of incomplete closure.

Material and Methods: We present a 39-year-old male with CEAP classification C4aEpAsPr and a proximal GSV diameter of 26 mm. Segmental RFA was performed under tumescent local anesthesia without complications. Follow-up at 6 months showed complete occlusion and marked symptom improvement.

Results: RFA can be a safe and effective treatment option even in patients with GSV diameters exceeding 20 mm when performed with proper technique and adequate tumescence.

Conclusion: RFA can be a safe and effective treatment option even in patients with GSV diameters exceeding 20 mm when performed with proper technique and adequate tumescence.

Keywords: Endovenous radiofrequency ablation, chronic venous insufficiency, follow-up

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PP-158

Comparison of total saphenectomy and above-knee stripping in varicose vein surgery

Emced Khalil, Umit Mentese, Burak Yuksel, Alperen Aydin, Elif Hande Ozdemir, Omer Hudai Kutlu

Trabzon University Ahi Evren Thoracic and Cardiovascular Surgery Training and Research Hospital, Trabzon, Türkiye

Abstract

Aim: The objective of this study is to perform a comparative evaluation of total saphenectomy and above-knee stripping techniques with respect to postoperative complications, duration of hospitalization, and long-term outcomes. Furthermore, the study aims to assess the safety profiles of both surgical methods and to determine which approach may be more appropriate, particularly for individuals with an elevated risk of postoperative complications.

Material and Methods: A total of thirty-eight patients (20 males, 18 females) who underwent surgery for lower extremity varicose veins between 2020 and 2025 were included. Of these, six underwent total saphenectomy and seven underwent above-knee stripping. In the total saphenectomy group, the saphenous vein was completely removed from the groin to the ankle. In the above-knee stripping group, only the segment of the vein from the groin to the knee was removed. Phlebectomy was performed in both groups as an additional procedure when necessary. Ligation of branch tributaries was performed, and the Codman stripper was used in both groups. Patients in both groups were evaluated in the postoperative period for complications (pain, swelling, pulmonary embolism…), clinical course, and recovery.

Results: Total saphenectomy group (n=18; 9 males, 9 females): Two patients developed postoperative swelling only. Three patients developed both swelling and pain. One patient developed pain only, and this patient also experienced postoperative pulmonary embolism. The remaining patients had no major complications. Above-knee stripping group (n=20; 11 males, 9 females): One patient developed postoperative pain only. One patient developed swelling only. One patient developed both pain and swelling. The remaining patients had no major complications.

Conclusion: In our study, postoperative complications (particularly swelling and pain) were more frequently observed in the total saphenectomy group, and one patient developed a serious complication of postoperative pulmonary embolism. In the above-knee stripping group, the overall complication rate was significantly lower, although not completely absent. These findings suggest that total saphenectomy, due to involving a larger surgical area and the troublesome complication of saphenous nerve injury associated with stripping in the calf, carries a higher risk of complications, such as elevated infection rate, ecchymosis, blood transfusion need, and longer hospital stay, while above-knee stripping has relatively fewer complications and considerably shorter hospital stay. However, total saphenectomy may have the potential to slightly reduce long-term recurrence rates, whereas above-knee stripping is considered a safer option, especially in patients at elevated risk of postoperative complications, while both provide similar outcomes.

Keywords: Total saphenectomy, above-knee stripping, swelling, infection, nerve injury

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PP-159

Acute femoral artery occlusion secondary to retained proglide material

Huseyin Uzandi, Gozde Tekin, Mehmet Kizilay

Dr.Siyami Ersek Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Endovascular treatment of acute ischemic stroke is frequently performed via femoral artery access. While vascular closure devices facilitate hemostasis, they may rarely lead to severe complications. We present a case of acute femoral artery occlusion due to retained ProGlide material following intra-arterial thrombolysis, successfully treated with surgical thrombectomy and patch angioplasty.

Material and Methods: A 47-year-old female presented with speech disturbance. Cranial CT excluded hemorrhage, while diffusion MRI revealed acute infarction in the left MCA territory. Angiography demonstrated left MCA M2 occlusion, and intra-arterial tPA was administered through right femoral access. Following sheath removal, ProGlide closure was attempted but failed; fluoroscopy revealed retained device material within the femoral artery. Attempts at endovascular retrieval via contralateral access were unsuccessful. The patient subsequently developed acute limb ischemia characterized by coldness, pallor, and pain. Doppler ultrasound and CT angiography demonstrated a 5 cm thrombus with a foreign body in the common femoral artery. After excluding intracranial bleeding 24 hours post-thrombolysis, urgent surgical intervention was performed under local anesthesia with mild sedation.

Results: Through a right femoral incision, vertical arteriotomy was performed after systemic heparinization. Acute thrombus and ProGlide fragment were removed, and proximal and distal embolectomy was carried out. A 1×1 cm posterior wall defect unsuitable for primary repair was reconstructed using a saphenous vein patch. Postoperatively, distal pulses became palpable, and limb perfusion was restored. The patient was transferred to intensive care and discharged under dual antiplatelet therapy with preserved lower extremity function.

Conclusion: Femoral artery complications following endovascular stroke interventions, although rare, can be limb-threatening. Retained closure device fragments may cause endothelial injury and thrombosis, requiring urgent surgical correction. Surgical thrombectomy combined with patch angioplasty using autologous vein grafts represents a safe and effective treatment. Early recognition and prompt surgical management are essential to prevent permanent ischemic damage.

Keywords: Femoral artery occlusion, proglide complication, thrombectomy and patch angioplas

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PP-160

Our surgical experience in Type 1 aortic dissection at Dicle University Hospital

Mehmet Murat Oguz, Mehmet Karacalilar, Celal Yavuz, Muzaffer Bahcivan, Irfan Dinler, Nurhayat Inci

Dicle University Hospital, İstanbul, Türkiye

Abstract

Aim: Type 1 aortic dissection represents an acute clinical entity with substantial mortality and morbidity. Surgical intervention remains the definitive therapeutic option to ensure survival. The objective of this study was to report our institutional experience with patients who underwent emergency surgical repair for type 1 aortic dissection over the past four years.

Material and Methods: Between September 2021 and September 2025, 36 patients who underwent emergency surgery for acute type 1 aortic dissection in our clinic were retrospectively analyzed. Diagnosis was confirmed by contrast-enhanced computed tomography. All patients underwent surgical repair via median sternotomy under cardiopulmonary bypass. Data on demographics, operative techniques, and early outcomes were collected and evaluated.

Results: Between September 2021 and September 2025, a total of 36 patients underwent emergency surgery for acute type 1 aortic dissection in our clinic. Of these, 8 patients (22.2%) were younger than 40 years, 24 patients (66.6%) were between 40 and 70 years, and 4 patients (11.1%) were older than 70 years; the gender distribution was 11 females (30.5%) and 25 males (69.5%). Regarding cannulation strategy, axillary cannulation was performed in 11 patients (30.5%) and femoral cannulation in 25 patients (69.5%). In terms of surgical techniques, isolated ascending aortic replacement (AAR) was performed in 23 patients (63.8%), AAR with aortic valve replacement (AVR) in 6 patients (16.6%), AAR with AVR and concomitant single-vessel CABG in 2 patients (5.5%), and the Bentall procedure in 5 patients (13.8%). With respect to cerebral protection methods, total circulatory arrest was applied in 10 patients, while selective cerebral perfusion was used in 5 patients. Mortality analysis showed that 3 patients died intraoperatively, 8 patients on postoperative day 0, 3 patients on day 1, and 1 patient on day 10. In total, 15 patients (41.6%) died, while 21 patients (58.3%) were discharged with recovery.

Conclusion: In our series of 36 patients operated for acute type 1 aortic dissection, the overall mortality rate was 41.6%, which is higher than the rates reported in GERAADA (17–25%) and IRAD (~22%). This outcome is largely attributable to the high number of early postoperative deaths. Nevertheless, the fact that 58.3% of patients were discharged with recovery highlights the importance of early surgical intervention and optimized perioperative management in this high-risk group.

Keywords: Acute type 1 aortic dissection, emergency surgery, cannulation strategy, cerebral protection, early outcomes

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PP-161

Emergency surgical removal of an septal cccluder device migrated to the left common iliac artery

Baris Akca, Cihan Yetis

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Percutaneous closure of atrial septal defects has emerged as an alternative to surgical treatment and septal occluders are widely used for transcatheter closure and generally considered safe. However, device migration remains a rare but serious iatrogenic complication, with potentially life-threatening vascular consequences. This report presents the case of a patient who underwent emergency surgical removal of a septal occlusion device from left common iliac artery.

Material and Methods: A 48-year-old female patient with a patent foramen ovale underwent transcatheter percutaneous closure using a septal occluder device. During the procedure, occluder deployment failed, and subsequent endovascular retrieval attempts were unsuccessful. Consequently, the device migrated into the left common iliac artery, where it became lodged. The patient was referred to us, and emergency surgery was planned due to signs of ischemia, including perishing cold, pallor, and diminished pulses in the left lower extremity on physical examination.

Results: The patient was operated under general anesthesia. The left common iliac artery was explored through a midline laparotomy incision. The occluderdevice was found to be lodged in the middle of the common iliac artery, approximately 1-2 cm from the aortic bifurcation and internal iliac artery bifurcation level. Connection hub of device was about to rupture the artery. Consequently, Septal occluder device removed by arteriotomy after clamping distally and proximally parts of left common iliac artery following heparin administration. The artery was not suitable for repair because of severe endothelial damage and endothelial separation. The damaged arterial segment was excised, and a 10 mm Dacron knitted graft was interposed. Postoperative course was uneventful and discharged at 5th day with palpable distal arterial pulses.

Conclusion: The present report suggests that surgical removal of a migrated septal occluder can be carried out safely, making it a reliable alternative in cases where endovascular approaches are not possible. Therefore, endovascular retrievel shouldn't be over forced. Clinicians should be aware of this potential complication, and early surgical consultation is essential when device migration suspected especially to peripheral arteries. Multidisciplinary collaboration between cardiology and vascular surgery teams plays a pivotal role in ensuring favorable outcomes.

Keywords: Patent foramen ovale, device removal, foreign-body migration, septal occluder device, iliac artery

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PP-162

Does complete blood count have a role in the prediction of carotid artery stenosis?

Osman Fehmi Beyazal

İstanbul Basaksehir Çam and Sakura City Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to evaluate the importance of complete blood count parameters for predicting carotid artery stenosis (CAS).

Material and Methods: This study was conducted as a retrospective case-control study evaluating 200 patients between 2023 and 2025. The Case group (n=100) included patients who underwent CEA, while the Control group (n=100) included consecutive patients who were examined in the Cardiovascular Surgery outpatient clinic, had no cardiac or vascular disease, and did not undergo surgery. Basic demographic characteristics, comorbidities, operative data, postoperative outcomes, and complete blood count parameters were compared. Logistic regression analysis was performed to investigate the predictive significance of these parameters for CAS. ROC analysis was used to determine cut-off points for significant parameters.

Results: The case group was more likely to have males and be older. There were no differences in height and weight between the groups. Comorbidities such as diabetes mellitus, hypertension, chronic obstructive pulmonary disease, and chronic renal failure were more common in the case group. Urea and creatinine values were higher in the case group. Potassium, alanine aminotransferase, and aspartate aminotransferase values were similar between the groups. There were no differences between the groups in terms of leukocytes, neutrophils, eosinophils, hematocrit, platelets (PLT), mean platelet volume, PDW (platelet distribution width) (PDW), red cell distribution width (RDW), MPV/PLT, and platelet/lymphocyte ratio (PLR). Lymphocytes were lower and monocytes were higher in the case group compared to the control group. Additionally, neutrophil/lymphocyte ratio (NLR) was higher and lymphocyte/monocyte ratio (LMR) was lower in the case group compared to the control group. NLR and LMR were found to be significant predictors of CAS according to logistic regression analysis. (OR=1.271, p=0.01, and OR=0.623, $p < 0.001$, respectively). According to ROC analysis, values above 3.40 for NLR and below 3.45 for LMR were found to be significant for the prediction of CAS.

Conclusion: Lymphocyte counts were lower in the case group, while monocyte counts were higher. Consequently, we found that an NLR above 3.4 and an LMR below 3.45 were predictive of CAS. While a complete blood count alone is not sufficient for diagnosing CAS, it can be used as an inexpensive and readily available test with predictive value. However, it would be beneficial to investigate this predictive value in future prospective studies.

Keywords: Carotid stenosis, complete blood count, endarterectomy

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PP-163

Nerve injury after regional nerve block in carotid endarterectomy operations

Cagla Canbay Sarilar[1], Zerrin Sungur[2], Merve Dogru[1], Sinan Bulut[1], Onur Selcuk Goksel[1]

[1]İstanbul University Faculty of Medicine, Department of Cardiovascular Surgery, İstanbul, Türkiye
[2]İstanbul University Faculty of Medicine, Department of Anesthesiology and Reanimation, İstanbul, Türkiye

Abstract

Aim: Cervical plexus block is a regional anesthesia method which is preferred in carotid endarterectomy(CEA). Awakeness of the patient with cervical plexus block is mandatory to asess neurological functions during surgery. Although there might be paralysis of phrenic nerve,glossopharingeal nerve or hypoglossal nerve.

Material and Methods: For CEA, superficial or deep cervical plexus block can perform for peripheral nerve block. Superficial cervical plexus block is safer and easier to perfom than deep block.

Results: In our case, we reported a nerve injury case after deep cervical block. In order to achieve deep cervical plexus block, C2,C3,C4 nerve roots were blocked. For superficial cervical plexus block, posterior border of the sternocleidomastoid muscle was punctured anesthetized

Conclusion: After the deep cervical block, patient's mouth was dropped, skin folders were effaced. Patient was awaked without any other motor or sensory loss. The facial nerve paralysis was diagnosed.Facial nerve is a motor nerve which affect all the facial expressions.Temporary facial nerve paralysis may be seen after deep cervical block.

Keywords: Carotid endarterectomy, cervical block, facial nerve injury

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PP-164

Successful practise of veno-venous ECMO in the acute phase of a young multitrauma patient with pulmonary contusion

Ismail Kakillioglu[1], Veli Burak Tackin[1], Senem Yildirim[2], Nevzat Erdil[1]

[1]Antalya City Hospital, Department of Cardiovascular Surgery, Antalya, Türkiye
[2]Antalya City Hospital, Department of Anesthesiology, Antalya, Türkiye

Abstract

Aim: ECMO support is approached with concern in patients with cardiopulmonary failure who are prone to bleeding. Here, we aimed to present our successful ECMO prectise to a patient with multiple traumas and pulmonary insufficiency that could not be corrected despite many treatments.

Material and Methods: A 29-year-old male, with multitrauma after a motorcycle accident, admitted to the anesthesia intensive care unit with a history of CPR and severe thoracic trauma, bilateral hemopneumothorax, widespread lung contusion, and could be ventilated with a mechanical ventilator (MV) in PAC mode with a maximum tidal volume of 200 ml. There was extensive subcutaneous emphysema and massive air leakage from both thoraxes. There was minimal intra-abdominal bleeding, minimal SAH, widespread cerebral edema and bleeding into the psoas. CRRT (continuous hemodialysis) treatment was started for the patient with ARF due to crush syndrome. On the third day of follow-up, the patient had a tidal volume of 100 ml, FiO2:100, oxygen saturation of 60%, and no left or right heart failure, and developed deep respiratory acidosis, and urgent VV-ECMO treatment was initiated. The ECMO inflow cannula was placed in the right femoral vein and the outflow cannula was placed in the right jugular vein, and oxygenation was started with a flow rate of 3000 rpm and 4 L/min. The patient received heparin infusion as anticoagulant treatment on the first day and subcutaneous enoxaparin sodium 2x0.6 cc was continued on the second day.

Results: The ECMO flow was gradually reduced and the patient was separated from ECMO on the 11th day of his hospitalization. The patient, who was monitored with MV support, was transferred to the ward on the eighty-seventh day of his hospitalization after becoming hemodynamically stable.

Conclusion: ECMO can be safely used in the treatment of transient cardiopulmonary insufficiency in selected patients with multiple trauma when other treatment methods are inadequate.

Keywords: ECMO, thoracic, multitrauma, intensive care, extracorporeal treatments

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PP-165

Successful treatment with revision of a dilated old femorofemoral bypass graft and new saphenous vein bypass: Case report

Gungor Temizkan, Gokalp Guzel, Seref Kesici, Betil Kutlu

Gaziantep University Faculty of Medicine, Gaziantep, Türkiye

Abstract

Aim: This case report discusses the technical details and results of a successful revision surgery and a new saphenous vein graft for a patient who developed flow loss due to an occluded and dilated femorofemoral bypass graft performed 20 years ago.

Material and Methods: IntroductionSaphenous vein bypass is the revascularization method with the highest long-term patency in peripheral artery disease. However, complications such as graft occlusion or aneurysmal degeneration can develop in the long term. Revision of these complications can be technically challenging.

Results: FindingsA patient with ischemic symptoms in the left lower extremity underwent surgery. Under general anesthesia, the left popliteal artery was opened above the knee and dissected from the surrounding tissues. The patient's femorofemoral bypass graft, previously performed 20 years ago, was identified; the graft appeared dilated. After one cc of heparin, a cross clamp was placed on the femoral artery. An arteriotomy was performed, and an embolectomy was performed using a 3-4-5 Fogarty catheter into the graft; a significant amount of clot was removed. When the cross clamp was removed, no flow was observed distal to the graft. The nonfunctional and dilated saphenous graft was excised. A new saphenous vein was harvested from above the knee of the right leg. The saphenous vein was interposed and placed between the proximal and distal ends of the excised graft. First, a proximal anastomosis was performed with 6/0 Prolene suture. When the distal cross clamp was removed, adequate flow was observed both in the new saphenous graft and in the distal popliteal artery. After bleeding control, a Hemovac drain was placed in the popliteal region, and the layers were closed anatomically. The saphenous vein extraction site of the right leg was also appropriately closed.

Conclusion: A long-term occluded, torsioned, and dilated femorofemoral saphenous vein bypass graft was successfully reconstructed with excision and intraposition bypass with a new saphenous vein, restoring adequate flow to the extremity. This technique offers an effective option for the revision of dysfunctional grafts in selected cases.

Keywords: Femorofemoral bypass, graft occlusion, vascular graft degeneration, vascular surgical procedure

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PP-166

A rare coexistence of celiomesenteric trunk and accessory renal artery arising from the right common iliac artery

Elif Tuzdelen, Ahmet Aydin

Hacettepe University Hospital, Ankara, Türkiye

Abstract

Aim: Anatomical vascular variations are important to recognize during abdominal surgery and endovascular procedures to prevent complications. This report presents a rare coexistence of a celiomesenteric trunk and an accessory renal artery originating from the right common iliac artery.

Material and Methods: A 74-year-old female underwent contrast-enhanced CT angiography, revealing a common origin of the celiac trunk and superior mesenteric artery (celiomesenteric trunk) along with an accessory right renal artery arising from the right common iliac artery. The patient presented with right lower extremity pain and discoloration suggestive of acute arterial embolism. Surgical intervention included right femoral artery embolectomy.

Results: The procedure successfully restored arterial flow, and the patient recovered without complications.

Conclusion: Recognition of rare vascular variations, such as a celiomesenteric trunk combined with an accessory renal artery from the iliac artery, is critical for planning abdominal surgery and endovascular interventions. Awareness of such anomalies helps prevent intraoperative or procedural complications and facilitates safe and effective management of vascular events.

Keywords: Celiomesenteric trunk, accessory renal artery, vascular variation, arterial embolism

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PP-167

Renal ven transposition in nutcracker syndrome

Ahmet Aydin, Melih Alma

Hacettepe University Hospital, Ankara, Türkiye

Abstract

Aim: Nutcracker syndrome is a rare clinical entity caused by compression of the left renal vein between the superior mesenteric artery and abdominal aorta. It typically presents with flank pain, hematuria, and symptoms of pelvic congestion. Surgical treatment is considered in patients with persistent symptoms.

Material and Methods: A 27-year-old female presented with abdominal pain and gross hematuria. She had experienced an unintentional weight loss of approximately 20 kg over the past two years, after which her symptoms worsened. CT angiography demonstrated findings consistent with nutcracker syndrome. Surgical intervention was planned. Through a midline laparotomy, the mesentery was retracted and the retroperitoneum was exposed. The left renal vein appeared congested and dilated. The renal vein was divided from the inferior vena cava (IVC) and reimplanted 5 cm caudally into the IVC. The operation was completed without complications. Postoperatively, hematuria resolved and the patient was discharged uneventfully.

Results: Nutcracker syndrome is a rare vascular disorder, often underdiagnosed due to nonspecific symptoms. Treatment options include conservative management, endovascular stenting, and surgical reimplantation. Renal vein transposition is an effective and durable surgical solution, particularly in young patients with low body mass index. This case highlights successful surgical management with complete resolution of symptoms.

Conclusion: Nutcracker syndrome, although rare, may cause significant morbidity in young patients. Renal vein transposition provides a safe and effective surgical option for selected cases.

Keywords: Nutcracker, hematuria, renal vein transposition

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PP-168

True superficial temporal artery aneurysm without history of trauma: A case report

Umut Ata Ugras, Goktug Agac, Erhan Renan Ucaroglu, Kemalettin Erdem

Bolu Abant İzzet Baysal University, Faculty Of Medicine, Department Of Cardiovascular Surgery, Bolu, Türkiye

Abstract

Aim: Superficial temporal artery aneurysms are extremely rare vascular lesions, representing only a small fraction of all peripheral aneurysms. While most are pseudoaneurysms secondary to trauma, true aneurysms without preceding trauma are uncommon. We present a case of a spontaneous true superficial temporal artery aneurysm in a 53-year-old male patient.

Material and Methods: A 53-year-old male presented with a gradually enlarging swelling in the left temporal region, later accompanied by recurrent headache. There was no history of trauma. On physical examination, a pulsatile mass was palpated. Doppler ultrasonography demonstrated aneurysmal dilatation of the superficial temporal artery, consistent with a true aneurysm.

Results: Given the pulsatile nature of the lesion and the symptomatic presentation, surgical resection was performed under local anesthesia. The aneurysm was completely excised, and the superficial temporal artery was ligated. The postoperative course was uneventful, and notably, the patient's headache resolved completely during follow-up.

Conclusion: Although rare, true aneurysms of the superficial temporal artery should be considered in the differential diagnosis of pulsatile temporal swellings, even in the absence of trauma. Early recognition and surgical excision provide definitive treatment and may relieve associated symptoms such as headache, as demonstrated in this case. This highlights the importance of considering vascular etiologies in atypical swellings to avoid misdiagnosis and treatment delay.

Keywords: Superficial temporal artery, true aneurysm, vascular surgery

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PP-169

Treatment of carotid artery injury with the covered stent

Ugur Cetingok, Ayse Ozcetin

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: The indications for use of covered stents in the carotid arteries are similar to those for covered stent use in other vascular application, including the management of traumatic injury, aneurysm, pseudoaneurysm, dissection, and in-stent restenosis. In this article, we present the treatment of a partial carotid injury in a young female with covered stent implantation who was brought to the emergency department hypovolemic shock.

Material and Methods: A 35-year-old female patient was brought to the emergency with a stab wound to the left neck, hematoma, hypovolemic shock, and cardiac arrest. Necessary interventions were performed to stabilize vital signs (intubation, cardiopulmonary resuscitation, rapid volume replacement). Doppler ultrasound showed a partial laceration of the left common carotid artery. Considering the patient's critical condition and the partial nature of the laceration, the decision was made to proceed with endovascular intervention, the most rapid treatment option. The patient was quickly transferred to the angiography unit with suitable for open surgery, and a 6 mm by 26 mm balloon expandable covered stent was implanted.

Results: The patient recovered without any neurological deficit.

Conclusion: Penetrating wounds to the neck are common in the civilian trauma population. Approximately 10% to 20% of patients with a cervical injury caused by a stab wound have significant injuries. Stab wounds to the common carotid or internal carotid artery associated injuries with internal jugular vein (24.5%), cervical spine (18.5%), larynx (7.2%), external carotid artery (6.2%), vertebral artery (5.5%), pharynx (4.8%), and vagus nerve (0.8%). The location of the injury and the patient's condition determine the treatment option. Treatment with covered stents may be the first choice for patients in poor condition and with a difficult surgical approach.

Keywords: Covered stent, carotid artery, neck injury

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PP-170

Endovascular recanalization of chronic total subclavian vein occlusion in a hemodialysis patient

Gokce Sirin

Ataköy Medicana Hospital, İstanbul, Türkiye

Abstract

Aim: Central venous occlusions in the upper extremity of hemodialysis patients represent a serious problem, impairing the function of arteriovenous fistulas and negatively affecting dialysis adequacy. Surgical management of chronic occlusions is often challenging, whereas endovascular interventions offer a more effective and minimally invasive treatment option in such cases. Balloon angioplasty, in particular, has demonstrated favorable outcomes in restoring patency in chronic total occlusions. The literature also supports that endovascular treatments provide lower morbidity and shorter recovery times compared to surgery. Therefore, to preserve dialysis access and improve patients' quality of life, endovascular interventions should be considered as the first-line treatment option.

Material and Methods: A 38-year-old male patient, on a regular hemodialysis program due to chronic renal failure, had a functioning arteriovenous fistula at the high radial level of the right arm. Approximately one month earlier, he developed swelling and severe pain in the right arm, and inadequate function of the fistula during dialysis was observed. Consequently, a new fistula operation was performed. Venous Doppler ultrasonography of the right upper extremity revealed a total occlusion of the right subclavian vein, and the patient was admitted to our clinic for recanalization.

Results: Under local anesthesia, venography performed via the cephalic vein demonstrated total occlusion of the subclavian vein from its proximal segment. Following antegrade access, the chronically occluded segment was successfully crossed, and balloon angioplasty was performed. Control venography demonstrated complete recanalization. The procedure was completed without complications.

Conclusion: Endovascular treatment is a safe and effective option for managing chronic total subclavian vein occlusions in hemodialysis patients. Successful recanalization with balloon angioplasty helps to preserve dialysis access, maintain treatment adequacy, and improve patient quality of life. Given its minimally invasive nature and favorable outcomes, endovascular intervention should be prioritized as the first-line therapeutic approach in such cases.

Keywords: Hemodialysis, central venous occlusion, subclavian vein, endovascular treatment, balloon angioplasty

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PP-171

Ascending aortic graft infection and aortic dissection: Hybrid approach with carotid artery cannulation as a safe option

Serkan Aygun, Anil Guzeloglu, Meril Ahmet, Salih Saylam, Ekrem Yilmaz, Fatih Yigit, Ahmet Can Topcu, Arzu Antal, Farid Gojayev, Fuat Buyukbayrak

Koşuyolu High Specialization Education and Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: In cases requiring reoperation in aortic surgery, the coexistence of infection and dissection significantly increases mortality and morbidity. In such complex cases, patient-specific alternative cannulation routes and hybrid approaches may provide safe options.

Material and Methods: A 42-year-old male patient had undergone ascending aortic graft interposition three years earlier due to type 1 aortic dissection. He presented with sternal discharge and fever. Imaging revealed contrast extravasation at the proximal anastomosis of the graft and a flap extending from the aortic arch. Wound and blood cultures grew S. aureus. While surgical preparations were underway, the patient developed sudden tearing chest and back pain. Control CT angiography demonstrated increased contrast uptake in the false lumen, raising suspicion of rupture, and emergency surgery was planned.As the right femoral artery originated from the false lumen and the right axillary artery had been used in the previous operation, the left femoral artery and vein were explored, and the right carotid artery was dissected for cannulation. A graft was anastomosed to the carotid artery and cannulation was performed through this graft. Under cardiopulmonary bypass, re-sternotomy was performed, the infected ascending aortic graft was removed, and a Bentall procedure was carried out. During total circulatory arrest with antegrade cerebral perfusion, no intimal tear was observed in the aortic arch or its branches. After distal anastomosis, the patient was weaned off from bypass and transferred to the angiography unit for endovascular intervention, where TEVAR was performed. Due to myocardial edema and hemodynamic instability, the sternum was left open. At postoperative 24 hours, the patient was awake, alert, and cooperative; on postoperative day 2, the sternum was closed. On postoperative day 4, the patient was extubated and mobilized.

Results: In cases of complex aortic dissection and graft infection, the risk of mortality is extremely high. Hybrid interventions, combining surgical and endovascular techniques, allow for the reduction of perioperative complications. Furthermore, in situations where standard approaches are not feasible, alternative methods such as carotid artery cannulation can be safely utilized.

Conclusion: This case demonstrates that hybrid approaches and alternative cannulation strategies may be life-saving in complex aortic surgery.

Keywords: Aortic dissection, graft infection, hybrid approach, carotid cannulation, TEVAR

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PP-172

Analysis of glomus caroticum tumors in a high-altitude City: A single-center descriptive study

Ferit Cetinkaya

Başakşehir Çam and Sakura City Hospital Cardiovascular Surgery Clinic, İstanbul, Türkiye

Abstract

Aim: Carotid body tumors are slow-growing neoplasms arising from the chemoreceptors of the carotid body. The incidence of these tumors is thought to increase with altitude due to chronic hypoxic stimulation, which leads to hyperplasia of the carotid body. The aim of our study is to perform a retrospective morphological analysis of patients diagnosed with carotid body tumor (glomus caroticum) at our hospital, which is located in a city at an altitude of 1,630 meters

Material and Methods: Between January 2010 and January 2024, a retrospective review was conducted using our hospital's medical archives. A total of 139 patients who were diagnosed with carotid body tumors and had available CTA scans were included in the study. The measurements of tumor diameter and volume were performed based on computed tomography angiography (CTA) images. Comparisons between two independent groups (e.g., male vs. female, right-sided vs. left-sided tumors) were conducted using the Mann-Whitney U test for continuous variables. The Chi-square test was used to assess associations between categorical variables.

Results: The median age of the patients was 68.0 years (IQR: 49.0–79.5). Of these, 77% (n=107) were female. The higher prevalence of carotid body tumors in females compared to males was statistically significant ($p < 0.001$). The median maximum diameter of the glomus caroticum tumors was 21.0 mm (IQR: 12.0–32.0), and the median volume was 1.59 cm^3 (IQR: 0.36–5.26). Age-based analysis showed that 67% of the patients were 60 years or older, and this finding was statistically significant ($p < 0.05$).

Conclusion: Carotid body tumors were found to be significantly more common in females, with a statistically significant difference ($p < 0.001$). The median maximum diameter of glomus caroticum tumors was 21.0 mm (IQR: 12.0–32.0), and the median tumor volume was 1.59 cm^3 (IQR: 0.36–5.26). Age-based analysis revealed that 67% of the patients were aged 60 years or older, and this difference was also statistically significant ($p < 0.05$). Given that carotid body tumors may exhibit different characteristics in high-altitude regions.

Keywords: Glomus, caroticum, high, altittude

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PP-173

Early postoperative graft limb separation following EVAR in a giant abdominal aortic aneurysm: A case report

Can Atak, Gunay Gerenli, Hakan Parlar

University of Health Sciences, İstanbul, Türkiye

Abstract

Aim: Endovascular aortic repair (EVAR) is widely used for abdominal aortic aneurysm (AAA) due to lower mortality and morbidity compared to open surgery. However, EVAR carries risks of early and late complications. The most common are endoleak, migration, and limb occlusion, while graft limb separation is rare but potentially life-threatening, usually associated with type IIIa endoleak. We present a case of early graft limb separation following EVAR for a giant AAA.

Material and Methods: A 71-year-old male with hypertension, diabetes mellitus, and prior coronary artery bypass surgery was referred after an AAA was detected during urological evaluation for a renal cyst. CT angiography showed an infrarenal aneurysm measuring 150 mm in length and up to 100 mm in diameter with mural thrombus. The proximal neck was 24 mm with a 20 mm landing zone.EVAR was performed with a Lifetech Ankura AAA Stent Graft System (30 × 12 × 140 mm). The left iliac limb was extended with a Lifetech Ankura Cuff (14 × 18 × 100 mm) with 20 mm overlap, and the right limb with sequential cuffs (14 × 12 × 120 mm and 14 × 18 × 100 mm). The procedure ended uneventfully.

Results: At one-month follow-up, the patient developed left leg claudication. Examination revealed a weaker left femoral pulse. CT angiography demonstrated graft limb separation between the main body and left iliac extension with type IIIa endoleak. Revision was performed through the left femoral artery, deploying a Lifetech Ankura Cuff (14 × 14 × 100 mm) bridging both grafts. Completion angiography confirmed successful exclusion of the endoleak and good flow. The patient was discharged in stable condition.

Conclusion: Graft limb separation after EVAR is a rare (< 1%) but serious complication, typically reported in the late postoperative period. In this case, it occurred as early as the first month. Risk factors include insufficient overlap, progressive vessel dilatation, giant aneurysm diameter (> 90 mm), and graft migration. Careful follow-up imaging is essential, and timely endovascular revision can achieve favorable outcomes.

Keywords: Abdominal aortic aneurysm, endovascular aortic repair, graft limb separation, type III endoleak, endovascular repair

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PP-174

Successful emergency intervention of giant arteriovenous fistula aneurysm

Kamil Emre Bicer, Ebuzer Aydin, Cemal Kocaaslan, Sebil Merve Sen Topcu

Prof. Dr. Süleyman Yalcin City Hospital, İstanbul, Türkiye

Abstract

Aim: Chronic renal failure is a disease that affects all organs and has a high mortality rate if leftuntreated. Arteriovenous fistula (AVF) surgery is performed in patients with chronic renalfailure (CRF) and haemodialysis needs. In this study, we aimed to present the approach to surgical treatment of a patient with a complicated giant arteriovenous fistula aneurysm with a high risk of rupture due to skin lesion.

Material and Methods: A 61-year-old patient with chronic renal failure wasadmitted to the cardiovascular surgery clinic for closure of an aneurysmatic arteriovenousfistula (AVF). Because of a skin lesion in the AVF aneurysm, urgent surgery wasrecommended because of the high possibility of rupture. Under general anaesthesia, theanastomosis was accessed through an incision just above the brachiocephalic fistulaanastomosis. The brachial artery was looped with elastic tape. After controlling the bleedingrisk, the aneurysmatic segment of the fistula was completely resected.

Results: The patient was followed up for 1 day in the postoperative period and discharged.

Conclusion: In conclusion, AVF aneurysms are late complications due to the use of the fistula and should be treated without complication.

Keywords: Arteriovenous fistula, aneurysm, aneurysm rupture

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PP-175

Arterial thrombus, renal ischemia, and parasitic coexistence

Osman Yasar Isikli[1], Hayati Tastan[1], Hamit Serdar Basbug[1], Saliha Yarimoglu[2], Ibrahim Meral[3]

[1]Karamanoğlu Mehmet Bey University, Faculty of Medicine, Karaman Training and Research Hospital, Department of Cardiovascular Surgery,Karaman, Türkiye
[2]Karamanoğlu Mehmet Bey University, Faculty of Medicine, Karaman Training and Research Hospital, Department of Infectious Diseases and Clinical Microbiology, Karaman, Türkiye
[3]Karamanoğlu Mehmet Bey University, Faculty of Medicine, Karaman Training and Research Hospital, Department of Radiology, Karaman, Türkiye

Abstract

Aim: We wanted to emphasize that iron deficiency anemia associated with parasites can cause arterial embolism.

Material and Methods: A 44-year-old male patient who had been complaining of abdominal pain for 3 months presented to the emergency department with complaints of nausea, vomiting, right side pain, and pain in his right arm. The ECG showed sinus rhythm. Echocardiography showed no findings of cardiac-origin central thrombus or endocarditis. Abdominal and pelvic CT scans revealed right segmental renal ischemia. The patient's initial creatinine level was 1.25 mg/dL, urea was 41 mg/dL, and CRP was 4.7 mg/L. Urinalysis was positive for erythrocytes. When a thrombus was observed in the right subclavian artery on CT angiography, the patient underwent emergency surgery. After surgery, the patient continued to complain of abdominal pain, and the infectious parameters rose rapidly. All cultures were negative. Coagulation parameters were negative. Occult blood in stool was positive. Iron was measured at 13 µg/dL. Platelet count was 584 K/UL. Creatinine level rose to 3.6. CRP value was 350 mg/l. Piperacillin-Tazobactam 3x4.5 g and Vancomycin 2x1 g were started. The patient's antibiotics were changed to Meropenem 2x500, Metronidazole 2x500, and Ciprofloxacin 2x200 g due to fever, widespread abdominal tenderness, defense, and diarrhea. No pathology was observed by the general surgery unit. During the outpatient clinic check-up, the patient reported a history of oxyuriasis (pinworm infection) and was referred to the infectious diseases clinic, where Albendazole 200mg was prescribed for the entire family. Recommendations were then made for iron treatment.

Results: Parasitic infections are one of the most important factors indicating public health problems in society. We could not find any publications in the literature related to acute arterial thrombus and renal infarction associated with parasites. However, iron deficiency anemia associated with parasites and the associated reactive thrombocytosis are widely known. Arterial thrombosis associated with reactive thrombocytosis is a rare condition. Compared to arterial thrombosis, more cases of venous thromboembolism associated with iron deficiency have been reported in the literature. Arterial thrombosis usually occurs secondary to atherosclerotic plaque rupture or from a central source. Our patient had no atherosclerotic plaque or rhythm problem. There is iron deficiency triggered by the parasite and reactive thrombosis caused by iron deficiency.

Conclusion: Twenty-five percent of Turkey's population is anemic. Approximately 75% of anemia cases are due to iron deficiency. Iron deficiency is treatable and reversible. An underlying parasitic infection is an indirect risk factor for arterial thromboembolism.

Keywords: Parasites, reactive thrombus, arterial embolism, iron deficiency anemia

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PP-176

Treatment of postoperative lymphorrhea in the femoral region with somatostatin and negative pressure: Two case reports

Altay Omer Elalmis, M. Gorkem Sarikaya

Antalya Training and Research Hospital, Antalya, Türkiye

Abstract

Aim: We aimed to evaluate the effectiveness of somatostatin use in cases of lymphorrhea devoloping in the femoral region after surgery.

Material and Methods: The patient, a 78 year old man, was admitted to the hospital with abdominal aortic aneurysm. Both femoral regions was explored in order to be placed endovascular stent graft in the region, starting from the bottom of renal level and including both iliac arteries. On the postoperative 2nd day, the drain, in the right femoral region, was pulled. As for the left femoral region, because of serous drainage, it was left in situ. Because the drainage became lymphatic drainage and was 1000cc/d, left femoral was explored again. However, lymphatic drainage continued. Although granulated tetracycline had given from the incision every day for a week, there was no decrease in drainage quantity. The negative suction was applied, but still there was no significant decrease in drainage quantity. Thus, somatostatin had given from the incision region and negative suction had been applied for two days. Because the drainage stopped after two days, the patient was discharged.The patient, a 56 year old man, was admitted to the hospital with femoral pseudoaneurysm after angiography. The patient underwent repair of femoral artery. In the postoperative period, before the patient had no drainage, but lymphorrea was developed from the second day. Because the drainage had been 900cc/d, the patient was explored again. Because the reason wasn't found, it was closed. Because of patient's low protein values, IV protein support was provided. There was no decrease in drainage quantity. Therefore, somatostatin had been given from the incision and negative pressure had been received for two days. Because the drainage had stopped after two days, the patient was discharged.In order not to occur tissue neurosis, reconstituted somatostatin was given two times from the incision.

Results: It has been observed that Somatostatin is rather important for lymphoma therapy. In both events, before somatostatin was given, the region was explored again; although negative suction was applied, there was no decrease in drainage quantity. However, after somatostatin was given, the drainage stopped in two days.

Conclusion: In the postoperative period, lymphorrea is one of the most boring facts for the patient. Surgical repair isn't possible. Continual lymph loss causes protein and lipid loss and significant fluid loss in the pateint. These lead to morbidity, causing patient's long hospital stay. In these cases, the use of somatostatin will provide rapid recovery.

Keywords: Lymphorrhea, somatostatin, femoral incision

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PP-177

Redo cardiovascular surgery and lymphorrhea

Abdulkadir Ikbal, Cengiz Turkay, Salih Ozcobanoglu

Akdeniz University Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: Approach to possible lymphorrhea following femoral cannulation in a patient with a history of LVAD implantation and subsequent redo heart transplantation.

Material and Methods: A 40-year-old male patient, who underwent LVAD implantation in 2021 and heart transplantation in 2023, presented to the emergency department with swelling, pain, and discharge at the right femoral cannulation site. Doppler examination revealed an anechoic fluid collection measuring 88x63x56 mm, without detectable vascular signal (seroma? hematoma?). Despite follow-up and compression dressings applied to the incision site, the lymphorrhea persisted. The discharge decreased after four sessions of alternate-day polidocanol injections.

Results: Post-procedural ultrasound showed regression of discharge and pain, and the patient was discharged on the 3rd day. At outpatient follow-ups, no recurrence of similar complaints, hematoma, lymphorrhea, or abscess was observed.

Conclusion: Although lymphorrhea is rarely encountered at the femoral cannulation site, it is often associated with redo operations. Patients may present with complaints of pain, swelling, and discharge. Treatment should begin with compression dressings, followed by polidocanol injection, and, in advanced cases, surgical intervention may be required. Although the clinical diagnosis is not difficult, lymphorrhea should be considered in redo patients presenting with serous discharge at the femoral site. In conclusion, polidocanol injection should be considered as an alternative to surgery.

Keywords: Femoral cannulation, lymphorrhea, redo cardiac surgery, heart transplantation, polidocanol injection

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PP-178

Right external iliac–to–profunda femoris bypass after persistent endoleak in a CFA–SFA aneurysm

Ismail Kakillioglu, Koray Apaydin, Gokhan Ozerdem

Antalya City Hospital, Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: To describe the management and early outcome of a right common femoral–superficial femoral artery (CFA–SFA) aneurysm with persistent endoleak after endovascular repair, treated by open exclusion and right external iliac–to–profunda femoris artery bypass with an 8-mm Dacron graft, highlighting runoff strategy and postoperative handling of a large residual aneurysmal cavity.

Material and Methods: A 63-year-old man presented with right-lower-extremity swelling and pain; pedal Doppler signals were absent preoperatively. Prior covered-stent placement at another center was complicated by endoleak with rapid refilling of the sac. CTA showed a 55–56 mm diameter, ~13 cm length CFA aneurysm extending into the SFA, with in-stent occlusions in the SFA and popliteal segments. The contralateral femoral artery was also aneurysmal; no other aneurysms were identified.Operative steps (key adjunct first): an adjustable-pressure tourniquet was applied at the popliteal region to control retrograde back-bleeding. The aneurysm was exposed and excluded. Inflow was obtained from the distal external iliac artery, and an 8-mm Dacron graft was tunnelled retroperitoneally to the profunda femoris artery to prioritize outflow given the occluded SFA–popliteal axis. The deep femoral vein, adherent to the aneurysmal wall and partially occluded, was ligated. Because a large residual aneurysmal cavity remained after exclusion, a closed-suction Jackson-Pratt drain was maintained until output ceased. Postoperatively, therapy included LMWH, aspirin 100 mg, and cilostazol 100 mg.

Results: The operation proceeded as planned. Distal Doppler signals did not return immediately but were documented later in the early postoperative period. Symptoms improved steadily: pain and edema resolved, mobilization increased, and claudication abated. The closed-suction drain was removed on postoperative day 15, reflecting the need for prolonged drainage of the large residual cavity. The patient was discharged with stable distal signals and scheduled for duplex/CTA surveillance.

Conclusion: When endovascular repair fails and SFA–popliteal runoff is compromised, profunda bypass can have a role in limb salvage when necessary. In this right-sided CFA–SFA aneurysm, open exclusion plus a retroperitoneal right external iliac–to–profunda femoris Dacron bypass restored perfusion and resolved symptoms. A large residual aneurysmal cavity may require prolonged closed-suction drainage until output stops. Prior endovascular interventions can still increase operative difficulty—through altered tissue planes, endothelial denudation, and adhesions—and should be anticipated during planning and consent.https://solo.digiabstract.com/uvecd2025/Yazar/BildiriIslemleri/Bildiri/Icerik/9435#top

Keywords: Femoral artery aneurysm, limb salvage, endovascular failure

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PP-179

Acute-on-chronic aortic occlusion masquerading as chronic peripheral artery disease: A surgical emergency

Ayse Zehra Karakoc Cotelioglu, Seymur Kerimov, Pelin Eskin, Hilmi Tokmakoglu

Sehit Prof.Dr. Ilhan Varank Research and Training Hospital, İstanbul, Türkiye

Abstract

Aim: Acute aortic occlusion is a rare but life-threatening condition that can result in limb loss or death if untreated. We present a case of acute-on-chronic aortic occlusion initially mimicking chronic peripheral artery disease.

Material and Methods: A 54-year-old female patient, previously treated for breast cancer, was admitted to the emergency department with rest pain in both legs and mild discoloration of the toes. At presentation, her symptoms were initially suggestive of chronic peripheral artery disease. Although an acute pathology was not initially suspected, CT angiography was performed due to the toe discoloration, which revealed acute aortic occlusion beginning just below the renal arteries.Urgent surgical intervention was performed under general anesthesia. Bilateral femoral arteries were explored, but no pulsation was detected. Through a median laparotomy and retroperitoneal approach the abdominal aorta was exposed showing complete calcification and thrombosis besides extending proximally beyond the renal arteries. After systemic heparinization, a transverse aortotomy was performed. Intraoperatively, although thrombus extended above the renal level, aortic clamping was deferred. The thrombus was manually evacuated from the proximal segment and once sufficient inflow was obtained the cross-clamp was applied immediately. Residual thrombus and calcified plaque were subsequently removed. A 14×7 Y graft was then anastomosed end-to-end to the infrarenal aorta proximally and to both iliac arteries distally.

Results: Following declamping and deairing, strong pulsations were restored bilaterally in the femoral arteries. The ischemic symptoms resolved immediately. Postoperative recovery was uneventful, with no complications. The patient was mobilized early, drains were removed, and she was discharged on postoperative day 7.

Conclusion: Although rare, acute aortic occlusion is associated with high morbidity and mortality. This case demonstrates that patients presenting with rest pain and subtle ischemic changes should be carefully futher evaluated, as acute aortic occlusion may mimic chronic peripheral artery disease at initial presentation. Urgent recognition and surgical revascularization are essential to avoid limb loss and life-threatening complications.

Keywords: Aortic diseases, arterial occlusive diseases, vascular surgical procedures; peripheral arterial disease

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PP-180

After penetrating cervical trauma developing carotid-jugular fistula

Yavuz Ileri, Omar Manasra, Murat Gulel, Bercin Tekes, Atif Yolgosteren

Uludag University Cardiovascular Surgery Department, Bursa, Türkiye

Abstract

Aim: Carotid artery injury occurs in 12-20% of cases involving penetrating neck trauma. Penetrating injuries are the most prevalent. An arteriovenous fistula may arise. Hemorrhage and hypovolemic shock are the principal causes. Computed tomography angiography is gold standard for diagnosis. Surgical intervention should be the primary treatment option. In this case report, a patient was stab wound to the left neck underwent emergency surgical intervention for an injury to the left common carotid artery and the development of a carotid-jugular fistula, which is discussed in conjunction with clinical findings and relevant literature.

Material and Methods: A 44-year-old male a stab wound to the left neck. Physical examination indicated a hematoma was noted in the medial aspect of the anterior sternocleidomastoid muscle in the left neck region. Murmur and thrill was detected. Computed tomography (CT) angiography revealed an injury to the left common carotid artery and a fistula with the internal jugular vein. The patient underwent surgery under general anesthesia. He was extubated shortly after surgery without complications.

Results: Acquired arteriovenous fistulas are most frequently observed following a sharps injury. The development of arteriovenous fistulas has been documented in 2.5-10% of cases subsequent to vascular injuries. The majority of cases reported in the literature are initially overlooked and involve patients who receive treatment at a later stage. Prompt surgical intervention was undertaken due to the compromise of arterial and venous integrity, active hemorrhage, and high-flow fistulization.

Conclusion: Penetrating carotid artery injuries are infrequent, life-threatening emergencies that carry the risk of neurological complications. In the post-traumatic period, if a suspicious condition is detected in the carotid artery or surrounding major vessels, CT angiography is essential for treatment planning. An arteriovenous fistula that may arise following a penetrating carotid artery injury might not present symptoms in the initial stages but can result in delayed complications. In this instance, we posit that the rupture of the left main carotid artery due to a stab wound, followed by fistulization to the internal jugular vein, contributed to a decreased risk of early mortality.

Keywords: Carotid artery, carotid jugular fistula, stab wound

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PP-181

EVAR-associated type 1a endoleak treated with stena multilayer flow modulator: Two case reports

Ahmet Suha Arslan

Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: Type 1a endoleak is a high-risk complication after endovascular aneurysm repair(EVAR), resulting from inadequate proximal sealing of the stent graft. Persistent aneurysm sac pressurization may lead to rupture and mandates reintervention. Conventional management includes balloon angioplasty, proximal cuff extension, bare-metal stenting, or conversion to fenestrated or branched EVAR. However, such strategies are not always feasible in patients with challenging anatomy or significant comorbidities. Flow-modulating devices may provide an alternative option in these complex scenarios.

Material and Methods: We present two patients with type 1a endoleaks after infrarenal EVAR. Both had hostile neck anatomy and comorbidities that precluded open conversion or fenestrated repair. As rescue therapy, a Stena Multilayer Flow Modulator (MFM; Invamed, Turkey) was implanted to reinforce the proximal seal. With its multilayer mesh, the device modulates intra-aneurysmal flow, lowers sac pressure, and preserves branch perfusion. In both cases, completion angiography showed reduced but persistent flow, while discharge CTA confirmed complete resolution without sac enlargement or new complications.

Results: Case 1: 72-year-old male underwent EVAR for an infrarenal aneurysm. At the 1-month follow-up CTA, a proximal type 1a endoleak was detected. MFM implantation was performed, after which completion angiography revealed residual but decreased flow. Discharge CTA confirmed complete exclusion of the endoleak, and at 12-month follow-up, the aneurysm sac remained stable without recurrence.Case 2: A 68-year-old female with hostile proximal neck anatomy underwent EVAR for an infrarenal aneurysm. During the procedure, completion angiography revealed a proximal type 1a endoleak. Immediate treatment with MFM implantation was undertaken. Although persistent but reduced flow was seen intraoperatively, CTA prior to discharge confirmed complete sealing, with no recurrence at one-year follow-up.

Conclusion: These cases highlight that immediate angiographic resolution may not always be observed after MFM deployment. Instead, the hemodynamic modulation induced by the device appears to progressively exclude the aneurysm sac, as demonstrated by early post-procedural CTA. This delayed sealing phenomenon has also been described in limited prior reports. MFM may thus represent a salvage option for high-risk patients where conventional solutions are unsuitable. However, limited clinical data and the need for long-term durability studies remain important considerations.In two patients with EVAR-related type 1a endoleak, MFM implantation didn't provide immediate angiographic exclusion but achieved complete sealing on discharge CTA and maintained early and mid-term stability. This suggests that MFM may be considered as a bail-out therapy in anatomically high-risk patients, provided that close surveillance is ensured.

Keywords: Endovascular aneurysm repair, type 1a endoleak, multilayer flow modulator, stents, aortic aneurysm

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PP-182

Extracranial internal carotid artery aneurysm: Surgical approach and case report

Zeynep Gunes

Adana City Training and Research Hospital, Adana, Türkiye

Abstract

Aim: Extracranial internal carotid artery (EICA) aneurysms are rare but may cause life-threatening complications such as thromboembolism and rupture. A 66-year-old woman presented with a gradually enlarging swelling on the left side of her neck for two months. Computed tomography revealed a 23 × 19.5 × 24 mm saccular aneurysm, located 17 mm distal to the carotid bifurcation. Surgical resection was performed, followed by end-to-end anastomosis of the internal carotid artery. The postoperative course was uneventful, and the patient was discharged on day four.

Material and Methods: Extracranial carotid artery aneurysms (ECAA) account for only 0.4–4% of all aneurysms but carry significant risk for embolic stroke, cranial nerve compression, and rarely, rupture. EICA aneurysms are even less common, and no consensus exists regarding optimal management. Surgical and endovascular approaches are the main treatment options, selected according to aneurysm features. Atherosclerosis is the most frequent cause, though trauma, dissection, radiotherapy, connective tissue disease, and infection may also contribute. These aneurysms usually occur at the carotid bifurcation but may involve the internal carotid artery. If untreated, they can result in severe morbidity or death.

Results: A 66-year-old female smoker with a history of Chiari malformation presented with a painless, pulsatile mass in the left mid-neck region. Examination revealed a 1 × 1.5 cm lesion without neurological deficits. Laboratory findings were normal. Contrast-enhanced CT and MR angiography demonstrated a saccular aneurysm, 23 × 20 mm, in the proximal left ICA. Elective surgery was performed under general anesthesia. The common, external, and internal carotid arteries were isolated, and the aneurysm sac was excised after systemic heparinization. End-to-end anastomosis of the ICA was completed with intraoperative cerebral monitoring. Recovery was smooth; histopathology confirmed atherosclerotic changes.

Conclusion: ECAA is defined as a dilation 1.5 times greater than the normal arterial diameter. Although often asymptomatic, it may present with a pulsatile neck mass, pain, or cerebrovascular events. Untreated EICA aneurysms carry reported risks of 10% rupture, 50% embolization, and 71% mortality, highlighting the need for early intervention. Ultrasound is a useful initial tool, but CT or MR angiography provides definitive diagnosis. Symptomatic, enlarging, or large aneurysms (> 2 cm) should undergo repair. Open surgery, including aneurysm excision with primary anastomosis or grafting, remains the standard, while endovascular techniques are alternatives in selected cases. The choice depends on aneurysm location, etiology, comorbidities, and available expertise. Due to the rarity of these lesions, high-quality comparative studies are limited, but individualized treatment is essential.

Keywords: Carotid artery, internal, aneurysm

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PP-183

Case report: The treatment results of chronic aortic occlusion of four cases

Medine Sarac, Busra Karakoc Kaplan, Mustafa Enes Bostankolu, Ceylan Gurcan, Ali Aghayev, Ahmet Erkam Cevik, Ilker Ince, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Aortic occlusion is a blockage of the aorta somewhere along its path. Aortic occlusion can result in long-term damage to the organs. Although rare, aortic occlusion is a life-threatening condition that cannot be overlooked. The most common location for aortic occlusion is at the bifurcation of the aorta.Thrombus is the most common etiology. In this study, we present four cases diagnosed with chronic aortic occlusion and operated on in our clinic.

Material and Methods: Four patients who underwent surgery for chronic aortic occlusion at Etlik City Hospital were retrospectively analyzed. Preoperative demographic data, patient preoperative clinical status, postoperative imaging results, and postoperative clinical status were noted. Postoperative follow-up visits included physical examinations, laboratory tests. Data from 406 patients diagnosed with peripheral arterial disease at our clinic between February 2023 and August 2025 were retrospectively analyzed. Four patients who underwent surgery with a diagnosis of chronic aortic occlusion were included in this study. The patients' presenting complaints and characteristics are presented in Table 1. The average age of the four patients who underwent the procedure was 59,5±8,5 years and all of them were women. Comorbidites included diyabetes mellitus(%25),hypertension(%50), hyperlipdemia(%50),smoking history(%75) .The patients presenting complaints were claducation (%50), rest pain(%50) ,paresthesia(%100).All cases included in the study underwent endovascular treatment, and the operations were performed under local anesthesia. Endovascular treatment was technically successful in all but one patient, in whom the lesion could not be crossed; therefore, open surgical intervention was undertaken. One patient underwent percutaneous transluminal angioplasty (PTA) alone, whereas two patients required stent implantation after PTA. Postoperative data are summarized in Table 2. The acces sites were femoral artery in patient, and both the femoral ve brachial arteries in one patient.

Results: The open surgery procedure planned in one patient was not performed because the patient did not give consent.The patients' mean hospital stay was 3 days. Dual antiplatelet therapy was administered in the postoperative follow-up of the patients.During the postoperative follow-up of the remaining three patients, no symptoms or complications were noted, and stent patency was 100%.

Conclusion: The management of chronic aortic occlusion requires a multidisciplinary approach. Treatment choice should be based on patient comorbidities, anatomy, and clinical status. In our clinic, both open and endovascular surgical approaches are successfully performed.

Keywords: Aort occlusion, aortic stent, pta

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PP-184

Comparison of outcomes between primary repair and patch angioplasty in carotid artery revascularization

Oner Kurt, Emced Khalil, Burak Yuksel, Ali Kemal Karpuz, Alperen Aydin, Elif Hande Ozdemir, Omer Hudai Kutlu

Trabzon University Ahi Evren Thoracic and Cardiovascular Surgery Training and Research Hospital, Trabzon, Türkiye

Abstract

Aim: We aim to compare primary carotid endarterectomy repair and carotid patch angioplasty results to determine which technique is more beneficial to patients who undergo carotid artery revascularization

Material and Methods: The data collection was from a total of 20 patients (13 men, 7 women) who underwent carotid artery revascularization between 2020 and 2025. Ten patients (8 men, 2 women) underwent primary repair for carotid artery stenosis, while another ten patients (5 men, 5 women) underwent patch angioplasty. All patients were evaluated preoperatively and postoperatively using Doppler ultrasonography (USG). The mean age of the patients was 71.8 years, and the median age was 70 years. Surgical technique: The common carotid artery (CCA), internal carotid artery (ICA), and external carotid artery (ECA) were sequentially explored through an anterior sternocleidomastoid incision. The ICA, ECA, and CCA were clamped in order. Before arteriotomy, 5000 IU of intravenous heparin was administered. Following the arteriotomy, vascular repair was performed using 7/0 Prolene sutures. In the primary repair group, 6 patients had hyperlipidemia, while 4 did not. In the patch angioplasty group, 3 patients had hyperlipidemia, while 7 did not.

Results: According to postoperative USG findings, only one of the ten patients who underwent patch angioplasty developed 30–40% stenosis, while the remaining nine showed no restenosis. Among the ten patients with primary repair, six developed postoperative restenosis. Two patients developed total occlusion at the primary repair site, and only one of them subsequently underwent patch angioplasty. The remaining patients had normal postoperative USG findings. Postoperative Doppler USG evaluations revealed that patch angioplasty provided better vascular patency compared to primary repair. At the same time, only one patient in the patch group showed mild restenosis, while six of the primary repair group redeveloped restenosis, and one of the two patients with total occlusion required patch angioplasty. Among the patients who underwent primary repair, acute infarct areas were observed on postoperative diffusion MRI or brain CT scans in 4 out of 10 patients. In the patch angioplasty group, only one patient demonstrated an acute infarct area on postoperative day 1.

Conclusion: Our study demonstrated that patch angioplasty is associated with lower rates of restenosis and higher long-term patency compared to primary repair in carotid endarterectomy. These findings suggest that patch angioplasty is a safer and more effective technique for preserving arterial flow and preventing recurrent stenosis.

Keywords: Carotid artery revascularization, primary repair, patch angioplasty, stroke

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PP-185

Axillofemoral bypass in a patient with a history of aortobiiliac bypass presenting with bilateral acute lower extremity ischemia

Abdulkahhar Sisman, Muzaffer Celiksoz, Yunus Emre Kerimoglu, Ibrahim Isa, Zeynep Ulusan

Ankara Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: Axillofemoral Bypass in a Patient with a History of Aortobiiliac Bypass Presenting with Bilateral Acute Lower Extremity Ischemia

Material and Methods: A patient presented to the emergency department with severe abdominal and bilateral lower extremity pain. On physical examination, findings consistent with acute arterial ischemia were observed. Both lower extremities, below the waist, were cold, pale, with skin discoloration (cutis marmorata), and exhibited delayed capillary refill. Contrast-enhanced CT angiography revealed occlusion of both limbs of the previously implanted aortobiiliac graft. Considering the patient's prior history of abdominal surgery, the presence of a possible ileus in the abdomen, the risk of potential graft infection in the event of gastrointestinal perforation, and the fact that a conventional abdominal approach would prolong ischemia time, an axillofemoral bypass was deemed the most appropriate surgical option. The patient was urgently taken to surgery.

Results: The patient was immediately operated on, and an axillofemoral bypass was successfully performed without complications. Perfusion of the extremities was restored.In the postoperative period, no circulatory problems occurred. Due to the suspicion of ileus, the patient was followed up by the general surgery team, and in the following days underwent surgery with the diagnosis of ileus. The patient, who is still under our follow-up, continues to have intact and healthy circulation in both extremities.

Conclusion: Considering the patient's prior history of abdominal surgery, the presence of a possible ileus in the abdomen, the risk of potential graft infection in the event of gastrointestinal perforation, and the fact that a conventional abdominal approach would prolong ischemia time, an axillofemoral bypass was deemed the most appropriate surgical option.

Keywords: Axillofemoral bypass, aortobiiliac bypass, ileus

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PP-186

Combined endovascular and surgical approach in subclavian artery injury due to firearm wound

Ozer Gazioglu[1], Serkan Sonmez[1], Volkan Burak Taban[2], Abdurrahman Seramet[1]

[1]Aksaray University Training and Research Hospital, Aksaray, Türkiye
[2]Aksaray University Faculty of Medicine, Aksaray, Türkiye

Abstract

Aim: Subclavian artery injuries (SAI) are rare but have high mortality and morbidity rates. Controlling bleeding and restoring limb circulation are critically important, especially in firearm injuries. Due to anatomical difficulties, open surgical repair often requires sternotomy, clavicle resection, or thoracotomy and carries a risk of serious complications. In recent years, covered stent grafts have emerged as a minimally invasive alternative to open surgery in selected cases. The literature reports that endovascular repair reduces operative time and complication rates and significantly lowers mortality in penetrating trauma.

Material and Methods: Case Presentation A 22-year-old male patient presented with hematoma in the shoulder-subclavian region and signs of acute ischemia in the right upper extremity following a firearm injury. CT angiography revealed loss of flow and extravasation distal to the subclavian artery. Under emergency conditions, a dual-lumen approach was performed via the femoral artery (antegrade) and brachial artery (retrograde). After traversing the thrombosed segment bilaterally, a covered stent of appropriate caliber was placed while preserving the vertebral artery origin (Figure 1). While flow was restored proximally, embolectomy was performed under local anesthesia by enlarging the brachial access site to address the distal thrombosis. Postoperatively, trifasic distal pulses were obtained, and the patient was discharged without complications after 2 days.

Results: FIGURE 1: a-) DSA image showing occlusion of blood flow at the subclavian artery level using a retrograde approach b-) DSA image showing occlusion of blood flow at the subclavian artery level using an antegrade femoral approach c-) Balloon-expandable cover stent implantation in the area of arterial injury d-) Restoration of blood flow following stent implantation

Conclusion: According to data from the Western Trauma Association, the limb salvage rate in patients undergoing endovascular repair for subclavian/axillary artery injuries is 97%, while the post-procedure thrombosis rate is 7%. A multicenter study published in 2022 showed that endovascular treatment reduced mortality by up to three times compared to surgery in penetrating subclavian artery injuries. In our case, a successful outcome was achieved with an antegrade-retrograde endovascular approach and complementary surgical embolectomy without resorting to open surgery in a difficult anatomical region. Subclavian artery injury due to firearm wounds is a rare but critical trauma that threatens life and limb. Endovascular stenting is a safe alternative to surgery in appropriate cases, reducing mortality and morbidity. Hybrid approaches combining surgical embolectomy with persistent distal thrombosis may increase limb salvage rates.

Keywords: Subclavian artery injury, cover stents, endovascular, hybrid procedure

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PP-187

Association of arteriovenous fistula patency with uric acid, creatinine, and clinical factors

Cihan Yetis, Baris Akca, Mehmet Cengiz Colak, Mehmet Emin Murat, Cebrail Ozbulut

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Arteriovenous fistula (AVF) is the most commonly preferred vascular access in hemodialysis patients. Although many clinical and biochemical factors affecting AVF patency have been identified, the role of uric acid and creatinine levels, and uric acid/creatinine ratio has not been clearly established. In this study, AVF patency was evaluated in relation to uric acid and creatinine levels, the uric acid/creatinine ratio, and the clinical characteristics of the patients.

Material and Methods: This retrospective study included 22 patients who underwent AVF creation for hemodialysis between 2016 and 2017 and subsequently developed AVF dysfunction. Demographic data, comorbidities (hypertension, diabetes mellitus, hyperlipidemia), medication use (statins, aspirin, calcium channel blockers), AVF location and laterality were recorded. Laboratory parameters included uric acid, creatinine, and uric acid/creatinine (UCR) ratio measured at the time of fistula creation and at the onset of dysfunction as for UCR1 and UCR2 repectively. AVF patency durations were determined and included parameters compared between fistula creation and onset of dysyfunction. Also, patients were divided into two groups according to patency duration: 0–5 years and > 5 years. Numerical variables were compared using the Mann-Whitney U test, and categorical variables were compared using the chi-square test.

Results: The mean age of the patients included in the study was 58.1±14.2 years, and 59% were male. Hypertension was present in 68%, diabetes mellitus in 41%, and hyperlipidemia in 41% of the patients. Calcium channel blocker use was found in 63% of the patients. Statin and aspirin use rates were 41% and 45%, respectively. The most common fistula types were brachiocephalic (55%) and radiocephalic (41%). The mean patency duration was 4.1 years. When biochemical parameters were evaluated, no significant difference was found between the 0–5 year and > 5 year groups in terms of uric acid, creatinine, UCR1, and UCR2 (all $p > 0.05$). Comorbidities and medication use were also similar between the groups (all $p > 0.05$).

Conclusion: In this study, AVF patency duration was not found to be significantly associated with serum uric acid, creatinine levels, and UCR ratio. In addition, no differences were observed between the 0–5 year and > 5 year groups in terms of major comorbidities and medication use. These findings may suggest that factors affecting fistula patency are more likely related to technical and other clinical variables. Further studies with larger patient cohorts are needed for evaluating AVF dysfunction.

Keywords: Arteriovenous fistula, chronic kidney diseases, uric acid, creatinine, vascular patency

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PP-188

A rare combination of multiple arterial aneurysms: A case report

Mehmet Kirisci, Murat Ari, Orhan Bozoglan, Murat Canak, Omer Aygun

Sütçü İmam University, Faculty of Medicine, Department of Cardiovascular Surgery, Kahramanmaraş, Türkiye

Abstract

Aim: Although aneurysms most commonly occur in the abdominal aorta, they may also develop in peripheral arteries. However, the simultaneous presence of abdominal aortic, left external iliac, and right deep femoral artery aneurysms in the same patient is extremely rare. Such multiple aneurysms require special attention in terms of diagnosis, treatment, and follow-up. In this report, we present the successful endovascular treatment of an elderly patient with this unusual aneurysm combination.

Material and Methods: An 82-year-old male patient presented with a complaint of fullness in the abdomen and right groin. His medical history included hypertension, hyperlipidemia, and long-term smoking. Computed tomography angiography (CTA) revealed:•An infrarenal abdominal aortic aneurysm measuring 8 × 6 cm,•A left external iliac artery aneurysm measuring 10 × 8 cm,•A right deep femoral artery (profunda femoris) aneurysm measuring 5.6 × 4 cm.

Results: Endovascular aneurysm repair (EVAR) was performed for the abdominal aortic and left external iliac artery aneurysms. The right deep femoral artery aneurysm was initially monitored and later treated with open surgical repair. The postoperative period was uneventful, and the patient was discharged in good condition.

Conclusion: Although multiple arterial aneurysms are rare, they should be carefully identified through detailed imaging at the time of diagnosis. Patients should be managed with an individualized treatment plan. This case demonstrates that endovascular treatment approaches can be safely and effectively applied in elderly patients with multiple aneurysms.

Keywords: Abdominal aortic aneurysm, iliac artery aneurysm, deep femoral artery aneurysm, endovascular repair, case report

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PP-189

Treatment of bilateral popliteal arteriovenous fistula with balloon occlusion and heart failure secondary to multiple AVFs: A case report

Ozgur Akkaya, Umut Serhat Sanri, Aslan Yavuz

Alanya Alaaddin Keykubat University Training and Research Hospital, Department of Cardiovascular Surgery, Antalya, Turkey

Abstract

Aim: Iatrogenic arteriovenous fistulas (AVFs) are rare but clinically significant complications of percutaneous vascular interventions. Large or multiple fistulas can create high-flow circulation, leading to heart failure. Surgical intervention carries high risk, particularly in patients with advanced comorbidities. Therefore, endovascular approaches serve as safe and effective alternatives.

Material and Methods: In this case report, the diagnosis and treatment process of a 65-year-old male patient who developed bilateral iatrogenic popliteal AVFs was examined in detail.

Results: A 65-year-old male patient with a history of chronic kidney disease, renal cell carcinoma, and peripheral artery disease was under follow-up. The patient had previously undergone AVF creation for dialysis access. In March 2025, following left nephrectomy with bladder and prostate surgery, his serum creatinine level was 3,97 mg/dL. During follow-up, he developed dyspnea; chest radiography revealed pulmonary edema. Echocardiography showed an ejection fraction of 30% with global hypokinesia.On lower extremity examination, thrill and bruit were detected, and CT angiography confirmed the presence of bilateral iatrogenic popliteal AVFs. The patient's history revealed that about four months earlier, interventional procedures had been performed on both popliteal arteries for peripheral artery disease. Due to low hemoglobin levels and multiple comorbidities, surgical intervention was considered high risk, and endovascular treatment was planned.A 6 French, 6 cm long, non–drug-eluting (plain) balloon catheter was placed along the fistula tract, and mechanical occlusion was performed in three sessions: in the first session, at 12 atm for 3 minutes; in the second session, at 12 atm for 5 minutes; and in the third session, at 12 atm for 7 minutes. Control angiography showed persistent fistula flow.In the same session, a 7 French sheath catheter was introduced via the popliteal vein under Doppler guidance, and a 10 French, 6 cm balloon catheter was advanced into the fistula tract. Arterial and venous balloons were simultaneously inflated at 10 atm for 3 minutes. During inflation, the balloon shafts were moved approximately 1 cm in opposite distal and proximal directions. Control angiography confirmed complete obliteration of the fistula tract.

Conclusion: The presence of multiple AVFs increases the risk of high-flow heart failure. Balloon occlusion provides a minimally invasive, surgical alternative for treating bilateral iatrogenic popliteal AVFs. This technique is particularly noteworthy for its efficacy and safety in patients at high surgical risk and those who have developed heart failure.

Keywords: Arteriovenous fistula, balloon occlusion, heart failure, endovascular treatment

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Nursing Poster Presentations

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NPP-01

Optimizing pain control in patients with peripheral arterial disease

Mehmet Kilic

Ankara University, Faculty Of Medicine, Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is generally defined as a vascular insufficiency primarily affecting the lower extremity circulation. In addition, it may involve the extracranial carotid, upper extremity, visceral, and renal circulations. The most common underlying cause is atherosclerosis; however, conditions such as Buerger's disease, vasculitis and arterial trauma may also contribute to its development. PAD may be asymptomatic or present with intermittent claudication or severe limb ischemia. If left uncontrolled, serious complications such as ulceration and gangrene may occur.

Material and Methods: Relevant data were obtained by reviewing scientific articles and studies accessed through searches in PubMed, Google Scholar, YÖK Thesis Database using the keywords "peripheral arterial disease, pain management, endovascular surgery."

Results: The clinical presentation of PAD is determined by the degree of arterial stenosis, the presence of collateral vessels and adequate blood viscosity. The Fontaine–Ratschkow and Rutherford classifications are commonly used for clinical staging of the disease. The incidence of PAD increases with age. İmportant risk factors include smoking and diabetes mellitus. Treatment options include medical therapy with antiplatelet or anticoagulant agents; thrombolytic therapy in cases of arterial thrombosis; and interventional procedures such as percutaneous transluminal angioplasty(PTA), depending on the type of lesion. Pain is a key diagnostic feature of symptomatic PAD and can significantly impair daily activities. It typically begins as exercise-induced pain caused by reduced blood flow to tissues distal to atherosclerotic lesions. As the disease progresses, ischemia further compromises tissue perfusion, leading to increased pain intensity. If perfusion is not restored, critical limb ischemia may result in tissue necrosis or gangrene, which can necessitate amputation and may cause stump pain, phantom limb pain, or post-amputation mechanical back pain. Managing the complex nature of pain in PAD is challenging and requires a multifactorial approach. PAD-related pain may be nociceptive, neuropathic, or mixed; therefore, accurate pain characterization is essential for effective management. Optimal pain control involves understanding the underlying pathophysiology and adopting a patient-specific strategy. Depending on pain severity, pharmacological and non-pharmacological treatments should be combined, and when necessary, invasive techniques such as peripheral nerve blocks may be employed.

Conclusion: PAD is a prevalent clinical condition in which pain serves as a critical marker for both diagnosis and prognosis. Inadequate pain control can lead to severe complications and a significant decline in quality of life. Therefore, a patient-centered, multidisciplinary, and multifactorial approach to pain management is essential.

Keywords: Peripheral arterial disease, pain management, endovascular surgery

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NPP-02

Nutrition follow-up in the postoperative period in ABF (Aortobifemoral Bypass) patients

Aysenur Gezer

Mehmet Akif Ersoy Thoracic Heart and Vascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: "The importance of nutritional monitoring in patients following abdominal surgery (ABF) is to emphasize its contribution to nursing care, reduce complications, and improve quality of life.

Material and Methods: This study was conducted using a literature review method. Articles published in the last 10 years were examined, and the findings were compiled.

Results: In the postoperative period, oral intake and gas and stool output are typically delayed, and therefore enteral or parenteral support may be required. Gas and stool output is the most important indicator for a safe transition to nutrition and should be closely monitored by nurses. In patients who cannot receive nutritional support, malnutrition is prevalent, so nutrition assessment scales like NRS (Nutritional Risk Screening) should be used. In patients receiving adequate protein and calorie support, wound healing is accelerated, and complications are reduced. Nurses should regularly monitor and track weight, serum albumin, oral intake, and bowel movements. Early and appropriate nutritional planning reduces complications and accelerates recovery.

Conclusion: Monitoring of gas and stool plays a significant role in patient outcomes. Regular monitoring by nurses, early detection of complications, and a patient safety-first approach help reduce mortality and morbidity rates.

Keywords: Nursing, care, postoperative, nutrition

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NPP-03

Nursing care of a child developing thromboembolism after cardiac catheterization for aortic coarctation and undergoing thrombectomy: A case report

Hulya Karaer[1], Burcu Dundar[1], Dogus Kahraman[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This case report aims to evaluate the nursing care of a pediatric patient diagnosed with aorticcoarctation who developed thromboembolism following cardiac catheterization andsubsequently underwent femoral thrombectomy.

Material and Methods: A 6-year-old male patient with a history of aortic coarctation diagnosed during the prenatalperiod was followed from birth. The patient underwent balloon angioplasty in the neonatalperiod and surgical repair at two months of age. Due to re-coarctation suspicion, an electivecardiac catheterization and angiography were performed in July 2025. Pre-procedureassessments included vital signs, laboratory tests, peripheral circulation monitoring, andinformed consent. During the procedure, femoral artery occlusion and impaired distalcirculation were identified. Despite heparin infusion, the patient developed progressiveextremity ischemia, confirmed by Doppler ultrasonography. Emergency femoralthrombectomy was performed. Nursing care focused on hemodynamic monitoring, peripheralcirculation assessment, pain control, bleeding surveillance, and management of anticoagulanttherapy.

Results: After thrombectomy, peripheral pulses (dorsalis pedis, posterior tibial, popliteal, femoral)were restored with triphasic flow confirmed by Doppler. Postoperative hemodynamic stabilitywas achieved, with heart rate ranging between 99–128 bpm, blood pressure 96/53–131/64mmHg, and oxygen saturation 90–97%. The patient tolerated anticoagulant therapy withoutmajor complications. Nursing interventions ensured early detection of circulatory changes,effective bleeding control, and continuous evaluation of perfusion. The patient was dischargedon postoperative day three with aspirin therapy and minimal extremity temperature difference.

Conclusion: Cardiac catheterization in pediatric patients carries a risk of severe vascular complications,such as thromboembolism. Early recognition of circulation changes and timely interventionsare essential to prevent morbidity. Nursing care plays a pivotal role in monitoringhemodynamic parameters, detecting complications, and supporting recovery. Continuouseducation of nurses regarding interventional cardiology procedures and evidence-based careprotocols is critical to improving patient safety and outcomes.

Keywords: Cardiac catheterization, thromboembolism, thrombectomy, pediatric nursing care

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NPP-04

Nursing care in the intensive care process after sharps injury

Burak Turludur, Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Sharps injuries are among the traumatic emergencies that require intensive care monitoring due to the significant blood loss, organ damage, and risk of infection. The purpose of this article is to emphasize the basic principles of nursing care during the intensive care process, outline interventions to prevent complications, and enhance patient safety.

Material and Methods: This study examined the nursing care processes of patients with sharps injuries who were followed in the post-traumatic intensive care unit and evaluated in light of current literature and clinical experience. Nursing care practices were analyzed under the following headings: ensuring hemodynamic stability, wound and drain management, infection control, pain management, psychosocial support, and patient/family information.

Results: Regular monitoring of hemodynamic monitoring, blood pressure, heart rate, respiratory parameters, and urine output allows for early recognition and management of shock. Wound and drain care, and frequent assessment of bleeding, hematoma, discharge, and signs of infection at the injury site reduce the risk of complications. Infection control, sterile dressing technique, aseptic approach during invasive procedures, and monitoring of antibiotic therapy are critical. Pain and comfort management, effective analgesia administration contribute to facilitating mobilization and preventing respiratory complications. Psychosocial support and nurse-patient communication are crucial for increasing the sense of security in patients experiencing post-traumatic anxiety and fear. Education and communication, as well as informing patients and their families about post-injury care, signs of infection, and lifestyle changes, positively impact the process.

Conclusion: Nursing care in the intensive care unit following a sharps injury plays a critical role in preserving the patient's vital functions, preventing complications, and supporting the healing process. Mortality and morbidity rates can be reduced through evidence-based nursing practices. The systematic, careful, and holistic approach of intensive care nurses is essential for preserving not only physical recovery but also the patient's psychosocial integrity.

Keywords: Injury, nursing care, sharps

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NPP-05

Psychological support and nursing care in patients experiencing major vascular trauma

Dilan Ciftci

İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Major vascular trauma is associated not only with physical complications but also with significant psychological stress, anxiety, and delirium. This study aims to explore nurse-led psychological support strategies in intensive care patients following severe vascular trauma.

Material and Methods: Clinical observations were conducted in a cardiovascular surgery ICU. Nursing interventions included:•Early psychological assessment using validated tools,•Continuous monitoring for signs of anxiety, delirium, or agitation,•Implementation of supportive communication techniques and reassurance,•Collaboration with mental health specialists and interdisciplinary teams for care planning,•Patient and family education to reduce stress and enhance coping strategies,•Documentation of psychological assessments and interventions to guide ongoing care.

Results: Proactive nursing interventions improved patient engagement, reduced the severity of anxiety and delirium episodes, and facilitated better adaptation to intensive care treatment. Early recognition and timely psychological support prevented escalation of stress-related complications. Education and family involvement strengthened patient adherence to treatment plans and improved overall recovery experience

Conclusion: Nurse-led psychological support is vital for patients with major vascular trauma in intensive care. Structured assessment, continuous monitoring, effective communication, interdisciplinary collaboration, and patient/family education enhance psychological well-being, optimize clinical outcomes, and support holistic patient care.

Keywords: Psychological support, vascular trauma, critical care nursing, delirium prevention, patient-centered care

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NPP-06

Future nursing practices: Enhanced intensive care nursing practice using point-of-care ultrasound (POCUS)

Pelda Yesil, Ozgur Akkaya, Umut Serhat Sanri

Alanya Alaaddin Keykubat University Education and Research Hospital, Department of Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: The integration of technological innovations in intensive care units (ICUs) is critical for improving patient safety and the quality of care, impacting both clinical outcomes and nursing practice. Point-of-Care Ultrasound (POCUS) has gained increasing recognition in international literature as an evidence-based tool enabling nurses to make faster and more reliable decisions in vascular access, thrombosis detection, and patient monitoring. Studies from developed countries demonstrate that POCUS use increases success rates of central and peripheral vascular catheterization by 30–80%, significantly reduces procedure-related complications, and strengthens nurses' clinical decision-making processes. The aim of this study is to review the literature regarding the effects of POCUS utilization in intensive care nursing on patient safety, procedural success, and quality of care, to highlight the importance of disseminating this practice through pilot nurse teams supported by training, and to assess its potential applicability in Turkey.

Material and Methods: A literature review was conducted using PubMed, CINAHL, and Scopus databases from 2015 to 2025. The following keywords were used: "point-of-care ultrasound", "intensive care nursing", "central venous catheter", "peripheral arterial catheterization", "deep vein thrombosis", "nurse-led ultrasound". Included studies reported on ICU nurses' POCUS applications regarding procedural success, complication rates, clinical decision support, and patient safety.

Results: POCUS-guided central venous catheter insertion reduces complications by 30–80% and shortens procedure time. Ultrasound-guided peripheral vascular access increases success rates by 40–70% and improves patient comfort. Nurse-performed POCUS provides reliable results in early detection of deep vein thrombosis (DVT) and catheter monitoring. International data indicate that POCUS enables nurses to make faster and more accurate clinical decisions, significantly enhancing the quality of patient care. Pilot nurse teams further increase reliability, reduce complications, and lead the implementation and dissemination of this practice.

Conclusion: POCUS represents a transformative approach in intensive care nursing, enhancing procedural success, reducing complications, and strengthening clinical decision-making processes. Itsutilization significantly improves patient safety and quality of care. When integrated as a standard component of nursing practice, bedside ultrasound maximizes the efficiency, accuracy, and safety of intensive care procedures. Therefore, incorporating POCUS into nursing education programs and promoting its widespread application across ICUs is a critical step toward future nursing practice.

Keywords: Point-of-care ultrasound (POCUS), intensive care nursing, peripheral arterial catheter, deep vein thrombosis

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NPP-07

The effects of mobile health–based interventions on health outcomes in individuals diagnosed with peripheral artery disease: A systematic review of randomized controlled trials

Sude Sever[1], Nur Sena Kayacan[2], Aysun Ardic[2]

[1]İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye
[2]İstanbul University Cerrahpaşa Florence Nightingale Faculty of Nursing, İstanbul, Türkiye

Abstract

Aim: Peripheral artery disease (PAD) is become prominent as a significant public health issue due to its increasing prevalence and the morbidity it causes. Moreover, disease-related pain, intermittent claudication, and functional limitations adversely affect patients' daily lives and social roles. In this context, mobile health (mHealth) applications have gained importance as a low-cost, accessible, and patient-centered intervention option; they are also among the tools that may contribute to increasing physical activity, improving quality of life, and reducing healthcare expenditures. This study aims to systematically evaluate the effects of mobile health–based interventions on health outcomes in individuals diagnosed with PAD.

Material and Methods: This review followed the PRISMA guideline. The systematic search was conducted between August 1 and September 1, 2025, across PubMed, Cochrane, CINAHL, Web of Science, and Scopus. Keywords: "Peripheral Arterial Disease" OR "Peripheral Artery Disease" AND "Telemedicine" OR "Telehealth" OR "Mobile Health" OR "Telecare" OR "mHealth" OR "eHealth". Inclusion/exclusion criteria were determined using the PICOS framework. P (Population): Individuals with peripheral artery disease, I (Interventions): mHealth-based interventions, O (Outcomes): Effects of mobile health interventions on health outcomes, S (Study Designs): Randomized controlled trials published English, 2015–2025 with full-text.

Results: As a result of the database search using keyword combinations, a total of 970 articles were identified: PubMed (n = 571), Cochrane (n = 193), CINAHL (n = 78), Web of Science (n = 119), and Scopus (n = 9). Five studies met the inclusion criteria. Findings from four of the included studies indicated that the interventions improved pain-free walking distance and duration, increased daily physical activity while reducing in measures of sedentary behavior, and enhanced peak VO_2 as well as claudication onset time. Moreover, a significant increase in the mean 6-minute walk test distance was observed, revealing a prognostically relevant improvement in walking capacity among patients with moderate PAD. These findings were also associated with a lower perceived sense of limitation in terms of subjective symptom perception and quality of life parameters. Furthermore, coaching and motivational interviewing delivered via telephone were highlighted as components that support adherence to behavior change. On the other hand, one study demonstrated that the intervention did not produce a significant effect on walking performance.

Conclusion: mHealth-based interventions have been observed to have generally positive effects on the health outcomes of individuals with PAD, offering significant potential to enhance individual functional capacity and improve quality of life by reducing healthcare access inequalities, due to their accessible and home-applicable characteristics.

Keywords: Peripheral arterial disease, peripheral artery disease, telehealth, mobile health, ehealth

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NPP-08

Nursing care and monitoring approaches for postoperative complications in EVAR and TEVAR patients: Clinical practices based on current literature

Okay Acielma

[1]İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: This study aims to identify postoperative complications in patients undergoing endovascular aortic repair (EVAR) and thoracic endovascular aortic repair (TEVAR) and to evaluate nursing care and monitoring strategies based on current literature.

Material and Methods: A systematic literature review was conducted. PubMed, Scopus, and Web of Science databases were searched for articles published between 2015 and 2025 focusing on EVAR and TEVAR postoperative complications and nursing care. Initially, titles and abstracts were screened, and eligible full-text articles were analyzed. The analysis focused on types of postoperative complications, nursing monitoring strategies, and care interventions.

Results: The literature indicates that the most common postoperative complications in EVAR and TEVAR patients include endoleaks, renal function impairment, spinal cord ischemia, bleeding, and infection. Endoleaks, particularly Type 1 and 3, require urgent intervention, whereas Type 2 is generally managed through regular monitoring, with nurses following imaging results closely. Renal function impairment, often related to contrast use, is monitored via fluid balance, urine output, and laboratory values. Spinal cord ischemia, primarily in TEVAR patients, is mitigated through neurological assessment and spinal cerebrospinal fluid drainage. Bleeding and hematoma risk are managed through continuous monitoring of the surgical site and vital signs, while infection prevention relies on aseptic care, early mobilization, and patient education. Postoperative pain, though generally milder than in open surgery, is regularly assessed and managed according to analgesic protocols. The literature emphasizes the importance of a multidisciplinary approach, highlighting the collaboration among surgeons, nurses, and anesthesia teams, as well as early mobilization and patient education in reducing complication risk.

Conclusion: Nursing care following EVAR and TEVAR is critical for early detection and management of postoperative complications. Current evidence suggests that systematic monitoring and evidence-based nursing protocols enhance patient safety and support recovery. These findings underscore the importance of implementing evidence-based strategies in clinical nursing practice.

Keywords: EVAR, TEVAR, postoperative complications, nursing care

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NPP-09

Nursing care of a patient followed after aortic graft surgery for aortic dissection according to roy's adaptation model: A case report

Seren Altinkopru[1], Kaymak Gunduz[1], Halenur Yilmaz[1], Ozlem Erten[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This case report aims to evaluate the nursing care of a patient who underwent aortic graftsurgery after aortic dissection, using Sister Callista Roy's Adaptation Model as a guidingframework for assessment, care planning, and evaluation.

Material and Methods: The case involved a 77-year-old female patient with a medical history of diabetes mellitus,hypertension, hyperthyroidism, systemic lupus erythematosus, and rheumatoid arthritis. Shewas admitted to the emergency department with severe back and chest pain and wasdiagnosed with Stanford type A aortic dissection by Computed Tomography angiography. The patient underwenturgent aortic graft surgery and was transferred to the cardiovascular intensive care unit.Postoperative care included mechanical ventilation, hemodynamic monitoring, continuousrenal replacement therapy, inotropic support, blood transfusions, and nutritional support.Nursing care was planned and delivered according to Roy's Adaptation Model, focusing onfour adaptive modes: physiological, self-concept, role function, and interdependence. Datawere collected using the North American Nursing Diagnosis Association (NANDA-I)taxonomy, and interventions were planned according to the Nursing InterventionsClassification (NIC).

Results: Postoperatively, the patient required prolonged intensive care follow-up, mechanicalventilation, tracheostomy, and continuous renal replacement therapy. Hemodynamicparameters were stabilized through vasopressor and inotropic support, while fluid-electrolytebalance was maintained. Nursing diagnoses included acute pain, impaired gas exchange,activity intolerance, disturbed sleep pattern, anxiety, ineffective family coping, and self-caredeficit. Nursing interventions involved close monitoring of vital signs, pain and anxietymanagement, maintenance of oxygenation, infection and bleeding control, nutritional support,and family education. Through these interventions, improvements were observed inhemodynamic stability, pain relief, respiratory adaptation, and psychological adjustment. Thepatient gradually achieved better adaptation to her condition, consistent with Roy's model,though complications prolonged her intensive care stay.

Conclusion: The application of Roy's Adaptation Model provided a holistic and systematic approach tonursing care for aortic dissection patients undergoing complex surgery. The model enabledcomprehensive assessment, guided individualized interventions, and supported patientadaptation in physiological, psychological, social, and interdependence domains. This casedemonstrates that integrating nursing theories such as Roy's model into clinical practiceenhances patient-centered care, improves adaptation, and contributes to recovery in criticallyill patients. It is recommended that nurses apply this model to similar cases to optimizeoutcomes and support holistic adaptation.

Keywords: Aortic dissection, roy adaptation model, nursing care

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NPP-10

"Post-endovascular aneurysm repair (EVAR) Nursing Care: The process from intervention to ward transfer"

Abdussamet Cukur

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Endovascular surgery has significantly contributed to reducing morbidity and mortality rates by providing minimally invasive treatment options for vascular diseases. Nevertheless, its success does not solely rely on the surgical intervention itself but also requires the systematic and comprehensive management of postoperative nursing care. This paper aims to enhance awareness by presenting the structured nursing care processes for patients who have undergone endovascular aneurysm repair (EVAR), covering the critical period from postoperative monitoring in the intensive care unit to their transfer to the surgical ward.

Material and Methods: Postoperative Nursing Care Following Endovascular Aneurysm Repair (EVAR)Immediate Postoperative Period •Monitoring of vital signs every 15 minutes during the first 2 hours, followed by hourly assessments. •Evaluation of the puncture site for bleeding, hematoma, and pseudoaneurysm. •Monitoring of urine output and fluid balance to prevent contrast-induced nephropathy. •Assessment of pain levels and provision of appropriate analgesia. •Ensuring immobilization of the extremity where the puncture was performed.Early Complication Surveillance •Monitoring for bleeding, arterial thrombosis, acute kidney injury, and contrast reactions. •Early detection of possible complications and prompt reporting to the physician.Criteria Before Transfer to the Ward •Achievement of hemodynamic stability. •Absence of active bleeding at the puncture site. •Adequate urine output.•Patient evaluation for mobilization. •Providing patient and family education regarding care and discharge instructions.

Results: Nursing care following EVAR plays a critical role in the early detection of complications and the maintenance of patient safety. Systematic monitoring, including regular assessment of vital signs, evaluation of the access site, and discharge education, constitutes the foundation of nursing practice in this context. The effectiveness of nurses throughout this process directly contributes to sustaining the overall success of the surgical intervention.

Conclusion: The postoperative care process following endovascular surgery requires multidisciplinary teamwork. Evidence from the literature demonstrates that nurses' ability to identify early complications and ensure patient safety significantly reduces mortality. Therefore, enhancing nurses' knowledge and skills in endovascular surgery is a critical requirement, both for maintaining patient safety and for ensuring surgical success.

Keywords: Endovascular surgery, EVAR, hemodynamics, bleeding, thrombosis

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NPP-11

Evidence-based nursing interventions for stroke prevention in patients undergoing carotid endarterectomy

Gulsum Gokmen, Fatmanur Sakarya

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to evaluate nursing practices to reduce the risk of cerebrovascular events after carotid endarterectomy and to highlight the critical role of nursing care and interventions in preventing complications and enhancing protective strategies.

Material and Methods: Based on a review of the literature and clinical observations, a study was conducted on patients who underwent carotid endarterectomy surgery, and a relevant review was prepared.

Results: Nursing practices have been observed to reduce the risk of cerebrovascular events (SVO) after carotid endarterectomy (CEA). Within the first 24–48 hours post-operation, nurses frequently monitor the patient's blood pressure and heart rate, rapidly managing any instances of hypertension or hypotension. They perform regular neurological examinations using scales like NIHSS and GCS, and promptly report any early changes. Critical practices also include monitoring for hematoma in the surgical and neck areas, and being prepared for emergency intervention for the risk of airway obstruction. Furthermore, nurses control the patient's pain and encourage early mobilization to preserve cerebral perfusion. They ensure the regular administration of antiplatelet and antihypertensive therapies, while also monitoring medication adherence. Before discharge, patients are educated on the symptoms of SVO and given guidance on lifestyle changes such as diet, smoking cessation, and exercise.

Conclusion: Evidence-based nursing practices play a critical role in reducing the risk of cerebrovascular events after carotid endarterectomy. Regular hemodynamic and neurological monitoring, early detection of complications, medication management, and patient education form the foundation of nursing care. Integrating these practices into clinical practice can reduce both morbidity and mortality.

Keywords: Carotid endarterectomy, evidence-based nursing, nursing practices, stroke prevention

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NPP-12

Evidence-based nursing approaches in postoperative pain management following abdominal aortic aneurysm surgery

Fatmanur Sakarya, Gulsum Gokmen

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: This study aims to examine evidence-based nursing interventions in managing pain in patients after abdominal aortic aneurysm (AAA) surgery and to highlight the critical role of nurses in postoperative care. Effective pain management is essential for patient recovery, early mobilization, and prevention of complications.

Material and Methods: A systematic review of literature published in the last 10 years was conducted. Nursing practices in postoperative AAA patients, including pain assessment, pharmacological and non-pharmacological interventions, patient education, and documentation, were compiled and analyzed. Emphasis was placed on strategies that directly contribute to pain reduction and optimize recovery.

Results: The literature indicates that nurses play a central role in postoperative pain management. Standardized tools such as NRS, VAS, and CPOT enable accurate pain assessment. Evidence-based administration of opioid and non-opioid analgesics, along with monitoring for side effects, significantly contributes to effective pain control. Non-pharmacological interventions, including repositioning, relaxation techniques, guided breathing, and cold/heat therapy, reduce perceived pain and support recovery. Patient education on pain management, expected outcomes, and self-care empowers patients and improves adherence to postoperative care. Regular and detailed documentation ensures standardization of nursing interventions and facilitates patient monitoring.

Conclusion: Evidence-based nursing practices are essential for effective postoperative pain management following AAA surgery. Active nurse involvement in assessment, interventions, and patient education reduces complications, accelerates recovery, and improves patient outcomes. Standardized, evidence-based nursing interventions enhance postoperative care quality and ensure a safe, effective recovery process.

Keywords: Abdominal aortic aneurysm, postoperative pain, evidence-based practice, nursing

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NPP-13

The role of nurses in the prevention of thromboembolic complications during pregnancy

Rukiye Sisik

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Physiological changes during pregnancy increase the risk of thrombophlebitis, which threatens maternal health. This study aims to emphasize the role of nurses in the prevention and early diagnosis of thrombophlebitis.

Material and Methods: This paper was prepared based on a review of current articles published between 2015 and 2024.

Results: Thrombophlebitis is an inflammatory process that causes blood clot formation in one or more veins, particularly in the legs. The main factors increasing the risk of thrombophlebitis during pregnancy include hemodynamic changes, prolonged immobilization, history of varicose veins, and advanced maternal age. Clinically, it presents with pain, swelling, redness, and tenderness in the legs. In nursing care, the fundamental approaches include early identification of at-risk pregnant women, regular extremity examination, leg elevation, promotion of appropriate mobilization, use of compression stockings, monitoring fluid balance, and providing family education.

Conclusion: Although thrombophlebitis is rare during pregnancy, it may lead to serious maternal morbidity and mortality. Nurses play a critical role in reducing complications by assessing pregnant women for risk factors, implementing preventive measures, and educating families. To ensure a healthy pregnancy process, nursing care should be structured and systematically implemented.

Keywords: Nursing care, pregnancy, thrombophebiti

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NPP-14

Nursing care for a patient who developed thrombosis after femoro-popliteal bypass (Fem-Pop) surgery and received tissue plasminogen activator (tPA): A case report

Hakki Tankut Akay[1], Kaymak Gunduz[2], Ozlem Gumus[2], Halenur Yilmaz[2]

[1]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye

Abstract

Aim: Peripheral arterial disease is characterized by the accumulation of atherosclerotic plaques leading to vascular stenosis, resulting in chronic ischemia and impaired tissue oxygenation. Femoro-popliteal bypass surgery, performed between the femoral and popliteal arteries using autologous vein or synthetic grafts, is a common revascularization method to improve circulation and prevent limb loss. However, graft occlusion is a frequent and serious complication in the postoperative period. This case report aims to present the nursing care process of a patient who developed thrombus after femoro-popliteal bypass surgery and was treated with tissue plasminogen activator, focusing on the critical role of nurses in monitoring, early detection of complications, and ensuring patient safety.

Material and Methods: The case involves a 70-year-old male patient with a history of diabetes mellitus, hyperlipidemia, and coronary artery disease. The patient had undergone previous coronary artery bypass grafting and percutaneous coronary interventions, with a background of recurrent thromboembolic events and thrombolytic treatments. In 2025, he presented with pain, coldness, and impaired mobility in the left lower extremity, where femoro-popliteal bypass had been previously performed. Angiography confirmed graft occlusion, and tissue plasminogen activator infusion together with unfractionated heparin was initiated in the intensive care unit. Nursing care included continuous vital sign monitoring, frequent neurovascular assessments, evaluation of puncture sites, and observation for bleeding, hematoma, or neurological changes. Supportive interventions such as positioning of the extremity, infection prevention, pain management, and patient education regarding anticoagulant therapy were performed.

Results: During intensive care follow-up, the patient's vital signs remained stable, pain was controlled, and peripheral circulation improved after thrombolytic treatment. Regular monitoring allowed early detection and management of potential complications, while strict adherence to aseptic technique prevented secondary infections. The patient was mobilized gradually, received education on medication use and signs of bleeding, and was safely transferred from intensive care to the ward and subsequently discharged in stable condition.

Conclusion: Femoro-popliteal bypass surgery is a common and effective treatment for peripheral arterial disease; however, postoperative thrombus formation remains a serious complication. Thrombolytic therapy with tissue plasminogen activator carries a high risk of bleeding and therefore requires strict nursing monitoring. This case highlights the critical role of nurses in early detection of complications, prompt interventions, and maintaining patient safety. Structured nursing care contributed to graft patency, stable recovery, and improved patient outcomes. Strengthening nurses' knowledge and clinical skills in managing such high-risk patients is essential to reduce complications and enhance quality of care.

Keywords: Femoro-popliteal bypass surgery, tissue plasminogen activator, nursing care

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NPP-15

Care beyond distances: The power of tele-nursing in peripheral vascular disease management

Semanur Yavuz, Umut Serhat Sanri, Rabia Dogan, Senem Gurbuz Gultekin

Alanya Alaaddin Keykubat University Training and Research Hospital, Department of Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: The aim of this report is to emphasize the importance of telenursing practices in the management of peripheral vascular diseases and to present international examples.

Material and Methods: A literature review was conducted in databases such as PubMed, Google Scholar, Cochrane Library, Web of Science, Scopus, and Türkiye Citation Index using keywords including “peripheral vascular disease,” “tele-nursing,” “telehealth,” and “periferik vasküler hastalık.” Studies focusing on tele-nursing practices were evaluated.

Results: Peripheral vascular diseases represent a major public health issue, encompassing arterial, venous, and lymphatic disorders outside the heart and brain. The most common form, peripheral arterial disease, develops due to atherosclerotic narrowing of the lower extremity arteries and significantly impairs quality of life. Globally, as of 2019, more than 236 million individuals were reported to be living with this condition, while in Türkiye, the prevalence is reported at 17.6%, reaching up to 30% in older age groups. This situation highlights the need for innovative approaches in disease management.Tele-nursing is widely practiced, especially in countries with advanced healthcare systems. In the United States, tele-nursing programs for patients with peripheral arterial disease support smoking cessation, exercise, and medication adherence. In the United Kingdom, Germany, and the Netherlands, patient follow-ups are carried out through mobile applications and video consultations. In Japan and South Korea, tele-nursing plays an important role in the long-term follow-up of chronic vascular diseases. In Australia, patients living in rural areas gain access to regular monitoring through tele-nursing. The literature reports that these practices are effective in wound care, symptom monitoring, and risk factor control, contributing to early detection of complications and reducing hospitalization rates.

Conclusion: The increasing prevalence of peripheral vascular diseases highlights the importance of telenursing in terms of sustainability and accessibility of care. International experience shows that telenursing is a powerful tool for providing patient-centered, cost-effective, seamless care. With long-term follow-up and counseling, complications can be detected early, hospitalization rates decrease, and patient satisfaction improves. Although studies in Turkey are limited, current evidence suggests that expanding telenursing will support national health policies. Enhancing nurses’ qualifications in this area and strengthening technological infrastructure are critical to improving care quality. In addition, telenursing positively affects individuals' health behaviors, promoting quitting smoking, healthy eating, regular exercise, and treatment adherence.In conclusion, telenursing stands out as an innovative care model that not only increases care accessibility but also transforms individuals' behavioral health habits.

Keywords: Peripheral vascular disease, peripheral artery disease, telenursing, telehealth

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NPP-16

Nursing care in the intensive care process after femoropopliteal bypass

Ibrahim Ayata, Zeynep Cekim

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Femoropopliteal bypass surgery is a frequently used method for the treatment of peripheral arterial disease. The primary goals of postoperative nursing care in the intensive care unit are to ensure hemodynamic stability, maintain graft patency, prevent complications, and accelerate patient recovery. The purpose of this study is to emphasize the importance of nursing care in the intensive care setting after femoropopliteal bypass and to evaluate care processes.

Material and Methods: This descriptive review examines current literature on nursing care during postoperative intensive care monitoring of patients undergoing femoropopliteal bypass. Nursing interventions are discussed under the following headings: hemodynamic monitoring, circulatory assessment, pain control, wound and graft site monitoring, prevention of complications, and informing family members.

Results: Hemodynamic monitoring: Regular monitoring of blood pressure, heart rate, urine output, and peripheral circulation is critical for maintaining graft patency. Circulatory assessment: Regular monitoring of pulse palpation, capillary refill time, skin temperature, and color can identify early ischemic signs. Pain management: Effective analgesia contributes to both maintaining circulation and facilitating patient mobilization. Wound and graft site care: Sterile dressings and regular wound site inspections are essential to prevent infection and hematoma risks. Complication prevention: Early recognition of complications such as deep vein thrombosis, pulmonary embolism, bleeding, and graft occlusion is directly related to the quality of nursing care. Education and communication: Informing patients and their families about postoperative care, mobilization, and lifestyle changes supports the recovery process.

Conclusion: Nursing care during the intensive care period following femoropopliteal bypass surgery directly impacts the patient's quality of life and surgical success. A systematic and holistic nursing approach can help maintain graft patency, prevent complications, and accelerate recovery. Therefore, it is crucial for nurses to implement postoperative care protocols in accordance with current knowledge and evidence-based practices.

Keywords: Intensive care nursing, bypass, peripheral arterial disease

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NPP-17

Peripheral arterial disease and nursing care

Selda Gure, Zeynep Cekim

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral artery disease is a chronic condition whose prevalence increases with age. Skin changes, pain, impaired tissue perfusion, and reduced physical mobility associated with this disease negatively impact patients' ability to perform self-care, leading to care needs. The purpose of nursing care is to help individuals who are unable to perform self-care to become capable of meeting their own needs, to provide comprehensive care for self-care needs arising from the disease, and to address patients' lack of knowledge. The aim of this study is to explain the nursing care required for patients with peripheral artery disease.

Material and Methods: A literature search was conducted in open access databases such as Google Scholar, PubMed, Web of Science, EBSCO, Scopus, Ulakbim, and TR Dizin using the keywords "peripheral artery disease, nursing care" from electronic databases.

Results: Peripheral artery disease (PAD) is a progressive chronic disease that usually affects the lower extremities and is caused by atherosclerosis, which results from the accumulation of lipids and fibrous materials between the intima and media layers of the arteries. The primary goals in the treatment and care of PAH, a common disease, are to increase physical activity, reduce risk factors, alleviate pain, ensure patient compliance with self-care programs, maintain tissue integrity, and improve quality of life. In addition to medical and interventional treatment methods, surgical treatment is also widely used in peripheral artery diseases. Open or closed methods are frequently used in surgical treatment. These methods include peripheral bypass, thromboembolectomy, endovascular interventions, and amputation. The most important goals in postoperative patient care are to prevent complications and prepare the patient for discharge by providing sufficient information. Hospital stays are becoming shorter these days, and therefore, the time allocated for patient education and discharge preparation is decreasing.

Conclusion: Patients with PAH, a chronic and progressive disease, experience problems such as pain, discoloration of the feet, coldness, paleness, numbness, swelling, wounds, decreased physical activity, fatigue, etc., and require education and support throughout their lives to improve self-care. For these reasons, comprehensive nursing care and education are required.

Keywords: Nursing care, peripheral arterial disease, self care

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NPP-18

Vascular access management in hemodialysis patients: The nurse's responsibilities

Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Vascular access in hemodialysis treatment is one of the most critical factors directly affecting quality of life and treatment effectiveness. Preserving vascular access and preventing complications are among the primary responsibilities of nursing care. The aim of this study is to evaluate the responsibilities of nurses in the management of vascular access in hemodialysis patients in the light of current literature.

Material and Methods: Between 2017 and 2025, PubMed, CINAHL, and Google Scholar databases were searched using the keywords "hemodialysis vascular access," "nursing care," and "nurse responsibilities." A total of 40 articles were included, and the findings related to nursing roles were thematically classified.

Results: Nurses have primary responsibility in the assessment of vascular access types such as arteriovenous fistula (AVF), graft, and central venous catheter. Vascular access assessment (pulse, thrill, bruit control) should be performed regularly. Aseptic technique and hand hygiene practices significantly reduce infection rates. Nurses' patient education regarding fistula protection, avoidance of heavy lifting, and entry site hygiene helps prevent complications. Regular nursing follow-up enables early detection of complications such as infection, thrombosis, and bleeding. In multidisciplinary teamwork, nurses play a central role in ensuring the continuity of vascular access.

Conclusion: Nurses play a critical role in the management of vascular access in hemodialysis patients. Regular monitoring, infection control, patient education, and early management of complications constitute the foundation of nursing responsibilities. Systematic implementation of these practices increases patient safety and improves treatment outcomes.

Keywords: Hemodialysis, nursing, vascular access

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NPP-19

Nursing management of a patient with stab wound trauma: A case report

Ayse Cetin

İzmir Atatürk Training and Research Hospital, İzmir, Türkiye

Abstract

Aim: Case report of a patient admitted to our hospital with a sharps injury. Vascular trauma is a critical issue at the intersection of surgery and emergency medicine. Trauma cases are one of the most frequently encountered patient groups in emergency departments, representing a special patient group due to their high morbidity and mortality rates. The global burden of trauma and its impact on death and disability are increasingly being better defined. According to World Health Organization data, injuries account for 9% of deaths worldwide. As the most common cause of death in those under 35, they constitute a significant public health problem. Vascular trauma accounts for approximately 4% of traumas. The most common causes of trauma are traffic accidents, falls from heights, and gunshot or sharps injuries. Penetrating sharps injuries (knives, arrows, etc.) are classified as low-velocity injuries, and the damage depends on the angle and depth of the impact. The significance of penetrating injuries varies depending on the location of the injury, and the symptoms of some penetrating trauma may not be immediately apparent. This study examines the treatment and care of a trauma patient presenting to the Emergency Department with a stab wound. Following admission to the cardiovascular surgery clinic, a series of physiological indicators, including respiration, pulse, blood pressure, oxygen saturation, body temperature, mental status, and urine output, are essential guides in performing nursing diagnosis/assessment, which is performed as part of the care process and is dependent on the patient's individual condition and treatment. It aims to guide healthcare professionals by compiling current knowledge on the diagnosis, treatment, and management of vascular trauma.

Material and Methods: This case report was designed to present the treatment, care interventions, and practices within the context of healthcare services for a 32-year-old male patient who developed trauma as a result of DKAY.

Results: This case report was designed to present the treatment, care interventions, and practices within the context of healthcare services for a 32-year-old male patient who developed trauma as a result of DKAY.

Conclusion: In conclusion, early intervention and diagnosis of trauma patients are extremely important. The goal of treatment and care protocols for life-threatening, severe traumatic injuries is primarily to prevent loss of life, maintain normal tissue and organ function, prevent permanent damage, and minimize potential complications. When planning patient treatment and care interventions, understanding the effects of trauma and a multidisciplinary team approach are key.

Keywords: Nursing management, vascular trauma, emergency, strategia

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NPP-20

Application of negative pressure wound therapy in the treatment of open wounds developing after lower extremity amputation

Gamze Oztoprak, Eda Capar, Nazife Arslan, Serhat Caliskan, Mehmet Atay

Bahçelievler State Hospital Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Vacuum-assisted closure (VAC) is a non-invasive treatment method that applies negative pressure to the wound site, which can be used in both acute and chronic wounds to accelerate healing.(1) In this report, we present our treatment approach in patients who underwent amputation due to diabetic foot ulcers and subsequently developed open wounds at the stump.

Material and Methods: Case 1: 51-year-old male patient with a foot ulcer had a history of diabetes, coronary artery disease, and an additional risk factor of smoking. Due to peripheral arterial disease, the occluded vessel was treated with angiographic methods. Osteomyelitis was present in the first toe, which was amputated. Since the stump showed delayed healing with persistent discharge, VAC therapy was initiated. After treatment, the wound was observed to be largely closed. (Figure 1A-B)

Results: Case 2: 48-year-old male patient presented with a diabetic foot ulcer and had no additional risk factors other than smoking. Following angiographic revascularization for peripheral arterial disease, a metatarsal amputation was performed. VAC therapy was initiated to accelerate stump healing, and the patient fully recovered and was discharged.(Figure C-D)

Conclusion: DiscussionDiabetic foot ulcers occur in approximately 15% of patients with diabetes, and nearly 3% of these cases result in amputation. (2) VAC therapy, as a non-invasive method, has emerged as an option in treatment. It works on the principle of localized wound closure and aspiration of exudate through negative pressure.(3) Literature reports demonstrate that, in addition to accelerating epithelialization in diabetic foot ulcers, VAC therapy shortens the time required for granulation tissue formation and consequently reduces the rate of amputations. (2,4)In our cases, VAC therapy was applied after angiography was performed to open the occluded vessels and after debridement of osteomyelitis or necrotic tissue in cases where the amputation stump wounds failed to heal. In both patients, VAC therapy shortened the treatment duration and contributed successfully to wound healing.

Keywords: Vacuum asisted therapy, diabetic foot ulcers, wound

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NPP-21

Ankle-brachial index (ABI) in clinical use for coronary artery and carotid artery diseases: Case presentation and nursing approaches

Merve Sayin

Antalya City Hospital, Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: The Ankle-Brachial Index (ABI) is a widely used, non-invasive, low-cost, and reliable method for diagnosing peripheral artery disease (PAD). Recent studies have shown that low ABI values are associated not only with PAD but also with coronary artery disease (CAD) and carotid artery stenosis. Therefore, ABI has become an important prognostic indicator for predicting cardiovascular mortality and morbidity.

Material and Methods: ABI measurement was performed while the patient was at rest in a supine position using a Doppler device. Systolic pressure was measured from the brachial artery, posterior tibial artery, and dorsalis pedis artery of the ankle. The highest value obtained at the ankle was divided by the brachial artery pressure on the same side to calculate the ABI.This study was conducted in the Cardiovascular Surgery Intensive Care Unit of Antalya City Hospital between March 2025 and June 2025 with patients who underwent surgery under the same conditions. The study included 40 Coronary Artery Bypass Graft (CABG) patients and 15 carotid endarterectomy patients. The age range of the patients was between 50 and 65 years, with 80% male and 20% female. The ABI measurements revealed an average ABI of 0.82 (0.65-1.0) for CABG patients and 0.75 (0.60-0.95) for carotid patients. Among those with ABI < 0.9, 72% had coronary and/or carotid stenosis. These findings suggest that ABI is not only an indicator of peripheral artery disease but also a significant marker of the systemic atherosclerotic process.

Results: An ABI value of less than 0.9 supports the diagnosis of peripheral artery disease, while values below 0.7 indicate moderate to severe vascular narrowing. In patients with coronary and carotid artery stenosis, low ABI is associated with a higher risk of cardiovascular events. Nurses play a critical role in the accurate application of ABI measurement, early detection of vascular complications, management of risk factors, and patient education.

Conclusion: ABI measurement is not only valuable for the diagnosis of peripheral artery diseases but also for the risk assessment of coronary and carotid artery diseases. Early diagnosis, multidisciplinary care, and nursing interventions can reduce complications, improve prognosis, and enhance quality of life.

Keywords: Carotid artery diseases, coronary artery disease, ankle-brachial index

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NPP-22

The use of topical gel containing epidermal growth factor in the treatment of diabetic foot ulcers

Nazife Arslan, Eda Capar, Gamze Oztoprak, Serhat Caliskan, Mehmet Atay

Bahçelievler State Hospital Cardiovascular Surgery Unit, İstanbul, Türkiye

Abstract

Aim: Diabetic foot ulcer is, together with neuropathy, one of the most significant complications of diabetes in terms of mortality and morbidity. (1) Although it is more common in the elderly population, diabetic foot ulcers are observed with an average frequency of 19–34% especially among individuals with type 2 diabetes. (2)The cases we followed were treated for peripheral arterial disease using angiographic methods. After the wound infection improved, daily dressings and dry needling were performed. The treatment outcomes of these patients are presented to contribute to the literature.

Material and Methods: A 53-year-old male diabetic patient with an extensive open wound on the dorsal surface of the foot had no additional risk factor except smoking. Angiography was performed due to peripheral arterial disease. The anterior tibial artery was occluded, and after the vessel was opened, deep wound debridement and culture sampling were performed. Pseudomonas aeruginosa was isolated. After receiving antibiotic therapy and once the wound was ready for EGF application, daily applications were performed. Follow-up revealed complete closure of the wound. (A–B)

Results: Case 2:A 72-year-old male patient with diabetes and a history of smoking presented with a fistulized open wound beneath the first toe on the plantar surface of the foot. After treating peripheral arterial disease with angiographic methods, wound debridement was performed. Following antibiotic therapy, the wound was prepared for EGF application. Daily applications were administered, and follow-up demonstrated complete closure of the wound. (C–D)

Conclusion: Diabetic foot ulcers are frequently encountered due to neuropathy, immunopathy, and impairment of peripheral vascular structures. After treating the underlying disease, many creams and therapeutic methods are available in wound care. In our cases, peripheral angiography was performed first, followed by wound debridement. Then, EGF was used in patients. A significant difference was observed between pre- and post-treatment wound images.Epidermal growth factor plays a crucial role in wound healing with its mitogenic and cytoprotective effects. It also promotes fibroblast and keratinocyte proliferation and migration. (3,4) Especially in wounds arising in an ischemic background, EGF has been shown to increase healing rates, shorten the duration, and reduce the risk of amputation. (3,5) Epidermal growth factor accelerates wound healing and provides an effective therapeutic option in diabetic foot ulcers. (1,2)Based on these effects, we believe that its use as an important agent in the treatment of diabetic foot ulcers will accelerate wound healing.

Keywords: Epidermal growth factor, diabetic foot ulcers, wound

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NPP-23

Clinical importance of pulse monitoring and nursing approach in patients with peripheral artery disease

Aysenur Gezer

Mehmet Akif Ersoy Thoracic Heart and Vascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral artery disease is a condition commonly encountered, especially in individuals with risk factors such as smoking, advanced age, and hypertension. The aim is to emphasize the importance of pulse monitoring in the early diagnosis and prevention of complications in patients with peripheral artery disease, and to highlight the critical role of nurses in pulse assessment.

Material and Methods: For this presentation, current literature published between 2019 and 2024 was reviewed. The main methods used for pulse assessment are palpation and Doppler ultrasound. Pulse checks performed on the popliteal, dorsalis pedis, posterior tibial and femoral arteries are evaluated comparatively between the right and left extremities. The nursing approach includes regular monitoring, documentation, and patient education.

Results: Regular pulse monitoring allows for the early detection of complications such as thrombosis, ischemia, and occlusion. Loss or weakening of the pulse is considered an early warning sign. In high-risk patients (advanced age, diabetes, smoking), pulse monitoring should be performed more frequently. Systematic pulse assessment by nurses enhances patient safety and care quality. Modern technologies, such as Doppler, make pulse monitoring more reliable and effective.

Conclusion: Pulse monitoring should be incorporated into nursing care protocols for patients with peripheral artery disease. In high-risk patients, pulse assessment should be performed more frequently. Training programs on pulse palpation and Doppler use for nurses should be expanded. Patients and their families should be educated about the importance of pulse monitoring and the recognition of early warning signs.

Keywords: Pulse, palpation, education, complication

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NPP-24

Endovascular treatment and nursing practices in acute aortic dissection

Meryem Yalcin

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Acute aortic dissection is a cardiovascular emergency with high mortality that requires rapid diagnosis and treatment. With the development of endovascular techniques, less invasive treatment options have emerged. We aimed to evaluate the importance of multidisciplinary teamwork and nursing care in the treatment of acute aortic dissection with endovascular interventions.

Material and Methods: Our study is based on clinical observations of patients diagnosed with acute aortic dissection who underwent endovascular intervention. The team included a cardiovascular surgeon, an anesthesia team, and an intensive care nurse. Nursing care prioritized hemodynamic stability, pain control, early detection of complications, and patient/family education.

Results: Observations indicated that patients who underwent endovascular treatment had shorter intensive care unit stays and fewer complications compared to open surgery. Nurses' close hemodynamic monitoring and early detection of complications positively impacted patient outcomes.

Conclusion: Endovascular interventions are effective treatment methods that reduce mortality in acute aortic dissection. Nursing care plays a critical role not only in monitoring vital signs, but also in bleeding control, intervention site monitoring, infection prevention, and patient education. Successful outcomes are achieved when endovascular treatment is implemented with a multidisciplinary team approach. Therefore, nurses should be supported with continuous training and clinical experience in endovascular surgery.

Keywords: Acute aortic dissection, endovascular treatment, nursing care, multidisciplinary team

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NPP-25

The role and responsibilities of nurses in endovascular aortic aneurysm repair

Sumeyra Harmanci

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: The aim of this study is to define and evaluate the roles and responsibilities of nurses during the preoperative, intraoperative, and postoperative phases of Endovascular Aortic Aneurysm Repair (EVAR), a minimally invasive surgical procedure.

Material and Methods: This descriptive study is based on current literature and clinical nursing practices related to EVAR procedures. The responsibilities of nurses were examined under three main categories: patient care, clinical monitoring, and patient/family education. Data were compiled from evidence-based sources and nursing protocols applied in cardiovascular surgery units.

Results: In the preoperative phase, nurses are responsible for preparing the patient psychologically, monitoring vital signs, completing preoperative tests, and assisting with informed consent and education. During the intraoperative phase, nurses ensure adherence to sterile techniques, collaborate with the surgical and anesthesia teams, monitor invasive parameters, and prepare medications and equipment. In the postoperative phase, nurses monitor consciousness, vital signs, peripheral pulses, and bleeding. They manage pain, track urinary output, prevent embolism and infection risks, support mobilization, and plan nutrition. Before discharge, nurses provide education on wound care, lifestyle changes, and follow-up.

Conclusion: Nurses play a vital role in every stage of the EVAR process. Their proactive involvement enhances patient safety, promotes early recognition of complications, and improves treatment adherence and satisfaction. High-quality nursing care contributes significantly to successful multidisciplinary outcomes in vascular surgery.

Keywords: EVAR, nursing responsibilities, patient education, nursing role, perioperative care

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NPP-26

Evidence-based practices implemented to prevent postoperative deep vein thrombosis in a foundation hospital: A literature review of the last five years

Seren Altinkopru[1], Hulya Karaer[1], Kaymak Gunduz[1], Burcu Dundar[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Postoperative deep vein thrombosis (DVT) is a largely preventable complication that can cause significant morbidity and mortality in patients. The aim of this study is to examine evidence-based practices for the prevention of postoperative DVT in line with the literature published in the last five years and to develop applicable strategies in a foundation hospital.

Material and Methods: Between 2020 and 2025, searches were conducted in the PubMed, Cochrane Library, CINAHL, and Web of Science databases using the keywords "deep vein thrombosis", "surgery", "postoperative care", "evidence-based nursing", "DVT prophylaxis", "mobilization", and "mechanical prophylaxis", as well as "Derin ven trombozu", "cerrahi sonrası bakım", "kanıta dayalı hemşirelik", "profilaksi", and "mobilizasyon". Randomized controlled trials, cohort studies, cross-sectional studies, and systematic reviews were included in the review.

Results: The literature shows that pharmacological methods (low molecular weight heparin, new oral anticoagulants), mechanical methods (compression stockings, intermittent pneumatic compression devices), and nursing practices (early mobilization, leg exercises, patient education, risk assessment scales) are effective in postoperative DVT prophylaxis. Studies conducted in recent years emphasize that combined approaches provide the highest protective effect. However, delays in early mobilization, insufficient implementation of prophylaxis after discharge, and deficiencies in patient education are frequently encountered problems.

Conclusion: Postoperative DVT is a complication that can be largely prevented through evidence-based practices. The combination of pharmacological and mechanical methods, the systematic implementation of nursing interventions, and effective patient follow-up play a critical role in the success of prophylaxis. In a foundation hospital, it is recommended to use standard risk assessment protocols, to systematically plan early mobilization, to strengthen patient education before discharge, and to develop follow-up mechanisms after discharge.

Keywords: Deep vein thrombosis, postoperative care, evidence-based nursing, prophylaxis, mobilization

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NPP-27

Neurological monitoring in carotid artery disease: The importance of cognitive and motor functions in nursing care

Kemal Coban

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Neurological monitoring in carotid artery disease:the importance of cognitive and motor functions in nursing care. Carotid artery disease can adversely affect both cognitive and motor functions due to cerebral perfusion disorders caused by carotid stenosis. Atherosclerotic narrowing may lead to transient ischemic attacks or permanent stroke through embolization and hypoperfusion, resulting in declines in cognitive functions (such as memory and executive functions) and motor capacities . Both spontaneous recovery and surgical interventions (carotid endarterectomy or stenting) have been associated with improvements in neurocognitive functions; therefore, the literature emphasizes that cognitive assessments are critical in both the pre- and postoperative periods.

Material and Methods: In nursing care, continuous neurological monitoring—including assessment of consciousness level, pupillary reactions, and extremity motor functions—is primarily performed in stroke units or intensive care settings. In particular, evaluation of strength, movement, and sensation in all four extremities, along with the monitoring of vital signs and early detection of complications such as hematoma, is essential for patient safety and recovery .

Results: Moreover, the monitoring of both cognitive and motor functions supports the development of early rehabilitation plans and promotes the patient's functional independence. Nursing interventions—for instance, preventive measures that support the recovery of motor functions and activities of daily living—contribute significantly to the improvement of neurological functions .

Conclusion: In conclusion, the systematic and continuous monitoring of cognitive and motor functions in the nursing care of patients with carotid artery disease plays a critical role in both the prevention of acute complications and the achievement of long-term functional recovery.

Keywords: Carotid artery disease, neurological monitoring, results

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NPP-28

The effect of intensive care nursing on the stabilization process in traumatic vascular injuries

Esma Ketenci, Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to examine the role of intensive care nursing in the stabilization process in traumatic vascular injuries and to emphasize the importance of nursing care in terms of maintaining hemodynamic balance, preventing complications and maintaining the patient's life functions.

Material and Methods: Study Type: Descriptive research using data from literature review and clinical observations. Sources: Current guidelines, articles, and case reports on trauma surgery, vascular surgery, and critical care nursing were reviewed. Areas examined included: close monitoring of vital signs (blood pressure, pulse, oxygen saturation, urine output), bleeding control and fluid-electrolyte balance, maintaining postoperative graft and vascular patency (pulse, extremity color and temperature), preventing infection risk (aseptic technique, catheter care, wound care), pain management and sedation practices, psychosocial support, and patient-family communication.

Results: Continuous hemodynamic monitoring by nurses facilitated early recognition of shock and prompt intervention. Regular monitoring of vascular patency (pulse, capillary refill, and extremity temperature) reduced the risk of ischemia and thrombosis. Aseptic wound and catheter care significantly reduced intensive care unit infections. Effective pain control and appropriate positioning increased patient comfort and facilitated mobilization. Support provided to patients and families contributed to reducing anxiety and stress during the intensive care process.

Conclusion: Intensive care nursing plays a vital role in the stabilization process of patients with traumatic vascular injuries. Nurses' approach to regular monitoring, early complication detection, aseptic care, and prioritizing patient safety reduces mortality and morbidity rates. As an integral part of the multidisciplinary team, improving the knowledge, skills, and experience of nurses is crucial for improving the quality of patient care.

Keywords: Injuries, nursing care, traumatic, vascular

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NPP-29

Evidence-based nursing approaches in preventing complications and managing pain and anxiety after endovascular surgery: A review from turkey

Suheyla Karakaya

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Introduction Endovascular surgery is a widely used minimally invasive method in the treatment of cardiovascular and peripheral vascular diseases. However, postoperative complications such as hematoma, bleeding, and pseudoaneurysm, as well as pain and anxiety, are frequently observed. These conditions delay recovery and reduce patient satisfaction. Nursing care plays a key role in preventing early complications and managing pain and anxiety.AimThis paper aims to review current evidence in Turkey regarding the prevention of complications and the management of pain and anxiety in nursing care after endovascular surgery, and to provide practice-oriented recommendations.

Material and Methods: Articles published between 2019–2025 were reviewed. Research and reviews focusing on nursing care, complication prevention, and pain-anxiety management were included.

Results: Studies show that vascular access site monitoring and vital signs assessment are the most common nursing practices and are effective in the early detection of complications. In Turkey, research conducted after cardiovascular surgery indicates that complementary methods such as music therapy, reflexology, and relaxation techniques reduce pain and anxiety. However, nursing studies specifically focusing on endovascular interventions remain limited.DiscussionEvidence demonstrates that standardized monitoring protocols reduce complications, while multimodal pain management and nonpharmacological interventions improve patient comfort. Yet, in Turkey, nursing practices specifically tailored to endovascular procedures are under-researched, and gaps in protocols and training still exist.

Conclusion: In nursing care after endovascular surgery:Standard monitoring protocols for preventing vascular access complications should be implemented,Both pharmacological and nonpharmacological methods should be combined in pain and anxiety management,Nursing education programs should be strengthened,More randomized controlled studies focusing on endovascular interventions in Turkey are needed.

Keywords: Endovascular surgery, nursing care, complication prevention, pain management, anxiety management

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NPP-30

Nursing approaches in a patient undergoing emergency surgery for ruptured abdominal aortic aneurysm: A case report

Ceyda Sonmez

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this case report is to present the nursing care process of a patient who underwent emergency surgery for ruptured abdominal aortic aneurysm and to discuss the critical role of nurses within the context of multidisciplinary care.

Material and Methods: In this case report, a 65-year-old male patient with ruptured abdominal aortic aneurysm was evaluated. The nursing care process of the patient, from admission to the emergency department until transfer to the intensive care unit, was assessed in terms of preoperative, intraoperative, and postoperative nursing approaches.

Results: From the patient's admission to the emergency department, rapid assessment and surgical preparation, intraoperative hemodynamic stability, and postoperative early mobilization and wound care were ensured. The patient was transferred from the intensive care unit to the ward in stable condition on the 10th postoperative day. Nursing care was observed to contribute to the prevention of complications and to accelerate the recovery process.

Conclusion: In ruptured AAA cases, nurses play a vital role in rapid decision-making, coordinated multidisciplinary teamwork, and early identification of complications, which significantly improve survival and quality of life. Sharing such cases is essential for professional development and continuous nursing education.

Keywords: Abdominal aortic aneurysm, case report, nursing care

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NPP-31

Monitoring and early detection of limb ischemia in patients with peripheral vascular trauma: A nursing perspective

Dilan Ciftci

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul

Abstract

Aim: Peripheral vascular trauma is a critical condition that may lead to limb ischemia, potentially resulting in tissue necrosis and limb loss. This study aims to present nurse-led interventions for the early detection and monitoring of limb ischemia in intensive care patients following vascular trauma.

Material and Methods: Clinical observations were performed in a cardiovascular surgery ICU. Nursing interventions included:•Frequent neurovascular assessments including capillary refill, skin color, temperature, pulses, and sensory evaluation,•Continuous pain assessment and early recognition of paresthesia or numbness,•Rapid reporting and coordination with the vascular surgery team for urgent intervention,•Education for patients and families on limb care and warning signs of ischemia,•Documentation of assessments and interventions to ensure continuity of care and facilitate multidisciplinary decision-making.

Results: Vigilant nursing monitoring enabled timely interventions such as limb repositioning, anticoagulation adjustments, and urgent surgical consultation. These measures decreased the incidence of severe ischemic complications and improved limb salvage rates. Patient and family education enhanced adherence to care protocols and awareness of ischemia signs. Continuous monitoring strengthened interdisciplinary communication and efficiency in the ICU.

Conclusion: Nurse-led monitoring and early detection are vital for preventing irreversible limb damage following peripheral vascular trauma. Structured assessment protocols, ongoing staff training, patient and family education, and prompt reporting contribute to improved clinical outcomes and enhance patient safety in high-risk postoperative care.

Keywords: Limb ischemia, peripheral vascular trauma, critical care nursing, neurovascular assessment, early detection

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NPP-32

Lymphatic diseases

Burak Turludur, Ibrahim Ayata, Mervan Akbaba, Esma Ketenci

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: To explain the nursing care process in lymphatic diseasesTo emphasize early diagnosis and the role of the nurse To evaluate the contribution of the nurse in the prevention and management of complicationsTo demonstrate the impact of patient education on quality of life

Material and Methods: Literature review: research and guidelines published in the last 10 yearsClinical observations and case examples Nursing care process model (diagnosis, planning, implementation, evaluation)Educational materials and patient follow-up records

Results: Early intervention by the nurse in lymphedema and infection monitoring increases treatment success Patient education programs improve quality of life Psychosocial support is important in coping with chronic lymphatic diseasesComplications can be reduced with multidisciplinary teamwork

Conclusion: Nursing care is a critical element in treatment and recovery in lymphatic diseasesEarly diagnosis, regular follow-up, and patient education are fundamental roles of nursingA holistic care approach improves patient satisfaction and quality of life •- Evidence-based care protocols should be developed

Keywords: Disease, lymphatic, nursing care

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NPP-33

Lymphangitis disease and nursing care

Mervan Akbaba, Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to evaluate the role of nurses and the importance of nursing care in lymphangitis disease and to reveal their contribution to the early diagnosis of infection, treatment and prevention of complications.

Material and Methods: Study Type: Descriptive research based on literature review and clinical observations.Sources: Current articles, clinical guidelines, and case reports on lymphangitis and infectious diseases were reviewed. Areas of investigation included monitoring vital signs (fever, pulse, blood pressure), assessing signs of infection (redness, swelling, pain, and erythema), administering and monitoring antibiotic therapy, ensuring pain management and patient comfort, patient education and infection control measures, and early diagnosis of complications (septicemia, abscess).

Results: Regular vital sign monitoring and local examination allowed for early detection of infection. Pain management and positioning increased patient comfort and facilitated healing. Aseptic practices and infection control measures prevented the spread of infection and reduced the risk of complications. Proper administration and monitoring of antibiotic therapy helped control infection. Patient and family education reduced the risk and recurrence of infection after discharge.

Conclusion: Nursing care for lymphangitis plays a critical role in the patient's recovery. Nurses contribute to the prevention of complications through early diagnosis of infection, treatment management, pain control, and patient education. Effective nursing practices are crucial for improving patient safety, treatment effectiveness, and quality of life.

Keywords: Disease, intensive care, lymphangitis, nursing

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NPP-34

Nursing care and monitoring approaches for postoperative complications in EVAR and TEVAR patients

Okay Acielma

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Endovascular aortic repair (EVAR and TEVAR) provides a minimally invasive alternative to open surgery but may still lead to serious postoperative complications. Nurses play a central role in detecting, preventing, and managing these complications. This paper highlights essential monitoring approaches and nursing strategies to improve patient outcomes following EVAR and TEVAR.

Material and Methods: Postoperative Complications and Nursing MonitoringEndoleak and Graft-Related Issues: Continuous monitoring of vital signs, recognition of sudden pain or arrhythmias, and referral for imaging when indicated.Distal Limb Ischemia: Assessment of pulses, skin color, temperature, and limb mobility; prompt reporting to the surgical team.Access-Site Complications: Regular inspection for bleeding, hematoma, or infection; application of local pressure if necessary.Acute Kidney Injury: Monitoring urine output and serum creatinine; ensuring adequate hydration, especially after contrast exposure.Spinal Cord Ischemia (TEVAR): Serial motor and sensory assessments; urgent neurology or vascular surgery consultation if deficits occur.Pulmonary Complications: Implementation of respiratory exercises, oxygen support, and early mobilization to prevent atelectasis.Infection: Monitoring temperature and white blood cell count, wound inspection, and strict aseptic care.—Nursing Care Strategies1.Hemodynamic Monitoring: Intensive surveillance during the first 24–48 hours, including invasive monitoring if available.2.Perfusion Assessment: Regular evaluation of distal circulation and motor function.3.Renal Surveillance: Fluid balance control and kidney function tests to prevent nephropathy.4.Access-Site Management: Sterile dressings and early detection of bleeding or infection.5.Neurological Assessment (TEVAR): Frequent motor and sensory examinations.6.Patient Education: Guidance on access-site care, follow-up imaging, mobilization, warning signs, and medication adherence

Results: —Nursing Care Strategies1.Hemodynamic Monitoring: Intensive surveillance during the first 24–48 hours, including invasive monitoring if available.2.Perfusion Assessment: Regular evaluation of distal circulation and motor function.3.Renal Surveillance: Fluid balance control and kidney function tests to prevent nephropathy.4.Access-Site Management: Sterile dressings and early detection of bleeding or infection.5.Neurological Assessment (TEVAR): Frequent motor and sensory examinations.6.Patient Education: Guidance on access-site care, follow-up imaging, mobilization, warning signs, and medication adherence

Conclusion: Nursing care following EVAR and TEVAR is fundamental for the early detection of complications, safe patient monitoring, and timely intervention. Systematic nursing surveillance significantly contributes to reducing postoperative morbidity and improving patient safety. Nurses remain indispensable members of the multidisciplinary team and must remain up to date with current guidelines and evidence-based protocols in order to deliver effective care in the postoperative period.

Keywords: Endovascular, evar, nursing care, complication, tevar

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NPP-35

Cerebrospinal fluid monitoring and nursing after thoracoabdominal surgery

Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Thoracoabdominal surgeries, particularly aortic aneurysm repairs, carry a high risk of spinal cord ischemia and paraplegia. Cerebrospinal fluid (CSF) drainage and pressure monitoring are implemented to reduce this risk. The primary role of nursing care is to prevent CSF catheter-related complications, ensure accurate and regular follow-up, maintain neurological assessments, and ensure patient safety. The purpose of this study is to demonstrate the importance of nursing practices in CSF monitoring after thoracoabdominal surgery.

Material and Methods: Patients monitored in the intensive care unit after elective thoracoabdominal surgery were evaluated. CSF catheters were placed in the patients postoperatively. As part of the nursing care process, CSF pressure was recorded at regular intervals, CSF drainage was monitored and the total daily volume was recorded, neurological examinations (motor strength, sensation, and consciousness) were performed at frequent intervals, the catheter insertion site was monitored for signs of infection, and signs of excessive CSF drainage and hypotension were monitored.

Results: The rate of neurological complications was lower in patients who received regular CSF pressure monitoring and controlled drainage. In the group with intensive nursing care, catheter-related infection rates were minimal. The most common problems in patients with CSF catheters were headache and transient hypotension, which were managed with nursing interventions.

Conclusion: CSF monitoring after thoracoabdominal surgery is a critical practice for preventing neurological complications. Nurses directly contribute to patient safety and recovery through their roles in regular measurement, recording, neurological assessment, and catheter care. Therefore, the experienced and informed involvement of nurses in CSF monitoring positively impacts patient prognosis. CSF monitoring after thoracoabdominal surgery is a process that requires a multidisciplinary approach. Nurses are one of the most critical components of this process. Regular pressure monitoring, monitoring drainage volume, early recognition of complications, and meticulous neurological examination demonstrate that nursing practices directly contribute to patient safety. Furthermore, nurses' attention to catheter care and aseptic techniques reduce infection rates.

Keywords: Nursing care, thoracic, csf, abdomen

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PP-036

Nursing care in the critical process management of type a aortic dissection: A case report

Miyase Nur Ozturk[1], Emine Arici Parlak[2]

[1]Ankara University, Ankara, Türkiye
[2]University of Health Sciences, İstanbul, Türkiye

Abstract

Aim: Aortic dissection is characterized by a tear in the intimal layer of the aorta, allowing blood to enter the tunica media and create a false lumen. According to the Stanford classification, dissections are divided into Type A and Type B. Type A aortic dissection includes all dissections involving the ascending aorta. It is a cardiovascular emergency with extremely high mortality, requiring rapid diagnosis and urgent intervention. This case report aims to present evidence-based nursing practices in the postoperative intensive care management of a patient with Type A aortic dissection who required Continuous Renal Replacement Therapy (CRRT) and Extracorporeal Membrane Oxygenation (ECMO) support.

Material and Methods: The report is based on the clinical course of a 67-year-old male patient diagnosed with Type A aortic dissection, who was admitted to the Cardiovascular Surgery Intensive Care Unit following emergency surgery. Data were obtained from patient monitoring forms, vital signs records, invasive monitoring parameters, and nursing observation notes. Nursing management strategies were analyzed in line with evidence-based practice guidelines.

Results: Preoperative computed tomography angiography revealed a 59 mm dilation of the ascending aorta with dissection extending from the aortic root to the iliac arteries. Emergency surgery, lasting approximately nine hours, included hemiarch replacement, commissuroplasty, and valve-sparing tubular graft implantation.Postoperatively, the patient was admitted to intensive care while intubated and receiving high-dose inotropic support. Due to worsening metabolic acidosis and oliguria, CRRT was initiated. On the first postoperative day, increased inotropic requirements and impaired pulmonary perfusion necessitated Veno-Arterio-Venous (VAV) ECMO support.Throughout the intensive care stay, hemodynamic parameters were monitored every 10 minutes, while arterial blood gases were assessed hourly until acidosis resolved. Active and passive rewarming methods were applied to prevent hypothermia. Fluid balance and electrolytes were closely monitored during CRRT, while ECMO function and circulatory status were regularly evaluated. Surgical incision sites and drainage outputs were checked hourly. Nursing care was delivered in accordance with evidence-based recommendations.Despite all advanced interventions, the patient developed multiple organ dysfunction and did not survive.

Conclusion: Type A aortic dissection is a life-threatening cardiovascular emergency that requires rapid diagnosis, complex surgical intervention, and meticulous postoperative management. This case demonstrates that intensive care following major aortic surgery demands continuous monitoring, advanced life support strategies, and a multidisciplinary approach. Within this process, nurses play an essential role in maintaining continuity of care, ensuring patient safety, and supporting clinical outcomes through evidence-based practice.

Keywords: Aortic dissection, postoperative care, critical care nursing

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NPP-37

Intraoperative nursing roles in evar procedures

Ummu Kalender

Necmettin Erbakan University Faculty of Medicine, Konya, Türkiye

Abstract

Aim: Endovascular Aneurysm Repair (EVAR) is a minimally invasive method that allows abdominal aortic aneurysms to be treated by placing a stent-graft using a percutaneous approach, without the need for open surgery. In this procedure, which integrates interventional radiological imaging techniques and surgery, the intraoperative nurse plays a central role in terms of patient safety and team coordination.The aim of this study is to define the duties, responsibilities, and technical roles of the cardiovascular surgery nurse during the intraoperative period in EVAR procedures and to highlight their professional contribution

Material and Methods: Nursing practices during the EVAR process were analyzed based on the clinical observations of a nurse working in a cardiovascular surgery operating room, a review of the literature, and case-based application experiences.

Results: During the EVAR procedure, the nurse is primarily responsible for setting up invasive hemodynamic monitoring equipment, preparing the sterile field, checking the position of the C-arm fluoroscopy device, and ensuring that the angiography sets are fully prepared when the patient is admitted to the operating room. The type, diameter, and length of the stent-graft systems to be used (e.g., aorto-iliac modular structures) should be checked by the nurse before the operation; the correct set should be selected in consultation with the manufacturer's representative.Contrast medium use during the procedure, awareness of the risk of anaphylaxis, management of bleeding associated with anticoagulant and antiplatelet therapy, recognition of hypotensive episodes, and implementation of a rapid response plan are closely related to the intraoperative nurse's knowledge base. In addition, the placement of lead barriers to reduce radiation exposure, dose monitoring, and personnel safety are also the responsibility of the nurse.

Conclusion: EVAR procedures are highly technological and require multidisciplinary collaboration. The intraoperative nurse contributes to team dynamics and directly impacts patient safety through their technical skills and clinical foresight. Therefore, it is important that nurses who will be involved in complex procedures such as EVAR are supported by advanced training in vascular anatomy, stent-graft systems, and interventional devices.

Keywords: EVAR, intraoperatıve nursıng, radıatıon safety, patıent safety

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NPP-38

Postoperative nursing care after carotid endarterectomy: A preliminary summary

Osman Asilturk, Seval Tobakcal, Canan Cevik, Serkan Yildirim, Yuksel Dereli, Yalcin Gunerhan

Necmettin Erbakan University Faculty of Medicine Hospital, Konya, Türkiye

Abstract

Aim: Carotid endarterectomy is a significant surgical procedure commonly performed to prevent cerebrovascular events and directly impacts mortality and morbidity. However, complications that may develop in the postoperative period carry serious risks to patient safety and treatment success. Therefore, postoperative nursing care plays a critical role in recognizing early complications and implementing appropriate interventions in a timely manner. The purpose of this study is to highlight the responsibilities of nurses and key points to consider during the postoperative care process after carotid surgery.

Material and Methods: This presentation examines current literature and findings related to postoperative nursing care after carotid endarterectomy. There are some complications after carotid endarterectomy operations. Espacially maintaining hemodynamic stability, regular assessment of neurological status, monitoring the incision site for hematoma, and infection prophylaxis are key focuses of nursing care. Furthermore, pain control, early mobilization, and maintaining fluid and electrolyte balance are also critical elements of the postoperative period.

Results: This presentation examines current literature and findings related to postoperative nursing care after carotid endarterectomy.

Conclusion: Nursing care in the post-carotid endarterectomy period is critical for preventing and early recognition of complications. Practices such as systematic observation, maintaining hemodynamic stability, meticulous neurological monitoring, and infection control play a decisive role in patient safety. Therefore, the effectiveness of nurses in postoperative care directly impacts treatment success and contributes to improved clinical outcomes.

Keywords: Carotid endarterectomy; Postoperative complications, Postoperative nursing care

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NPP-39

Nursing Management of access site complications following carotid endarterectomy: Evidence-based approaches from turkey

Suheyla Karakaya

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Introduction Carotid endarterectomy (CEA) is an effective surgical procedure for treating carotid artery stenosis and reducing stroke risk. However, postoperative access site complications such as hematoma, bleeding, infection, nerve injury, and pseudoaneurysm can occur, impacting recovery and patient safety. Nursing care is critical for early detection, prevention, and management of these complications.AimThis study aims to evaluate evidence-based nursing interventions for access site complications following CEA and to summarize practices applicable in the Turkish healthcare context.

Material and Methods: A literature review was conducted of studies published between 2019 and 2025. Observational, interventional, and review studies addressing nursing practices, complication prevention, and patient monitoring were included.

Results: Postoperative monitoring demonstrated that regular assessment of vital signs, inspection of the surgical site, and close hematoma observation are effective for early detection of complications. Nursing interventions for bleeding and hematoma include application of local pressure, immobilization, and adherence to emergency management protocols. Infection prevention is ensured through strict adherence to sterile techniques, proper wound care, and aseptic procedures. In addition, patient education on wound management, activity limitations, and recognition of warning signs enhances self-monitoring and timely reporting, thereby improving overall outcomes. These combined strategies indicate that structured nursing care significantly contributes to reducing the incidence and severity of access site complications following carotid endarterectomy.

Conclusion: Evidence suggests that structured nursing care, implemented according to standardized protocols and combined with multidisciplinary collaboration, significantly reduces the incidence and severity of access site complications following carotid endarterectomy. In Turkey, although research is limited, existing studies emphasize the critical role of nurses in preventing and managing these complications. Nursing management of access site complications is therefore a fundamental component of CEA care, and strengthening nurse education, adherence to protocols, and interdisciplinary cooperation is essential. Further research is needed to evaluate the effectiveness of these interventions and to optimize postoperative nursing strategies in the Turkish healthcare context.

Keywords: Carotid endarterectomy, nursing care, access site complications, patient safety

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NPP-40

Sudden progression of ascending aortic hematoma to Type A dissection requiring cabrol procedure

Gurkan Ozdemir, Ali Serhat Bucak, Koray Apaydin, Nevzat Erdil

Antalya City Hospital Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: This study aims to emphasize the unpredictable and life-threatening evolution of acute transmural aortic hematoma into Type A dissection, and to demonstrate the effectiveness of the Cabrol procedure as a life-saving surgical technique in cases with left main coronary involvement.

Material and Methods: A 69-year-old hypertensive male presented with acute chest pain. Initial contrast-enhanced thoracic CT revealed a 2–3 mm transmural hematoma in the ascending aorta. The patient was admitted to the cardiovascular surgery intensive care unit for conservative management with beta-blockers and nitroglycerin, alongside hourly monitoring of vital signs, neurological status, and pain scores. During the first 24 hours, he remained stable; however, he subsequently developed severe recurrent chest pain, diaphoresis, and fluctuating consciousness. Urgent CT angiography demonstrated progression to acute Type A dissection, extending from the aortic root to the ascending aorta with suspected left main coronary involvement. Emergency surgery was performed via median sternotomy under cardiopulmonary bypass. Intraoperative evaluation confirmed inadequate coronary perfusion, and a modified Cabrol procedure with saphenous vein graft was performed, followed by replacement of the ascending aorta with a synthetic graft.

Results: The patient underwent successful surgical repair with a total cross-clamp time of 76 minutes and an overall operative duration of four hours. Intraoperative findings confirmed extension of the dissection to the left main coronary ostium, requiring coronary revascularization with the modified Cabrol procedure in combination with ascending aortic replacement. Postoperatively, the patient was hemodynamically stable, with drain output decreasing to acceptable levels within the first 12 hours. Inotropic support was discontinued within 24 hours, and the patient was extubated without respiratory or neurological complications. No arrhythmia, infection, or renal impairment occurred during intensive care follow-up. He was transferred to the ward on postoperative day seven in good clinical condition and discharged home uneventfully.

Conclusion: Acute transmural aortic hematoma may initially appear stable but carries a significant risk of rapid progression to life-threatening Type A dissection. Close clinical and radiological monitoring is therefore essential in these patients. Once progression occurs, prompt surgical intervention is crucial for survival. In this case, successful management was achieved with the modified Cabrol procedure, which ensured adequate coronary perfusion in the setting of left main involvement. This experience highlights the importance of early recognition, timely surgery, and multidisciplinary perioperative care in optimizing outcomes for such high-risk patients.

Keywords: Ascending aorta, cabrol, nurse care, ascending hematoma

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NPP-41

Nursing monitoring and clinical experiences in patients undergoing emergency surgery due to ruptured abdominal aortic aneurysm

Mihriban Bulbul, Berna Doman, Nevzat Erdil

Antalya City Hospital, Cardiovascular Surgery Intensive Care Unit, Antalya, Türkiye

Abstract

Aim: Ruptured abdominal aortic aneurysm (RAAA) is a critical condition with high mortality that requires emergency surgical intervention. Mortality rates after rupture are reported in the literature to be between 40–60%. Endovascular aneurysm repair (EVAR) and open surgery are the main treatment options. EVAR provides advantages such as rapid hemodynamic stabilization and shorter intensive care stay. However, nursing monitoring plays a decisive role in the early detection of potential complications and in ensuring patient safety.

Material and Methods: In the Cardiovascular Surgery Intensive Care Unit of Antalya City Hospital, six patients diagnosed with ruptured abdominal aortic aneurysm were monitored: one underwent EVAR and five underwent open surgery. Preoperative nursing care included urgent vascular access and arterial catheterization, rapid fluid resuscitation, hemodynamic stabilization, and preparation of blood products. Postoperatively, in the EVAR patient, peripheral pulse control, monitoring of access site hematoma, urine output and renal function, and regular laboratory evaluation for contrast-induced nephropathy were performed. In open surgery patients, prolonged mechanical ventilation, bleeding and transfusion requirements, wound care, and infection control were the main priorities.

Results: Although Antalya City Hospital was newly established in 2024, it stood out with its multidisciplinary teamwork and sufficient clinical experience. Among six patients with ruptured abdominal aortic aneurysm, three experienced cardiac arrest in the preoperative period and underwent emergency surgery. The EVAR patient was extubated early in the ICU and transferred to the ward without complications. In open surgery patients, prolonged intubation, hemodynamic instability, and infection risk were observed. Two patients who underwent open surgery died after extubation and stabilization due to late complications, while two others died in the late period after transfer to the ward. Thanks to nursing monitoring, hypotensive episodes, oliguria, and wound complications were detected early, and timely interventions were performed.

Conclusion: In ruptured abdominal aortic aneurysm, intensive care nursing follow-up after EVAR is of critical importance for access site monitoring, maintaining hemodynamic stability, assessing renal function, and preventing complications. Although postoperative care after open surgery is longer and more intensive, in both approaches, the active role of nurses within the multidisciplinary team reduces mortality and morbidity. This case experience highlights that nursing monitoring is a key determinant of patient prognosis.

Keywords: Ruptured aortic aneurysm, EVAR, intensive care nursing, complication management

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NPP-42

Evidence-based pain management in patients with peripheral arterial disease

Zeynep Cekim, Selda Gure

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is highly prevalent today, and its incidence is increasing with the aging population. Pain is one of the primary symptoms of symptomatic PAD and is associated with disease progression and reduced quality of life. The aim of this paper is to summarize evidence-based approaches to pain management within nursing care for individuals with PAD.

Material and Methods: This paper was prepared by reviewing current articles published between 2015 and 2025.

Results: Recent literature indicates that pain management in patients with PAD should not rely solely on pharmacological treatments but should be based on multidisciplinary and holistic approaches. The combined use of pharmacological agents, invasive interventions, and non-pharmacological methods is preferred, as it targets different pathways of pain transmission and provides better analgesic outcomes.Pharmacological treatments include antiplatelets, statins, and analgesics. Non-opioid analgesics, in particular, have been reported to be effective in controlling exertional pain. Among non-pharmacological interventions, keeping the extremity below heart level facilitates circulation and reduces pain. Strong evidence supports the effectiveness of supervised exercise programs in reducing the intensity of pain during walking. Additionally, warm applications have been found to enhance circulation and contribute to pain control, while cold applications should be avoided.From a psychosocial perspective, nicotine use is known to increase pain through vasoconstriction, making smoking cessation counseling an effective nursing intervention. Cognitive-behavioral approaches and patient education play a key role in managing anxiety and sleep disturbances associated with chronic pain. Nurses are responsible for regularly assessing pain levels, monitoring adherence to pharmacological treatments, and providing counseling on exercise and lifestyle modifications as part of comprehensive care.

Conclusion: Pain management in individuals with PAD should not be limited to pharmacological treatments alone. The application of evidence-based nursing interventions within a multidisciplinary and holistic framework enhances the effectiveness of pain control.

Keywords: Evidence-based practice, nursing care, peripheral artery disease, pain management

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NPP-43

Nursing care of a patient who received extracorporeal membrane oxygenation (ECMO) support after pulmonary endarterectomy (PEA) surgery due to a diagnosis of chronic thromboembolic pulmonary hypertension: A case report

Asuman Ersayin[1], Hulya Karaer[1], Seren Altinkopru[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This case report aims to evaluate the nursing care process of a patient diagnosed with chronicthromboembolic pulmonary hypertension (CTEPH) who underwent pulmonaryendarterectomy (PEA) and required extracorporeal membrane oxygenation (ECMO) supportpostoperatively. The focus is on the nurse's role in monitoring, preventing complications, andproviding individualized, evidence-based care.

Material and Methods: The subject was a 68-year-old male patient with CTEPH who was admitted with dyspnea andunderwent PEA. Postoperatively, veno-arterial ECMO support was initiated due tocardiopulmonary dysfunction. Nursing interventions included continuous hemodynamic andrespiratory monitoring, frequent pain and consciousness assessments, anticoagulationmanagement, fluid-electrolyte balance monitoring, prevention of infection and pressureinjuries, and early mobilization when possible. Standardized nursing scales, such as theBraden Scale for pressure ulcer risk, were applied. Nursing care was documentedsystematically in line with intensive care protocols.

Results: Following surgery, the patient was monitored in the cardiovascular intensive care unit underECMO support. Vital signs, central venous pressure, fluid intake-output, and laboratoryparameters were closely tracked. The patient required vasoactive agents, insulin infusion,anticoagulation, transfusion, and renal replacement therapy. Nursing care focused onmaintaining tissue perfusion, observing cannulation sites, preventing bleeding and hematoma,ensuring skin integrity, and monitoring for complications such as arrhythmias, infection, orpressure injuries. Despite comprehensive multidisciplinary treatment and intensive nursingfollow-up, the patient developed recurrent hypotension, tachyarrhythmias requiring multiplecardioversions, generalized edema, and cardiopulmonary deterioration. On the 12thpostoperative day, the patient suffered cardiac arrest and was pronounced deceased despiteresuscitation efforts.

Conclusion: This case highlights the complexity of nursing care in patients undergoing PEA followed byECMO support. Nursing responsibilities extend beyond routine monitoring to include earlyrecognition of complications, strict hemodynamic surveillance, prevention of secondaryproblems, patient safety, and coordination with the multidisciplinary team. Although thepatient's outcome was unfavorable, structured and individualized nursing interventionscontributed to managing complications and maintaining stability for as long as possible. Thecase underscores the vital role of nurses in enhancing treatment safety and outcomes incritically ill patients requiring ECMO therapy. Further training and protocols are essential tostrengthen nursing practice in this high-risk population.

Keywords: CTEPH, PEA, ECMO, nursing care

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NPP-44

The effect of endovascular surgery on patient comfort

Berrin Demir Mentas, Mine Yuksel, Hulya Altun, Ozkan Adiguzel

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Endovascular surgery is a treatment method used to treat vascular diseases with minimally invasive methods.The aim was to emphasize the advantages in the treatment process and patient comfort of patients who underwent endovascular surgery compared to those who underwent open surgery.

Material and Methods: Between January 2025 – August 2025, 261 patients were retrospectively analyzed.These patients were patients with aortic dissection, aortic aneurysm and rupture, diagnosed with aortic disease and treated with open surgery and endovascular surgery. In these patients, in order to detect early complications, hemodynamic monitoring, blood gas analysis (with lactate follow-up), laboratory parameters (renal function tests) were used, and routine physical examinations were performed. Pseudoaneurysm risk was regularly checked after the intervention. Differences in hospitalization processes and patient comfort between patients who underwent open surgery and those who underwent endovascular surgery were evaluated.

Results: 81.6% of the patients were male, 18.4% were female.The mean age of the patients was 58 years.The mortality rate was 10.72%.

Conclusion: Endovascular surgery, as it is applied with minimally invasive methods, increases patient comfort.Since the risk of open surgery is high and anatomically challenging, mortality and morbidity rates are higher in patients. With small incision and catheter interventions, it was observed that postoperative pain was less in patients. Hospitalization time was shortened. Patients were discharged on the 1st postoperative day in most cases, and most of them were discharged on the 2nd postoperative day. In endovascular surgery patients, hospital stay was shortened, and surgical site incisions were minimal, reducing infection risk. When these patients were compared with open surgery patients, intensive care stay was shorter. Some patients were discharged without the need for intensive care. Postoperative pain control was achieved earlier. Respiratory complications were less common. Intensive care stay was shortened, and early mobilization was achieved. Patients with comorbidities such as COPD were observed to tolerate surgery better. Patients were able to maintain their daily activities and self-care in the early postoperative period. At the same time, minimal incision scars were observed, contributing to the protection of body integrity and aesthetic comfort. It was observed that hospitalization time was shortened in patients who underwent endovascular surgery compared to those who underwent open surgery, extubation time was shorter, pain levels were lower, early mobilization was achieved, and self-care was maintained. Since there were fewer postoperative complications, patients were more willing to undergo the procedure again. Endovascular surgery is considered a physiologically and psychologically more comfortable method for patients.

Keywords: Endovascular, patient comfort

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NPP-45

Arterial catheterization and the nursing approach in preventing complications

Pelda Yesil, Ozgur Akkaya, Umut Serhat Sanri

Alanya Alaaddin Keykubat University Education and Research Hospital, Cardiovascular Surgery Department, Antalya, Türkiye

Abstract

Aim: Arterial catheterization is a widely used invasive procedure in intensive care units (ICUs) for hemodynamic monitoring, invasive arterial pressure measurement, and blood gas analysis. However, it carries risks of complications such as thrombosis, distal ischemia, bleeding, hematoma, and infection, which increase morbidity and mortality, posing a serious threat to patient safety. Nursing practices, including the use of aseptic techniques in arterial catheter care, proper catheter stabilization, and regular monitoring of distal circulation, are critical for early detection of complications and for preventing potentially severe outcomes.This study aims to identify complications that may occur following arterial catheterization, demonstrate the role of nursing care practices in preventing these complications, andhighlight the importance of systematic nursing approaches in enhancing patient safety.

Material and Methods: A literature review was conducted between 2015 and 2024 using PubMed, ScienceDirect, andGoogle Scholar databases with the keywords: “arterial catheterization,” “complications,”“nursing care,” and “intensive care.” Studies focusing on post-arterial catheterizationcomplications and nursing interventions aimed at preventing them were included in theevaluation.

Results: According to the literature, the most common complications of arterial catheterization arethrombosis, distal ischemia, infection, bleeding, and hematoma. Thrombosis and distalischemia are among the most critical complications associated with radial arterycatheterization. Studies have shown that using aseptic techniques and regular monitoring ofthe insertion site reduces the risk of infection by 25–30%, while regular monitoring of distalcirculation and catheter care by nurses allows early detection of complications, preventingsevere outcomes. Additionally, current guidelines emphasize that daily assessment of thenecessity of the catheter significantly reduces complication rates.

Conclusion: Although arterial catheterization is an indispensable procedure in the management of ICUpatients, the risk of complications it entails represents a critical challenge to patient safetyand quality of care. Evidence indicates that nurses, through their knowledge, clinical skills,and systematic care practices, can significantly reduce these risks. In addition to preventingcomplications, these practices directly enhance patient satisfaction, clinical success, and theoverall quality of intensive care services. Therefore, nursing interventions should go beyondroutine care practices and be continuously developed and standardized according to currentguidelines.

Keywords: Arterial catheterization, nursing care, complication prevention, aseptic technique

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NPP-46

Prevention of deep vein thrombosis after femoral artery bypass: Nursing approaches

Ubeydullah Ekmis

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to examine the role of nursing interventions in preventing deep vein thrombosis (DVT) after femoral artery bypass surgery and to share evidence-based nursing strategies.

Material and Methods: This study was conducted using a literature review method. Research published between 2015 and 2025 on postoperative femoral artery bypass patients, DVT, and nursing care was reviewed. The findings of the selected studies were analyzed and interpreted in terms of nursing practices and patient safety.

Results: The literature review shows that the risk of DVT is particularly high during the first seven postoperative days. The main risk factors are advanced age, obesity, immobilization, hypertension, and a history of thromboembolic events. Nursing interventions include ensuring early mobilization, monitoring anticoagulation therapy, supporting the use of leg compression devices and elastic stockings, maintaining skin integrity, and providing patient education. In addition, early recognition of signs of thrombophlebitis and prompt intervention by nurses play a critical role in preventing complications.

Conclusion: DVT after femoral artery bypass is a serious complication risk, and nursing interventions play a fundamental role in its prevention. The systematic implementation of evidence-based nursing practices increases patient safety and reduces morbidity. Developing multidisciplinary DVT prevention protocols and supporting nurses through continuous education improve the quality of postoperative care.

Keywords: Femoral artery bypass, deep vein thrombosis, evidence-based practice, nursing interventions

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NPP-47

The role of nurses in the management of risk factors in peripheral arterial disease

Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Peripheral arterial disease (PAD) is a chronic condition with high morbidity and mortality, characterized by the involvement of peripheral arteries due to atherosclerosis. Major risk factors include smoking, diabetes, hypertension, dyslipidemia, obesity, and sedentary lifestyle. The aim of this study is to highlight the roles of nurses in managing risk factors associated with PAD and their contributions to patient care.

Material and Methods: A literature review methodology was used. Articles published between 2015 and 2025 were reviewed through databases such as PubMed, CINAHL, and national Turkish databases. A total of 42 articles were analyzed using the keywords "peripheral arterial disease," "risk factors," "nursing care," and "patient education." Content analysis was conducted to summarize findings related to nursing practices.

Results: Nurses were found to increase smoking cessation rates through motivational interviewing and counseling techniques. Providing dietary counseling and guidance on exercise programs significantly improved the maintenance of lifestyle changes among patients. Regular follow-up and patient education by nurses enhanced treatment adherence in managing diabetes, hypertension, and dyslipidemia. Nurse-led foot care education was found to play a critical role in reducing the incidence of ulcers and amputations. Nursing counseling was shown to be effective in alleviating anxiety and depression in PAD patients

Conclusion: The management of risk factors in PAD relies not only on medical treatment but also on the patient's ability to make sustainable lifestyle changes. Nurses play an active role in multifaceted areas such as smoking cessation, nutrition, exercise, medication adherence, foot care, and psychosocial support, thereby positively influencing disease prognosis. Addressing this topic in professional congresses will enhance nurses' awareness and strengthen their role within multidisciplinary healthcare teams.

Keywords: Peripheral, support, nursing, disease, care

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NPP-48

Nursing care and monitoring approaches for postoperative complications in EVAR and TEVAR patients: Clinical practices based on current literature

Okay Acielma

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: This study aims to identify postoperative complications in patients undergoing endovascular aortic repair (EVAR) and thoracic endovascular aortic repair (TEVAR) and to evaluate nursing care and monitoring strategies based on current literature.

Material and Methods: A systematic literature review was conducted. PubMed, Scopus, and Web of Science databases were searched for articles published between 2015 and 2025 focusing on EVAR and TEVAR postoperative complications and nursing care. Initially, titles and abstracts were screened, and eligible full-text articles were analyzed. The analysis focused on types of postoperative complications, nursing monitoring strategies, and care interventions.

Results: The literature indicates that the most common postoperative complications in EVAR and TEVAR patients include endoleaks, renal function impairment, spinal cord ischemia, bleeding, and infection. Endoleaks, particularly Type 1 and 3, require urgent intervention, whereas Type 2 is generally managed through regular monitoring, with nurses following imaging results closely. Renal function impairment, often related to contrast use, is monitored via fluid balance, urine output, and laboratory values. Spinal cord ischemia, primarily in TEVAR patients, is mitigated through neurological assessment and spinal cerebrospinal fluid drainage. Bleeding and hematoma risk are managed through continuous monitoring of the surgical site and vital signs, while infection prevention relies on aseptic care, early mobilization, and patient education. Postoperative pain, though generally milder than in open surgery, is regularly assessed and managed according to analgesic protocols. The literature emphasizes the importance of a multidisciplinary approach, highlighting the collaboration among surgeons, nurses, and anesthesia teams, as well as early mobilization and patient education in reducing complication risk.

Conclusion: Nursing care following EVAR and TEVAR is critical for early detection and management of postoperative complications. Current evidence suggests that systematic monitoring and evidence-based nursing protocols enhance patient safety and support recovery. These findings underscore the importance of implementing evidence-based strategies in clinical nursing practice.

Keywords: Endovascular aortic repair, thoracic endovascular aortic repair, postoperative complications, nursing care

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NPP-49

Nursing care of a patient diagnosed with peripheral arterial disease according to dorothea orem's self-care deficit theory: A case report

Kaymak Gunduz[1], Seren Altinkopru[1], Alime Asli Gozler Arslan[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This case report aims to evaluate the nursing care of a patient diagnosed with PeripheralArtery Disease (PAD) using Dorothea Orem's Self-Care Deficit Nursing Theory, focusing onthe planning, implementation, and outcomes of individualized care.

Material and Methods: A 71-year-old male patient, with a history of diabetes mellitus, hypertension, coronary stents,peripheral vascular interventions, colon cancer surgery, and right toe amputation due todiabetic foot, was admitted with severe right leg pain and ischemic findings in May 2025.Clinical evaluation revealed absent peripheral pulses and limb hypothermia. The patient wasadmitted to the intensive care unit (ICU) for thrombolytic therapy and closely monitored forsix days, followed by three days of ward-based care. Nursing assessment was guided byOrem's Self-Care Deficit Theory, collecting data on universal, developmental, and healthdeviation self-care needs. NANDA-I nursing diagnoses were identified, including risk forimpaired tissue perfusion, acute pain, activity intolerance, impaired skin integrity, bleedingrisk, infection risk, self-care deficit, and anxiety. Nursing interventions were planned usingNIC classification, including hemodynamic and neurovascular monitoring, pain management,mobilization, pressure ulcer prevention, nutritional support, aseptic catheter care, and patient-family education.

Results: The patient responded positively to thrombolytic therapy, with improvement in limbtemperature, restoration of peripheral pulses, and stabilization of blood pressure and oxygensaturation. Oxygen therapy was discontinued by day three, pain levels decreased, andmobilization was achieved. Nursing interventions effectively addressed risks such as bleedingand infection, while ensuring skin integrity and adequate nutrition. Patient and familyeducation enhanced compliance and promoted self-care capacity. The patient was transferredfrom ICU to the surgical ward in a stable condition and discharged with improved functionalstatus.

Conclusion: Application of Orem's Self-Care Deficit Nursing Theory provided a systematic framework forassessing, planning, and implementing nursing care in a patient with PAD. The theoryfacilitated holistic evaluation, individualized interventions, and effective outcomes, includingstabilization of vital signs, pain reduction, mobility improvement, and enhanced self-careability. This case highlights the importance of integrating nursing theories into clinicalpractice to promote patient safety, accelerate recovery, and support long-term self-management. Orem's model is recommended for patients with complex health needs to ensurecomprehensive and structured nursing care.

Keywords: Peripheral artery disease, orem's self-care deficit nursing theory, nursing care, case Report

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NPP-50

Evaluation of a nursing checklist for carotid endarterectomy generated by GPT-4o

Duygu Kayaalp[1], Yeter Benkaya[1], Mefharet Yilmaz[1], Hatice Aytekin Avci[1], Yasemin Dere[1], Basri Elban[1], Omer Faruk Rahman[2]

[1]İzmir Çiğli Training and Research Hospital, İzmir, Türkiye
[2]İzmir Bakircay University, Faculty of Medicine, Department of Cardiovascular Surgery, İzmir, Türkiye

Abstract

Aim: Proper preparation for carotid endarterectomy (CEA) is critical to ensuring safe and effective surgical performance. Large language models (LLMs), increasingly adopted for rapid and accurate information delivery, have potential applications in the healthcare setting. This study aimed to evaluate a nursing checklist for CEA generated by GPT-4o, assessing its applicability and completeness for use in the operating room.

Material and Methods: GPT-4o was prompted to generate a 10-item checklist for use by nurses during the preoperative preparation phase of carotid endarterectomy. The checklist, produced on August 7, 2025 using a free account, was evaluated by six cardiovascular surgery operating room nurses and one cardiovascular surgeon for usefulness and clarity on a 5-point Likert scale (1 = lowest, 5 = highest). In addition, evaluators were asked an open-ended question regarding the presence of any missing items, and their qualitative responses were collected. Normality was assessed using the Shapiro–Wilk test. As the data met the assumption of normality, parametric tests were applied, and results were expressed as mean ± standard deviation. A p-value of < 0.05 was considered statistically significant.

Results: The mean usefulness score was 4.53 ± 0.50, while the mean clarity score was 4.46 ± 0.53. No statistically significant difference was found between the two (paired samples t-test, $p = 0.479$). Item 5 received the lowest scores in both domains (mean usefulness: 3.67; mean clarity: 3.33).

Conclusion: The checklist generated by GPT-4o omitted several carotid endarterectomy–specific elements noted by the evaluators, including shunt preparation, patch selection, and suture availability checks. Although not directly applicable in its current form, it could be optimized by the surgical team to incorporate these procedure-specific steps and thereby support standardization in operative practice.

Keywords: Artificial intelligence, carotid endarterectomy, checkliststst, vascular surgical procedures

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NPP-51

Surgical treatment and nursing approach in a patient diagnosed with right lower extremity embolism: A case report

Ali Yaprakci, Seval Tobakcal, Omer Tanyeli

Necmettin Erbakan University, Faculty of Medicine Hospital, Konya, Türkiye

Abstract

Aim: Lower extremity embolism is a life-threatening condition that may lead to limb loss if not recognized early. While surgical treatment is essential, nursing care plays a pivotal role in preventing complications and supporting recovery. To present the care process of a patient referred to our clinic with a late diagnosis of lower extremity embolism who was initially recommended for amputation but successfully treated surgically.

Material and Methods: A 65-year-old male patient presented with persistent pain and a non-healing wound in the right lower extremity. At the first center, he received antibiotic therapy without improvement, and amputation was suggested after vascular occlusion was identified. Upon admission to our clinic, angiographic evaluation revealed severe embolism and occlusion in the right leg arteries. The patient underwent embolectomy, thrombectomy, femoropopliteal bypass, and aorto-iliac artery repair with favorable surgical outcomes.

Results: Postoperative nursing interventions included close monitoring of vital signs and distal pulses, wound care and infection prevention, pain management, surveillance for bleeding and thrombosis, early mobilization, and rehabilitation support. Patient education on smoking cessation, medication adherence, nutrition, and psychosocial support were emphasized before discharge.

Conclusion: This case demonstrates how delayed or inadequate initial evaluation increases amputation risk. A multidisciplinary approach, particularly structured nursing care, was essential in preventing limb loss and improving the patient's quality of life. Early diagnosis and effective nursing management remain crucial for favorable outcomes in lower extremity embolism.

Keywords: Embolism, lower extremity, nursing approach

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NPP-52

Nursing care of continuous CSF drainage system in a patient undergoing endovascular aortic repair

Mine Yuksel, Hulya Altun, Berrin Demir Mentas, Ozkan Adiguzel

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Spinal cord ischemia (SCI) is a serious complication that can occur after thoracic endovascular aortic repair (TEVAR) and endovascular abdominal aortic repair (EVAR). It may generally lead to paraplegia or irreversible neurological damage. One of the methods used to prevent or reduce these complications is cerebrospinal fluid (CSF) drainage. The aim of CSF drainage is to maintain spinal cord perfusion pressure and to prevent ischemic damage. This study aims to emphasize the importance of nursing care in monitoring pressure, regulating drainage volume, and preventing complications.

Material and Methods: The purpose of CSF drainage is to maintain spinal cord perfusion pressure. The targeted CSF pressure should generally be between 8–12 mmHg. According to current studies, the hourly drainage volume should be 10–25 mL, and should not exceed 150 mL in 24 hours. Excessive drainage may increase the risk of central nervous system damage and infection, thereby reducing its effectiveness. The effectiveness of CSF drainage should be carefully monitored through transducers, and continuous attention should be paid. Therefore, transducer-based pressure monitoring, drainage at the required level, and accurate measurements are of critical importance. Incorrect measurements or excessive drainage may increase morbidity.

Results: Because CSF drainage is a complex procedure, nurses must possess specialized knowledge and skills. Adequate knowledge and skills in CSF drainage practices are crucial for preventing complications, preventing incorrect practices, accelerating patient recovery, and ensuring safety. It has been shown that nurses, by being at the center of the multidisciplinary team, support the patient's healing process. Therefore, nurses' level of education, clinical experience, and ability to continuously learn are key factors in determining the quality of care.

Conclusion: Correct placement of the catheter, evaluation of risks of obstruction or bleeding, determination of drainage conditions, and monitoring of mean arterial pressure and spinal cord perfusion pressure are major responsibilities of nurses in preventing complications.Nurses should also perform regular neurological evaluations, monitor possible signs of bleeding and infection, maintain catheter and drainage system care, perform peripheral monitoring, position the patient appropriately, and keep regular records. Hypoxia and hypothermia in the patient should be prevented. It should be remembered that preventing hypoxia and hypothermia plays a critical role in reducing the risk of SCI.

Keywords: Cerebrospinal fluid, drainage system, endovascular

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NPP-53

Evidence-based nursing practices in chronic venous insufficiency

Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to evaluate the effectiveness of nursing interventions in patients with chronic venous insufficiency (CVI) using evidence-based approaches and to determine their contribution to improving patients' quality of life, symptom management, and reducing the risk of complications.

Material and Methods: This study was conducted as a literature review. Research articles published between 2015 and 2025 were selected from PubMed, CINAHL, Cochrane Library, and Web of Science, focusing on nursing interventions in adult patients diagnosed with CVI. The selected studies included randomized controlled trials, cohort studies, and systematic reviews. Keywords used were: "chronic venous insufficiency," "nursing interventions," "evidence-based practice," "compression therapy," and "patient education." The quality of the studies was assessed using the CASP (Critical Appraisal Skills Programme) checklist.

Results: Regular and proper use of compression stockings significantly reduced leg edema and pain. As patients' knowledge about self-care and lifestyle modifications (exercise, leg elevation, weight management) increased, symptom management and treatment adherence improved. In patients with venous ulcers associated with CVI, nurse-supervised appropriate wound care and dressing reduced healing time. Patients' quality of life and treatment motivation increased through nurse-led counseling and support programs.

Conclusion: Evidence-based nursing practices in chronic venous insufficiency improve symptom control, reduce complication risks, and enhance patients' quality of life. Nurses are encouraged to develop standardized, education-focused, and individualized care protocols for CVI management. Moreover, the widespread implementation and continuous updating of evidence-based nursing interventions in CVI care are critical for optimizing patient outcomes.

Keywords: Care, chronic, nursing, venous

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NPP-54

Central venous catheter-associated thrombosis and deep vein thrombosis in intensive care patients: The importance of nursing approaches

Pelda Yesil, Ozgur Akkaya, Umut Serhat Sanri

Alanya Alaadin Keykubat University Education and Research Hospital, Cardiovascular Surgery Department, Antalya, Türkiye

Abstract

Aim: Central venous catheters (CVCs) are essential tools in intensive care units for hemodynamic monitoring, fluid replacement, medication administration, and therapeutic interventions. Despite their necessity, the presence of a CVC significantly increases the risk of catheterrelated thrombosis and venous thromboembolism (VTE). Prolonged immobilization among critically ill patients further elevates the likelihood of deep vein thrombosis (DVT), contributing to higher morbidity and mortality rates. Systematic nursing monitoring, early risk identification, and preventive interventions are therefore crucial for patient safety and effective management of thrombotic complications.This study aims to examine the incidence of CVC-associated thrombosis and DVT in intensive care patients and to emphasize the essential role of nursing interventions in preventing these complications and facilitating early detection.

Material and Methods: A literature review was conducted covering studies from 2005 to 2025, using PubMed, Scopus, and CINAHL databases. Keywords included “central venous catheter thrombosis,” “deep vein thrombosis,” “intensive care,” “nursing care,” and “nurse-led intervention.” Selected studies were evaluated in terms of nursing practices, incidence of complications, and preventive strategies. Both randomized controlled trials and observational studies were included. Findings were synthesized thematically to highlight evidence-based nursing approaches that reduce complications.

Results: Literature indicates that CVC-associated thrombosis is linked to catheter malposition, prolonged catheter use, and inadequate aseptic techniques. Early and regular assessment of the catheter insertion site and distal circulation is critical for timely detection. DVT risk factors include immobilization, mechanical ventilation, obesity, and malignancy. Effective nursing strategies include early mobilization, passive exercise, use of elastic compressionstockings, intermittent pneumatic compression devices, and monitoring adherence to pharmacological prophylaxis. Implementation of nurse-led risk assessment protocols has been shown to significantly reduce thrombosis incidence, allow early recognition of complications, and decrease overall morbidity.

Conclusion: CVC-related thrombosis and DVT in intensive care patients are serious complications with high morbidity and mortality. However, systematic, protocol-driven nursing interventions can largely prevent these complications. These approaches not only help prevent thrombus formation but also facilitate early detection of complications, thereby optimizing clinical outcomes. Nursing practices play a decisive role in improving patient safety and provide both practical and systematic contributions to intensive care literature.

Keywords: Central venous catheter, deep vein thrombosis, intensive care, nursing interventions

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NPP-55

Effects of anti-embolism stockings on venous thromboembolism after cardiac surgery: A systematic review of randomized controlled trials

Belgin Celikturk

İstanbul Mehmet Akif Ersoy Chest and Cardiovascular Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Venous thromboembolism (VTE) after cardiac surgery is a significant clinical concern due to its contribution to increased morbidity and prolonged hospital stay. Complications related to VTE negatively affect patients' recovery process and quality of life. In this context, the use of anti-embolism stockings is considered a low-cost, safe, and accessible preventive intervention. This study aims to systematically review randomized controlled trials evaluating the effects of anti-embolism stockings on VTE in patients following cardiac surgery.

Material and Methods: This study was conducted in accordance with the PRISMA guidelines. PubMed, Scopus, and Cochrane Library databases were searched for publications between 2015 and 2025. The search strategy included keywords such as "anti-embolism stockings," "venous thromboembolism," and "cardiac surgery." Eligibility criteria were defined based on the PICOS framework. P (Population): Adult patients undergoing cardiac surgery, I (Interventions): Use of anti-embolism stockings, O (Outcomes): Incidence and clinical impact of venous thromboembolism, S (Study Designs): Randomized controlled trials published in English between 2010 and 2025 with accessible full-text.

Results: A total of 12 randomized controlled trials were included in the review, encompassing nearly 3,600 patients. In most studies, groups using anti-embolism stockings demonstrated a significantly lower incidence of venous thromboembolism (VTE) compared to control groups. A notable reduction in the development of deep vein thrombosis was also reported. Studies in which anti-embolism stockings were combined with pharmacological prophylaxis (heparin or low-molecular-weight heparin) showed a higher protective effect. However, some studies indicated that the use of anti-embolism stockings alone had a limited effect on VTE incidence and did not reach statistical significance. Overall, the findings suggest that anti-embolism stockings are a safe, low-cost, and easily applicable method, and their effectiveness in preventing VTE is enhanced when used in combination with pharmacological prophylaxis.

Conclusion: The use of anti-embolism stockings after cardiac surgery has been shown to be a safe, low-cost, and effective preventive intervention for reducing the incidence of venous thromboembolism (VTE). Its effectiveness is further enhanced when combined with pharmacological prophylaxis, providing stronger protection in terms of patient safety. However, there is a need for larger-scale randomized controlled trials encompassing diverse surgical procedures and patient populations to strengthen the evidence base.

Keywords: Anti-embolism stockings, venous thromboembolism, cardiac surgery

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NPP-56

Carotid artery disease

Mervan Akbaba, Ibrahim Ayata, Burak Turludur, Esma Ketenci

İstanbul Mehmet Akif Ersoy Chest and Cardiovascular Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: To describe the nursing care process for individuals with carotid artery diseaseTo emphasize the role of the nurse in early diagnosis, treatment, and prevention of complicationsTo describe nursing interventions aimed at patient education and improving quality of life

Material and Methods: Literature review: articles and guidelines published in the last 10 yearsClinical observations and case examplesNursing care process model (diagnosis, planning, implementation, evaluation)

Results: Early identification of risk factors by nurses reduces the risk of strokeRegular neurological examinations in postoperative care are critical for preventing complications Patient education (smoking cessation, diet, medication compliance) improves quality of life Multidisciplinary collaboration (neurology, surgery, physiotherapy) improves patient outcomes

Conclusion: Nursing care in carotid artery disease plays a crucial role in preventing complications and achieving successful treatment Early diagnosis, regular follow-up, patient education, and a holistic approach are the fundamental roles of nursingNursing Standard protocols for care should be developed

Keywords: Artery, disease, karotid, nursing care

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NPP-57

The critical role of the nurse in the management of castleman disease

Hatice Gokmen, Ibrahim Ayata

İstanbul Mehmet Akif Ersoy Chest and Cardiovascular Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: The aim of this study is to evaluate the role of nurses in the management of Castleman disease and their contribution to patient care, especially to reveal their importance in symptom management, prevention of complications and improving the patient's quality of life.

Material and Methods: Study Type: Descriptive research based on literature review and clinical observations. Sources: Hematology and oncology literature, patient care guidelines, and case reports related to Castleman's disease were reviewed.

Results: Regular follow-up and vital sign monitoring ensured early detection of complications, and symptom management and pain control improved patients' quality of life. Aseptic practices and infection control reduced the risk of infection in patients with weakened immune systems, while patient and family education increased treatment adherence and reduced psychosocial stress. Medication management and treatment monitoring increased treatment effectiveness and minimized side effects.

Conclusion: Nurses are a critical part of the multidisciplinary team in the management of Castleman disease, directly impacting the quality of patient care. Their active roles in symptom monitoring, infection control, medication management, education, and psychosocial support are vital to ensuring patient safety, improving treatment adherence, and enhancing quality of life.

Keywords: Lymphatic diseases, nursing care, costleman disease

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NPP-58

Postpartum deep vein thrombosis (DVT) and nursing approach

Elif Irem Bas, Kiymet Kaplan Yucel

Ankara University, Health Application and Research Hospitals, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Deep vein thrombosis (DVT), most commonly seen in the lower extremities, is a major international health problem with high morbidity and mortality rates. During pregnancy, the increase in coagulation factors leads to a decrease in natural anticoagulants and fibrinolytic activity. In addition, the growing uterus increases venous return, while increased estrogen and progesterone levels cause venous atony. Reduced mobilization further contributes to the formation of a new hemostatic balance that increases the tendency to thrombosis. While this hypercoagulable state protects the mother against bleeding during childbirth, it increases the risk of DVT in the postpartum period. This study emphasizes the importance of providing appropriate nursing care for patients diagnosed with DVT after delivery in order to facilitate thrombus resolution, promote optimal comfort, prevent complications, and provide informational and emotional support.

Material and Methods: Data were obtained from case reports and nursing care plans related to the topic by using the keywords DVT, postpartum deep vein thrombosis, and nursing care in the Google Scholar search engine.

Results: Nursing intervention priorities for patients diagnosed with postpartum DVT include monitoring for symptoms such as swelling, redness, and increased blood pressure in the affected area, which may indicate progression or worsening of thrombosis. Anticoagulant therapy (low molecular weight heparin (LMWH)) should be administered as directed by the physician to reduce the risk of complications. Anticoagulant use compatible with breastfeeding instead of warfarin should be provided. Pain management should also be considered. Additionally, the importance of infection control should be emphasized. Early mobilization should be facilitated to improve cardiovascular circulation and prevent further thrombosis. Elevation of the affected extremity should be encouraged. The importance of antiembolism stockings should be explained and the appropriate application of these stockings to both extremities should be emphasized. The patient's vital signs should be monitored regularly.

Conclusion: In the postpartum period, DVT is a critical condition affecting both maternal health and the newborn's well-being. Nurses should be aware of possible complications in patients diagnosed with DVT, evaluate the patient holistically, and plan and implement appropriate care. Counseling should be provided to mothers regarding drug transfer into breast milk, breastfeeding should be supported, and the importance of nutrition should be highlighted. Mothers should be taught range of motion (ROM) exercises, and supportive communication should be established to allow them to express their fears and anxieties. Nurses play an important role in managing the process with a low risk of complications.

Keywords: DVT, nursing care, postpartum deep vein thrombosis

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NPP-59

The role of intensive care nurses in major abdominal vascular surgeries

Muhammed Kivrak, Osman Asilturk, Canan Cevik, Yalcin Gunerhan, Yuksel Dereli, Niyazi Gormus

Necmettin Erbakan University Faculty of Medicine Hospital, Konya, Türkiye

Abstract

Aim: Major abdominal vascular surgeries—such as abdominal aortic aneurysm repair, aorto-iliac reconstructions, and interventions for mesenteric ischemia—are high-risk procedures with significant morbidity and mortality. Patients undergoing these operations are vulnerable to life-threatening complications, including severe bleeding, circulatory instability, renal dysfunction, reperfusion injury, and infection. Postoperative outcomes depend not only on surgical success but also on the coordinated management of the intensive care team, in which nurses play a central role. This paper highlights the essential contributions of intensive care nurses in ensuring patient safety, preventing complications, and improving survival following major abdominal vascular surgeries.

Material and Methods: A structured review of key nursing responsibilities in the postoperative intensive care management of major abdominal vascular surgery patients was conducted. Focus areas included hemodynamic stabilization, respiratory care, renal function preservation, bleeding and transfusion management, infection control, neurological and peripheral circulation monitoring, and pain and comfort management.

Results: Intensive care nurses serve as frontline observers in identifying and responding to complications. Through vigilant monitoring, they ensure hemodynamic stability, detect early signs of bleeding or ischemia, reduce pulmonary risks via ventilatory support, safeguard renal function by fluid-electrolyte balance, and maintain strict infection control. Effective pain management and psychosocial support further contribute to patient recovery and quality of life.

Conclusion: In major abdominal vascular surgeries, the intensive care nurse is not only a caregiver but also a key partner in clinical decision-making. Their timely interventions, particularly in emergencies such as mesenteric ischemia, significantly improve survival rates. Intensive care nursing thus represents a critical yet often underrecognized determinant of success in complex vascular surgical care.

Keywords: Major abdominal vascular surgery, mesenteric ischemia, abdominal exploration, intensive care nursing, complication management

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NPP-60

Lifestyle behaviors and nursing interventions in patients with peripheral arterial disease: Evidence-based approaches from Turkey

Suheyla Karakaya

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: IntroductionPeripheral arterial disease (PAD) is a chronic vascular condition characterized by narrowing or occlusion of the arteries in the lower extremities, significantly impacting quality of life. In Turkey, PAD prevalence ranges between 17.6% and 47.2%. Lifestyle behaviors—including regular physical activity, smoking cessation, balanced nutrition, and adherence to medical therapy—are critical for disease management and secondary prevention. Nursing care plays a central role in supporting patients to adopt and maintain these behaviors.AimThis paper aims to evaluate lifestyle behaviors in patients with PAD and examine the impact of nursing interventions on promoting healthy practices in the Turkish context.

Material and Methods: MethodStudies published between 2019 and 2025 focusing on lifestyle behaviors and nursing interventions in PAD patients were reviewed.

Results: Physical Activity: PAD patients generally exhibit low levels of physical activity. Nursing-led interventions, including individualized exercise programs and walking therapy, have been shown to improve physical capacity Smoking Cessation: Smoking is a major risk factor for PAD progression. Nursing counseling and support groups have been effective in reducing patients' tobacco useDiet and Nutrition: Low-calorie and anti-inflammatory diets contribute to reducing inflammation and improving overall health in PAD patients.DiscussionEvidence indicates that nursing interventions play a key role in modifying lifestyle behaviors in PAD patients. Although research in Turkey is limited, current findings suggest that nurses can effectively support behavior change through education, counseling, and individualized care plans. Institutional support and multidisciplinary collaboration further enhance intervention effectiveness.

Conclusion: Assessing and promoting lifestyle behaviors is a fundamental aspect of nursing care for PAD patients.Nursing interventions targeting physical activity, smoking cessation, and healthy nutrition yield effective outcomes.More research is needed in Turkey to evaluate the effectiveness of lifestyle-focused nursing interventions for PAD patients.

Keywords: Peripheral arterial disease, nursing interventions, lifestyle behaviors, physical activity

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NPP-61

Nursing interventions to reduce ischemia and complication risks after aorta bifemoral bypass: Evidence-based practices

Ubeydullah Ekmis

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: The aim of this study is to examine how nursing interventions can reduce ischemic complications and other postoperative risks in patients undergoing aorta bifemoral bypass (ABF) surgery. Postoperative complications can prolong recovery and negatively impact patients' quality of life. Nurses play a critical role in mitigating these risks through early assessment and evidence-based interventions.

Material and Methods: This study was conducted using a cross-sectional observational design combined with a literature review in patients who underwent ABF surgery. Postoperative nursing care and clinical data were evaluated. Circulation and lower limb perfusion, wound condition, pain level, and the occurrence of complications were regularly monitored. Nursing interventions included patient education, wound care, mobilization, and infection prevention strategies. The effectiveness of evidence-based protocols reported in the literature was also reviewed.

Results: Nursing interventions facilitated early detection of postoperative ischemic symptoms and reduced the incidence of complications. Focusing on wound care accelerated tissue healing and minimized the risk of infection. Regular wound assessment, adherence to dressing protocols, and monitoring of exudate allowed early identification of potential complications. Circulation monitoring and perfusion assessment helped detect ischemic changes promptly, while pain management and mobilization supported the recovery process. Literature review confirmed that evidence-based nursing protocols enhance patient safety and positively influence wound healing after ABF. Patient education programs increased active participation in wound care and contributed to improved quality of life.

Conclusion: Nursing practices after ABF surgery are vital for early detection of ischemic complications, effective wound care, and risk reduction. Evidence-based care supports patients' recovery while minimizing complications. This study emphasizes that nurses' active involvement in the postoperative period is crucial for patient safety, wound healing, and clinical outcomes.

Keywords: Aorta bifemoral bypass, nursing interventions, ischemia, wound care

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NPP-62

Evidence-based nursing practices in compartment syndrome

Ibrahim Ayata

Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Türkiye

Abstract

Aim: Compartment syndrome is a medical emergency that leads to irreversible damage of muscle and nerve tissue due to increased pressure within a closed compartment. The aim of this study is to identify evidence-based nursing interventions that can enhance early diagnosis, prevent complications, and improve patient care in compartment syndrome.

Material and Methods: A literature review was conducted in national and international databases (PubMed, CINAHL, Cochrane Library, Google Scholar) using the keywords "compartment syndrome," "nursing care," and "evidence-based practice." Articles published between 2015 and 2025 were included. The selected studies evaluated nursing care practices, patient outcomes, and evidence-based protocols.

Results: •For early diagnosis, the "6 Ps" assessment (pain, pallor, pulselessness, paresthesia, paralysis, poikilothermia) is critical for nurses. Increasing pain unresponsive to analgesics was emphasized as an early indicator. Pulse, capillary refill, sensory, and motor function should be regularly monitored. The affected limb should be kept at heart level, and excessive elevation should be avoided. Regular assessment of tightness, swelling, and pressure is necessary. Patient education: Patients should be instructed to report symptoms such as pain, numbness, or coldness immediately. Literature highlights that ongoing education and standardized clinical protocols for nurses reduce complications.

Conclusion: Compartment syndrome progresses rapidly and can cause permanent damage if intervention is delayed. Evidence-based nursing practices should focus on early diagnosis, consistent neurovascular assessment, proper positioning, cast and bandage monitoring, and patient education. Enhancing nurses' knowledge and awareness, along with collaboration within the multidisciplinary team, is crucial for patient safety and prognosis.

Keywords: Compartment syndrome, nursing, arterial oclusion

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NPP-63

Nursing care for the management of complications after carotid endarterectomy

Aleyna Apaydin[1], Hakki Tankut Akay[2]

[1]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye
[2]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: The aim of this study is to identify complications that may develop after carotid endarterectomy (CEA) and to emphasize the importance of nursing care in the prevention and management of these complications.

Material and Methods: The study was prepared by reviewing current literature reviews published between 2018 and 2023 in the PubMed, NCBI, Medscape, and ScienceDirect databases. Definitions of carotid endarterectomy, the surgical process, complications, and evidence-based approaches related to nursing care were evaluated.

Results: Most complications after carotid endarterectomy occur within the first 12 hours. Therefore, intensive monitoring and intervention are required in the early period. Nurses are expected to play an active role in neurological assessment, monitoring of vital signs, and early recognition of complications. In addition, patient education and family support also play an important role in the prevention of complications.

Conclusion: Nursing care in the management of complications after carotid endarterectomy is of critical importance for increasing patient safety and reducing complications. With early diagnosis, appropriate intervention, and patient education, the frequency and severity of complications can be reduced.

Keywords: Carotid endarterectomy, complication management, nursing care, stroke, intensive care

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NPP-64

Nursing Care of a patient with aortic aneurysm who underwent thoracic endovascular aortic replacement repair according to Jean Watson's human care model: A case presentation

Hakki Tankut Akay[1], Hulya Karaer[1], Firides Yildirim[1], Aleyna Apaydin[2]

[1]Başkent University Hospital-Department of Cardiovascular Surgery, Ankara, Türkiye
[2]Başkent University Hospital-Directorate of Nursing Services, Ankara, Türkiye

Abstract

Aim: This study aims to present the nursing care of a patient diagnosed with aortic aneurysm who underwent Thoracic Endovascular Aortic Repair (TEVAR), within the framework of Jean Watson's Human Caring Model. The objective is to highlight the holistic and humanistic approach of the model in postoperative care and to provide an example of its application in clinical practice.

Material and Methods: The case involves a 42-year-old male patient with a history of aortic valve replacement (1993), Bentall and hemiarch repair (2015), and debranching surgery (2022), who was admitted with dyspnea and diagnosed with recurrent aortic arch aneurysm. TEVAR was performed during hospitalization. Data were collected through nursing observations, medical records, and patient self-reports. Nursing care was structured according to Watson's Human Caring Model, focusing on interpersonal caring relationships, the caring moment, and healing processes. Nursing interventions included physiological monitoring, pain management, mobilization, infection prevention, patient education, psychological support, and addressing spiritual needs.

Results: Postoperative nursing care supported the patient's adaptation and recovery. The application of Watson's model facilitated effective communication, trust, and individualized care. Interventions such as mobilization, respiratory exercises, and nutritional support promoted physical recovery, while psychological support reduced anxiety and enhanced coping strategies. Emphasis on humanistic and spiritual care improved the patient's overall well-being and satisfaction. The integration of Watson's Human Caring Model into clinical practice enhanced patient safety, reduced postoperative complications, and supported holistic healing.

Conclusion: The use of Jean Watson's Human Caring Model in the postoperative care of patients undergoing TEVAR provides a holistic framework that addresses physiological, psychological, and spiritual needs. This case demonstrates that the model strengthens nurse-patient relationships, enhances trust, and supports healing processes. The findings suggest that incorporating Watson's Human Caring Model into clinical nursing practice contributes to improved patient outcomes and satisfaction. Wider implementation of this model in nursing care is recommended, particularly for patients undergoing complex cardiovascular surgeries.

Keywords: Aortic aneurysm, TEVAR, Jean Watson human care model, nursing care

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Discussion Poster Presentation

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DPP-01

Management of percutaneous transfemoral access-site complications following transcatheter aortic valve implantation and endovascular aneurysm repair

Baris Akca, Cihan Yetis, Mehmet Cengiz Colak, Mehmet Emin Murat, Cebrail Ozbulut, Olcay Murat Disli

İnonu University, School of Medicine, Department of Cardiovascular Surgery, Malatya, Türkiye

Abstract

Aim: Endovascular aortic aneurysm repair (EVAR) and transfemoral transcatheter aortic valve implantation (TAVI) are widely used minimally invasive procedures most commonly performed via the femoral artery. Percutaneous vascular closure devices are frequently employed in clinical practice to achieve hemostasis in these procedures. Although considered a reliable and effective method, complications such as bleeding, occlusion and ischemia may occur following the use of these devices. We aimed to investigate femoral access-site complications after TAVI and EVAR over the past five years, considering advances in device technology, improvements in femoral closure devices, and growing procedural experience.

Material and Methods: Between January 2020 and July 2025, patients who underwent EVAR/TAVR procedures via the femoral artery with the use of percutaneous vascular closure devices and subsequently required urgent surgical intervention due to bleeding or ischemia were retrospectively analyzed (n=22).

Results: Of the patients evaluated, 54.6% (n=12) were male. TAVR was performed in 81.8% (n=18). The mean age was 78.5 ± 6.1 years. In 77.3% (n=17) of cases, access was obtained via the right femoral artery. The most common blood type was O Rh(+) (59.1%). Hypertension (n=11) was the most frequent comorbidity. The mean ejection fraction was 53.6 ± 6.8. All patients presented with absence of distal pulses, pallor, and coldness in the operated limb. Active bleeding at the access site was observed in 18 patients. All patients underwent emergency surgery; direct vascular repair was performed in 16 patients, endarterectomy with patch plasty in 2, embolectomy in 13, and PTFE graft repair in 1. One patient had concomitant right ventricular injury in addition to femoral artery trauma. Severe femoral artery calcification was present in 19 patients, and multiple puncture injuries involving both the profunda femoris and superficial femoral arteries were identified in 8 patients. No amputations or mortality occurred among the surgically treated patients.

Conclusion: Advanced age combined with cardiovascular comorbidities and elevated mortality rates renders open surgical approaches more challenging. During TAVR/EVAR procedures with percutaneous vascular closure devices, femoral artery injuries such as intimal dissection or rupture leading to hemorragia, though infrequent, may represent limb-threatening complications leading to hemodynamic shock. Careful preoperative evaluation and a collaborative team approach can reduce the risk of early vascular complications following TAVR/EVAR. Although minimally invasive surgical access and percutaneous vascular closure devices may be considered complementary techniques, in patients with calcified or tortuous femoral arteries, or those with relatively small arterial diameters, surgical access should be regarded as the more appropriate option.

Keywords: Vascular injuries, transcatheter aortic valve implantation, vascular access devices, vascular closure devices, endovascular aortic repair

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DPP-02

Vascular surgical management of traumatic bilateral lower limb amputations: Use of the non-salvageable limb as a source of autologous vascular grafts

Omer Faruk Soydas[1], Abdulgani Orhun Yenigun[2], Ugur Dikkas[3], Berk Arapi[3]

[1]Mardin Training and Research Hospital, Cardiovascular Surgery Clinic, Mardin, Türkiye
[2]İstanbul Haseki Training and Research Hospital, Cardiovascular Surgery Clinic, İstanbul, Türkiye
[3]İstanbul University-Cerrahpaşa, Cerrahpaşa Medical Faculty, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Traumatic bilateral lower extremity amputations are rare but devastating injuries requiring rapid multidisciplinary surgical intervention. When anatomical replantation of all amputated extremities is not feasible, optimizing functional outcomes is essential. This report presents a case where autologous vascular grafts harvested from a non-salvageable limb were successfully used to revascularize and replant the contralateral limb.

Material and Methods: A 34-year-old male with no prior medical history was admitted following a shipyard accident in which heavy debris caused bilateral lower limb amputations. Examination revealed a traumatic below-knee amputation of the right leg with severe tissue and vascular destruction, making replantation impossible. The left lower extremity was subtotal amputated about 10 cm above the ankle, attached only by posterior soft tissue, with no palpable distal pulses. A multidisciplinary team from cardiovascular, orthopedic, and plastic surgery departments opted for replantation of the left limb. Under general anesthesia, external fixation of tibial fractures was performed. Both anterior and posterior tibial arteries were exposed, and devitalized tissue was debrided. Because of vessel loss, vascular grafting was required. The great saphenous vein and dorsal foot veins were harvested from the amputated right leg for autologous grafting. After embolectomy, vein grafts were interposed to repair both arteries. Venous repair was completed, and plastic surgery performed nerve repair.

Results: Postoperative intensive care monitoring showed stable hemodynamics and restored perfusion, with palpable dorsalis pedis pulses and good venous outflow. The replantation site was checked regularly, demonstrating sustained vascular integrity without need for revision. The patient recovered uneventfully and was discharged with preserved limb viability and rehabilitation planning.

Conclusion: In severe bilateral traumatic amputations where full anatomical replantation is unachievable, prioritizing salvage of one limb using innovative surgical approaches can maximize function. Autologous vascular grafts from non-viable amputated segments provide an effective resource, avoiding additional donor site morbidity and allowing rapid reconstruction. Multidisciplinary collaboration remains essential for decision-making and achieving optimal outcomes in complex extremity trauma.

Keywords: Amputation, limb salvage, vascular grafting, arterial repair, replantation

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DPP-03

Early patency in peripheral arterial injuries: A single-center 20-case series with extended report of three cases

Murat Ozeren, Abdulkadir Bilgic, Ali Ihsan Irmak

Mersin University Faculty of Medicine, Mersin, Türkiye

Abstract

Aim: Peripheral arterial (PA) injuries may lead to high morbidity if diagnosis and revascularization are delayed. Current guidelines emphasize immediate exploration in the presence of hard signs, early systemic heparinization, and prophylactic fasciotomy in high-risk cases. This study aimed to evaluate early patency outcomes after surgical repair of traumatic PA injuries in a single-center series, and to illustrate decision-making processes through three detailed case reports.

Material and Methods: We retrospectively reviewed 20 consecutive patients who underwent open repair for traumatic PA injuries between January 2020 and June 2025. Recorded variables included age, sex, mechanism of injury, injured vessel, lesion type, associated injuries, and repair method. The primary endpoint was presence of distal flow at 24 hours assessed by handheld doppler. In three representative cases, indication, timing, surgical technique, and early results were presented in detail.

Results: The mean age was 37.4 years (median 38); 19 patients were male. Mechanisms of injury were stab/cutting (50%), gunshot (25%), blunt trauma (20%), and motor vehicle accident (5%). Injured arteries included the posterior tibial (30%), femoral (25%), distal superficial femoral (15%), popliteal (10%), brachial (10%), proximal superficial femoral (5%), and dorsalis pedis (5%). Lesions were full-thickness in 90%. Primary repair was performed in 60% of cases and reversed saphenous vein grafting in 40%. Associated injuries were absent in 70% of patients, while bone (20%), tendon (5%), and muscle/nerve/tendon (5%) injuries were observed. At 24 hours, all patients (20/20) had triphasic doppler signals with no revision or amputation required.

Conclusion: Early systemic heparinization, tension-free reconstruction, and careful preparation of the distal vascular bed provide safe and effective primary repair, even in distal tibial arteries. At the popliteal level and in borderline ischemia, a low threshold for fasciotomy and structured ultrasound surveillance are strongly recommended. These findings are consistent with the 2025 ESVS and 2024 WTA guidelines and may serve as a practical treatment algorithm under regional healthcare conditions.

Keywords: Peripheral arterial injury, vascular trauma, primary arterial repair, tibial artery, saphenous vein graft

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DPP-04

Effect of curcumin on TRPM2 channel protein in a high-fat diet-induced obesity model with cardiovascular implications

Merve Durhan[1], Selahattin Tunc[1], Onural Ozhan[1], Hasan Ozen[2], Yilmaz Cigremis[1]

[1]Inonu University, Malatya, Türkiye
[2]Balıkesir University, Balıkesir, Türkiye

Abstract

Aim: To investigate the effects of Curcumin on the TRPM2 channel protein in a high-fat diet (HFD)-induced obesity model, focusing on oxidative stress and cardiovascular alterations.

Material and Methods: Rats (n=12 per group) were assigned to control, vehicle, Curcumin (60 mg/kg), HFD, and HFD + Curcumin groups for 12 weeks. Blood glucose, hemodynamic parameters, and body/organ weights were measured. Serum and tissues were analysed for insulin, CRP, TNF-α, IL-6, IL-1β, and TRPM2 levels via ELISA. Liver oxidative stress markers (MDA, GSH), antioxidant enzymes (SOD, CAT), and TRPM2 gene expression were assessed. Histopathological analysis was performed on the liver, heart, vessels, kidney, muscle, and adipose tissues.

Results: HFD increased blood glucose, reduced blood pressure, and caused ECG abnormalities ($P < 0.05$). Hepatic MDA, IL-1β, and TRPM2 protein levels were elevated, while SOD activity decreased in HFD rats. No significant changes were observed in CAT activity, IL-6, or TRPM2 gene expression. Steatosis was observed only in HFD liver samples; other tissues showed no pathological changes. Curcumin treatment attenuated these alterations.

Conclusion: HFD-induced obesity promotes oxidative stress and inflammation via TRPM2 channels, contributing to cardiovascular dysfunction. Curcumin shows potential in mitigating these effects, suggesting therapeutic value for vascular complications associated with obesity.

Keywords: High-fat diet, obesity, curcumin, oxidative stress, cardiovascular dysfunction

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DPP-05

Life-threatening abdominal aortic rupture due to failure of ruptured valve balloon withdrawal during transcatheter aortic valve implantation in degenerated aortic root homograft

Kudret Atakan Tekin, Mustafa Akbulut

Koşuyolu High Specialization Education And Research Hospital, Department of Cardiovascular Surgery, İstanbul, Türkiye

Abstract

Aim: Valve-in-valve transcatheter aortic valve implantation (ViV-TAVI) has emerged as a viable alternative approach to conventional redo surgery in degenerated aortic bioprosthesis. Balloon rupture during TAVI is extremely rare but potentially fatal complication. We present a case of severe aortic complications after VIV-TAVI procedure on a degenerated aortic homograft and required open surgery.

Material and Methods: A 55-year-old man with a history of aortic root surgery using an aortic homograft 27 years earlier presented with severe aortic stenosis. Due to high surgical risk, ViV-TAVI was performed with a 21.5 mm Myval balloon-expandable valve (Meril Life Sciences, India). A significant paravalvular leak (PVL) was corrected by post-dilatation with a 22 mm Z-Med II balloon (NuMED, Canada). After postdilatation, the balloon ruptured, failed to retract into the 14-Fr Python™ sheath (Meril Life Sciences), and became stuck in the abdominal aorta during complete retraction of the entire system. The patient developed sudden hypotension. Emergency angiography demonstrated rupture at the aortic bifurcation. Temporary hemostasis was achieved with a 20 × 40 mm balloon, followed by emergency aorto-bi-iliac bypass.

Results: Via midline laparotomy, the infrarenal aorta and bifurcation were exposed and found ruptured. After systemic heparinization, the occlusion balloon was deflated and removed, and a cross clamp was placed on the abdominal aorta at the infrarenal level. Aortotomy revealed the ruptured post-dilatation balloon, which had sharp edges. The ruptured postdilatation balloon was cut from the middle part with a chisel and removed from the abdominal aorta and the other part was withdrawn from the femoral artery. The endothelium completely separated from the tunica media in the abdominal aorta and stripped from the abdominal aorta to the bifurcation was seen and removed. A 16/8 mm Dacron graft was anastomosed end-to-end to the aorta proximally and to both iliac arteries distally, completing an aorto-bi-iliac bypass. The abdomen was closed in standard fashion.

Conclusion: This case highlights the potential for catastrophic vascular rupture during ViV-TAVI procedures performed on degenerated aortic homografts, particularly during balloon withdrawal. Extreme caution must be exercised at every step of the process. Prompt recognition and immediate open surgical intervention are critical for patient survival.

Keywords: Valve-in-valve, transcatheter aortic valve implantation, abdominal aortic rupture

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DPP-06

Evaluation of the effect of intralesional epidermal growth factor use on wound healing in patients with diabetic foot ulcers

Emre Dursun, Huseyin Demirtas, Mustafa Hakan Zor

Gazi University Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This study aimed to investigate the effects of intralesional epidermal growth factor (EGF) administration on wound healing in patients with diabetic foot ulcers. Additionally, the impact of patients' clinical, demographic, and laboratory findings on the healing process was evaluated.

Material and Methods: We retrospectively reviewed the records of 30 patients who received intralesional EGF treatment at the Department of Cardiovascular Surgery, Gazi University Faculty of Medicine, between January 2018 and October 2024. Demographic data, wound characteristics, laboratory values, and treatment details were analyzed. Correlation and comparative statistical tests were applied, with a p-value of < 0.05 considered statistically significant.

Results: Complete wound healing was observed in 83.4% of patients, while 13.3% showed partial healing. The mean wound closure time was 57±14 days, and the average healing rate was recorded as 85±15%. Healing rates were significantly higher in non-infected wounds ($p < 0.001$). A negative correlation was found between wound size and healing rate ($r=-0.627$, $p < 0.001$). Furthermore, elevated HbA1c levels and erythrocyte sedimentation rate were associated with impaired healing ($p=0.015$ and $p=0.039$, respectively). No statistically significant effect on healing was observed with variables such as gender, age, body mass index (BMI), or smoking status.

Conclusion: Intralesional epidermal growth factor appears to be a promising and effective adjunctive therapy for diabetic foot ulcers. Higher healing rates and reduced amputation risk were observed particularly in patients with non-infected, smaller wounds and well-controlled glycemia. However, these findings need to be supported by prospective, multicenter studies with larger patient populations.

Keywords: Diabetic foot ulcer, epidermal growth factor, wound healing

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DPP-07

Case report: Endovascular mechanical atherectomy for recanalization of an occluded femoropopliteal saphenous vein bypass graft

Mustafa Enes Bostankolu, Ceylan Gurcan, Busra Karakoc Kaplan, Medine Sarac, Ahmet Erkam Cevik, Ali Aghayev, Levent Altinay

Ankara Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Chronic peripheral arterial disease (PAD) is a progressive condition that adversely affects quality of life and may ultimately lead to limb loss. Both endovascular and surgical revascularization techniques are available for the management of PAD. Among surgical options, femoropopliteal bypass using either a synthetic graft or a saphenous vein graft is frequently performed. Most studies have demonstrated superior patency rates of saphenous vein grafts compared with synthetic grafts. Here, we present a case in which endovascular mechanical atherectomy was performed to recanalize an occluded femoropopliteal saphenous vein graft.

Material and Methods: A 54-year-old male presented with bilateral intermittent claudication occurring after 10–15 meters of ambulation. His medical history included coronary artery disease, peripheral arterial disease, chronic kidney disease, and hypertension. He had a 50 pack-year smoking history and was taking acetylsalicylic acid, clopidogrel, and atorvastatin. The patient had previously undergone bilateral femoropopliteal bypass in 2013 using a 7-mm Dacron graft, followed by a redo femoropopliteal bypass with a saphenous vein graft in 2014.Preoperative imaging revealed diffuse calcification of the common femoral, popliteal, and crural arteries, as well as total occlusion of the saphenous vein graft. Considering the patient's clinical status, an endovascular intervention was planned and preoperative preparation was undertaken.

Results: The patient was taken to the hybrid operating room, where the left brachial artery was used as the access site. Mechanical atherectomy of the occluded right femoropopliteal saphenous vein bypass graft was performed with minimal contrast administration using a 2.1/3-mm endovascular atherectomy device. Control angiography confirmed adequate luminal recanalization.Postoperatively, the patient was transferred to the intensive care unit for monitoring. Supportive hydration and anticoagulation therapy were initiated, and peripheral pulses were continuously observed. Graft patency was maintained without complications, and the patient was discharged on an antiplatelet/anticoagulant regimen.At one month, duplex ultrasonography demonstrated preserved graft patency. At three months, laboratory tests revealed normal renal function, and computed tomography angiography confirmed graft patency. At six- and nine-month follow-ups, the patient was asymptomatic, and duplex ultrasonography again confirmed graft patency.

Conclusion: Endovascular atherectomy may represent a viable therapeutic option for the management of graft occlusions following bypass procedures performed distal to the inguinal ligament.

Keywords: Peripheral arterial disease, femoropopliteal bypass, saphenous vein graft, endovascular atherectomy, graft occlusion

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DPP-08

Endovascular aneurysm repair (EVAR) in a renal transplant recipient: A rare case report

Burak Toprak[1], Hasan Cihan[2], Abdulkadir Bilgic[3], Vehbi Kinay[1], Ozkan Karaca[1], Nihat Soylemez[1]

Mersin Education and Research Hospital, Mersin, Türkiye
Van Education and Research Hospital, Van, Türkiye
Mersin University Faculty of Medicine Hospital, Mersin, Türkiye

Abstract

Aim: We report a rare case of endovascular aneurysm repair (EVAR) performed in a renal transplant recipient with preserved graft function, emphasizing technical considerations and perioperative outcomes.

Material and Methods: A 48-year-old male, with a history of renal transplantation and functioning allograft, presented with abdominal and back pain. He had comorbidities including hypertension, diabetes mellitus, and prior cholecystectomy. Clinical examination revealed palpable femoral pulses with weak ankle pulses, accompanied by claudication. Computed tomography angiography revealed a 55.4 mm infrarenal abdominal aortic aneurysm (AAA). Multidisciplinary vascular board evaluation recommended EVAR. Three-dimensional reconstruction demonstrated the transplanted renal artery anastomosed to the right external iliac artery. Bilateral femoral access was obtained using ProGlide-assisted percutaneous technique and Seldinger cannulation. The endograft main body was deployed, with careful adjustment of the right iliac limb to avoid compromising the transplanted renal artery. Contrast usage was minimized and diluted to preserve renal function.

Results: Completion angiography confirmed patency of the transplanted renal artery with successful exclusion of the aneurysm. Postoperative course was uneventful, with stable renal function tests, resolution of symptoms, and trifasic distal pulses. The patient was discharged in good condition.

Conclusion: This rare case highlights the feasibility of EVAR in patients with functioning renal allografts when meticulous planning and intraoperative techniques are applied. Preservation of renal graft perfusion, careful stent limb adjustment, and minimal contrast use are critical to achieving successful outcomes in this high-risk population.

Keywords: Abdominal aortic aneurysm, EVAR, renal transplant, endovascular repair, case report

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DPP-09

Endovascular thoracal aorta injury repair after thoracic pedicle screw placement

Fatih Ada, Hasan Bascil, Yusuf Taspinar, Salih Toy, Ahmet Turan Ince

Sivas Cumhuriyet University, Faculty of Medicine, Cardiovascular Surgery Department, Sivas, Türkiye

Abstract

Aim: Thoracic pedicle screw fixation is a widely used technique in spinal surgery. However, screw malposition, though rare, may lead to serious vascular complications such as thoracic aortic injury. Endovascular repair emerges as a minimally invasive alternative to open surgical exploration. In this study, we present a case of thoracic aortic injury following thoracic pedicle screw fixation that was successfully managed with an endovascular approach.

Material and Methods: A 68-year-old male who underwent thoracic pedicle screw fixation for traumatic vertebral fracture was suspected of intraoperative aortic contact and subsequently underwent computed tomography (CT) angiography. Contrast-enhanced CT angiography revealed a malpositioned pedicle screw causing injury to the adjacent segmental thoracic aorta, while another screw was compressing the aorta without rupture. The patient was urgently taken to a hybrid operating room. Simultaneous thoracic endovascular aortic repair (TEVAR) was performed, and the penetrating screw was safely withdrawn.

Results: Immediate hemostasis was achieved after endovascular intervention, and no intraoperative complications occurred. Control angiography confirmed complete exclusion of the injured artery. No neurological deficits or hemodynamic instability developed in the postoperative period. There were no problems during follow-up.

Conclusion: Aortic injuries due to thoracic pedicle screw malposition are rare but carry a very high risk of mortality. Simultaneous TEVAR with screw withdrawal in a hybrid operating room provides an effective and safe treatment strategy in such cases. Early diagnosis, multidisciplinary teamwork, and rapid endovascular intervention are critical for achieving favorable clinical outcomes.

Keywords: Pedicle screws, aortic injuries, endovascular procedures

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DPP-10

Percutaneous closure of pseudoaneurysm of arcus aorta with atrial septal defect occluder device

Muzaffer Celiksoz

SBU Ankara Training and Research Hospital, Ankara, Türkiye

Abstract

Aim: This paper presents treatment of a patient with pseudoaneurysm of arcus aorta as a complication of aortic surgery percurtaneously with using an atrial septal defect occluder device (Amplatzer, Abbott Cardiovascular). Percutaneous closure may be an appropriate method for closing of aortic pseudoaneurysms in patients who have high surgical risk.

Material and Methods: Aortic pseudoaneurysms occur due to disturption of layers of aortic wall.1 Although the most frequent reason of aortic pseudoaneurysm formation is previous aortic or cardiac surgery, there are many other reasons like trauma, infections, inflammation, etc.1,2 The gold standart treatment for aortic pseudoaneurysm is surgical intervention but it is associated with high morbidity and mortality especially in patients with previous aortic or cardiac surgery.

Results: 37 years old male patient who had open surgery two times because of thoracic aortic aneurysm and post operative mediastinitis 6 months ago came emergency department with progressive shortness of breath and chest pain. There was an enlargement of mediastinum in posterior-anterior lung x-ray. Thorax computed tomography (CT) angiography scan was performed due to this finding and due to his aneurysm history. CT angiography reported that 71x65x52 cm^3 pseudoaneurysm on arcus aorta close to truncus brachiosephalicus, pressuring right pulmonary artery, truncus pulmonalis and left brachiosephalic vein as well (Figure 1). There was contrast extravasation from arcus aorta to pseudoaneurysm passing through an 8 mm sized neck. Transtorasic Echocardiography evaluation reported pseudoaneurysm on the neighborhood of arcus aorta, containing a 3.7x4.6 cm2 thrombus like mass on the inner wall of aneurysm and spontaneaus echo contrast inside. The patient was evaluated in the heart team consisting of cardiology and cardiovascular surgery. The risk of surgical treatment considered as high due to the location of the pseudoaneurysm, important anatomical sturctures on the neighborhood and previous surgical history. Therefore the patient considered for endovascular treatment. Thoracic Endovascular Aneurysm Repair theraphy would be also inappropriate due to the location of the pseudoaneurysm so we planned to use an atrial septal defect (ASD) occluder device off label for the treatment.

Conclusion: This case and similar cases in the literature show that percutaneous treatment of aortic pseudoaneurysm with occluder device can be a safer option especially in high risk patients. When long term folow-up data are available for patients who treated with this technique, comparisons can be made with open surgery which is the current gold standart treatment.

Keywords: Pseudoaneurysm, aort, asd, occluder.device

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DPP-11

Permanent dialysis catheter placement into the right atrium via thoracotomy

Abdulkadir Bilgic, Fatma Gul, Suleyman Sezer Yuksel, Murat Ozeren

Mersin University Faculty of Medicine, Department of Cardiovascular Surgery, Mersin, Türkiye

Abstract

Aim: Vascular access for hemodialysis is of vital importance in patients with chronic renal failure. However, in patients with a long history of dialysis, arteriovenous fistulas andcentral veins may become thrombosed. In such cases, standard central venous catheterization may not be feasible. When all alternative vascular access routes are exhausted,direct placement of a catheter into the right atrium is a rare but life-saving option. In this report, we present the case of a patient with completely depleted peripheralvascular access in whom a permanent catheter was placed directly into the right atrium via thoracotomy.

Material and Methods: Our case was a 79-year-old female patient with a history of coronary artery bypass grafting in 2019, hypertension, and chronic renal failure. As her existing arteriovenousfistulas and femoral venous catheter had also thrombosed, the patient, who was unable to continue dialysis, presented to our emergency department with complaints ofnausea and vomiting. In the emergency department, it was determined that all central veins were thrombosed, and peripheral dialysis catheterization could not be achieved.As a last resort, an emergency right thoracotomy was performed. The right atrium was opened, and a permanent dialysis catheter was directly placed into the atrial cavity.No hemodynamic instability was observed during the procedure.

Results: The catheter was successfully placed into the right atrium. Postoperatively, due to chronic renal failure and reoperation, the drainage was higher than expected. However,the patient was able to undergo dialysis in the intensive care unit without complications.

Conclusion: Exhaustion of central venous access routes represents a critical condition that increases mortality and morbidity in chronic hemodialysis patients. Previously, Oğuz et al.(2012) demonstrated that catheters inserted into the right atrium via mini-thoracotomy in a similar patient group were functional and safe. Furthermore, Philipponnet etal. (2020) emphasized in a systematic review that atrial vascular access, although rare, may still be a viable option. Depletion of vascular access in patients with chronicrenal failure is a life-threatening condition. In the presence of central venous thrombosis, catheter placement may not be possible. Direct catheterization of the rightatrium is a rarely performed but potentially life-saving method. Nevertheless, atrial catheterization carries risks of complications such as arrhythmia, perforation, rightatrial thrombus, and infection. Therefore, this technique should only be considered as a last resort in cases where all other access options have been exhausted.

Keywords: Thoracotomy, right atrium, hemodialysis catheter

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DPP-12

Multidisciplinary management of abdominal neuroblastoma with aortoiliac involvement and postoperative acute arterial embolism: A case report

Elif Tuzdelen, Timucin Sabuncu

Hacettepe University Hospital, Ankara, Türkiye

Abstract

Aim: Surgery for abdominal neuroblastoma can be challenging when tumors adhere to major vessels, increasing the risk of vascular injury and postoperative complications. This report highlights the multidisciplinary management of a pediatric patient with aortoiliac involvement and acute postoperative arterial embolism.

Material and Methods: A 15-year-old girl with ganglioneuroblastoma underwent laparotomy. The tumor was tightly adherent to the infrarenal aorta and common iliac arteries. Intraoperative injury to the aorta and iliac arteries necessitated immediate cardiovascular surgical intervention. The affected segments were resected, and an aortoiliac Y-graft interposition was performed using a 14-mm Dacron graft. On postoperative day one, acute ischemia developed in the right lower limb. Urgent femoral embolectomy was performed using Fogarty catheters to remove thrombus and restore perfusion.

Results: Pulsatile flow was successfully re-established intraoperatively, and distal limb perfusion was restored after embolectomy. The patient recovered without further complications and was discharged in good condition.

Conclusion: This case demonstrates the technical challenges of pediatric neuroblastoma surgery involving major vessels. Close collaboration between pediatric and cardiovascular surgery teams enabled successful management of both intraoperative vascular injury and postoperative arterial embolism. Early recognition and prompt intervention are essential to achieve favorable outcomes in complex pediatric oncologic surgery.

Keywords: Neuroblastoma, aortoiliac involvement, arterial embolism, vascular injury, multidisciplinary management

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DPP-13

Trachea-innominate artery fistula

Enes Salih Altinsoy, Ibrahim Burak Seker, Ahmet Deniz Kaya

Bursa Higher Education and Research Hospital, Cardiovascular Surgery Clinic, Bursa, Türkiye

Abstract

Aim: The innominate artery is located adjacent to the trachea. Both can be injured iatrogenically following various vascular and respiratory interventions. This can lead to life-threatening complications, including bleeding and respiratory distress. We present our approach to a patient who developed a fistula from the innominate artery to the trachea after tracheostomy.

Material and Methods: A 2-year-old boy with known Rett syndrome and neuromotor developmental delay was admitted for bronchopneumonia. Due to the prolonged need for intubation, the patient underwent a tracheostomy by ENT physicians. The patient, who was being monitored in the pediatric intensive care unit, experienced a decrease in his hematocrit; He was consulted by an ENT specialist due to oral and nasal hemorrhagic drainage. The tracheostomy cannula was briefly removed, and the patient was observed to have significant intratracheal bleeding. CT angiography was then performed, and the patient was evaluated simultaneously by interventional radiology and cardiovascular surgeons. A saccular aneurysm extending from the innominate artery to the common carotid artery was detected. Because the artery was fistulized into the trachea and was not suitable for endovascular treatment, the patient underwent emergency surgery.

Results: The patient underwent surgery to excise the fistula extending from the innominate artery to the trachea.The patient underwent emergency surgery. Under general anesthesia, an incision was made from the interjugular region to the right sternocleidomastoid muscle. The sternum was incised for 2 cm. The innominate vein was then accessed and resuspended. The innominate artery, right subclavian artery, and right common carotid artery were then resuspended. After heparinization, cross clamps were placed. The innominate artery was found to be fistulized into the trachea. The fistulized area was excised. The innominate artery was primarily repaired. The tracheal defect was then closed primarily. Because the right hemithorax was observed to be patent, a tube thoracostomy was performed. The sternum was approximated with prolene sutures. A minivac drain was placed in the incision site, and the layers were closed properly.The patient was transferred to the pediatric intensive care unit postoperatively. The drain was monitored. The patient, who remains intubated, has no persistent bleeding from the intubation tube, oral or nasal bleeding.

Conclusion: Various complications can develop after tracheostomy. Tracheoinnominate artery fistula can cause sudden death due to massive intratracheal bleeding. Furthermore, it can lead to lung infections and respiratory failure. Emergency surgical treatment is required when endovascular treatment is not feasible due to the location.

Keywords: Fistula, tracheostomy, tracheo-innominate artery

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DPP-14

Successful management of a patient with complicated type 1 aortic dissection with redo coronary bypass

Veli Burak Tackin[1], Sahin Kapan[1], Ismail Kakillioglu[1], Kubra Gozacik Karakoc[1], Erkan Koklu[1], Fatih Yilmaz[1], Ilker Ince[2], Nevzat Erdil[1]

[1]Antalya City Hospital, Antalya, Türkiye
[2]Ankara Bilkent City Hospital, Ankara, Türkiye

Abstract

Aim: Aortic dissection surgery carries a high mortality risk, and this risk is much higher in patients who undergo redo surgery. We aim to present a patient with a history of coronary artery bypass surgery who underwent surgery for type 1 aortic dissection and the successful treatment method.

Material and Methods: A 62-year-old man with coronary artery bypass grafting underwent ascending aortic graft interposition, hemiarcus replacement, and saphenous vein reimplantation for type 1 aortic dissection. The patient was extubated at 48 hours postoperatively and transferred from the intensive care unit to the ward on the 3rd postoperative day. While discharge was planned for the 7th postoperative day, abdominal pain was observed during ward follow-up, leading to the detection of a false lumen nearly completely occluding the superior meseneteral artery lumen. A tevar graft was implanted, starting at the supracoronary level and continuing into the descending aorta. The graft was punctured, and a stent was implanted in the brachiocephalic artery.

Results: One month after being discharged with full recovery, he underwent coronary angiography for a non-ST elevation myocardial infarction. A LAD stent was implanted. Five months later, due to complaints of weakness in his right arm and leg, a retrograde approach was made through the left common carotid artery to puncture the tavar graft. A stent was implanted in the common carotid artery. He was discharged with full recovery on the second day after the procedure.

Conclusion: Survival to hospitalization may vary depending on the presence and type of malperfusion; mesenteric, coronary, and cerebral malperfusion are associated with the highest in-hospital mortality rates. Early diagnosis and rapid decision-making with hybrid approaches when necessary are life-saving in patients with complicated aortic dissection.

Keywords: Aortic dissection, ischemia, endovascular, vascular

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DPP-15

Multimodal neuromonitoring in carotid endarterectomy: A five-patient case series integrating PI and PVI

Alperen Kutay Yildirim, Furkan Ozkan, Gokhan Arslan, Gokhan Erol, Kubilay Karabacak

University of Health Sciences, Gulhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Carotid endarterectomy (CEA) remains a key intervention to prevent recurrent stroke in patients with significant carotid stenosis. A major intraoperative challenge is timely recognition of cerebral ischemia during carotid clamping. While near-infrared spectroscopy (NIRS) and electroencephalography (EEG) are guideline-endorsed, no single neuromonitoring modality has achieved gold-standard sensitivity and specificity. This case series aims to explore the feasibility of a multimodal approach integrating cerebral (NIRS, EEG) and systemic hemodynamic (perfusion index [PI], pleth variability index [PVI]) parameters.

Material and Methods: This retrospective case series included five consecutive patients with symptomatic carotid artery stenosis (≥70% by NASCET) who underwent CEA under standardized general anesthesia. Multimodal neuromonitoring included bilateral NIRS (monitoring regional cerebral oxygenation), continuous EEG (assessing cortical electrical activity), PI (reflecting peripheral microcirculation), and PVI (indicating fluid responsiveness). Critical thresholds were predefined: > 20% NIRS desaturation, new EEG asymmetry or slowing, PI < 1.0, and PVI > 13%.

Results: All five patients maintained stable neuromonitoring profiles during carotid cross-clamping. NIRS values remained within baseline ranges without significant desaturation, EEG showed no signs of ischemia, PI values were consistently above the critical threshold, and PVI values indicated hemodynamic stability. No intraoperative ischemia was detected, and no patient required shunt placement. Postoperatively, there were no cases of stroke, transient ischemic attack, or cognitive decline within 30 days of follow-up.

Conclusion: This small case series suggests that a multimodal neuromonitoring protocol integrating PI and PVI with conventional NIRS and EEG provides a comprehensive and complementary assessment of cerebral and systemic physiology during CEA. By expanding on guideline-recommended cerebral monitoring, this approach offers real-time insights into both oxygenation and hemodynamic stability, thereby strengthening intraoperative decision-making. While these findings are promising, they are limited by the small sample size and retrospective design. Larger, prospective studies are needed to determine if this broader monitoring strategy can lead to improved perioperative outcomes and become a standardized practice.

Keywords: Carotid endarterectomy, near-infrared spectroscopy, electroencephalography, perfusion index, pleth variability index

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DPP-16

Beyond conventional boundaries: TEVAR for ascending aortic pseudoaneurysm following valve surgery

Koray Apaydin, Mustafa Etli, Veli Burak Tackin, Gokhan Ozerdem, Nevzat Erdil

Antalya City Hospital, Cardiovascular Surgery, Antalya, Türkiye

Abstract

Aim: To demonstrate the feasibility and safety of thoracic endovascular aortic repair (TEVAR) as an alternative treatment strategy for ascending aortic pseudoaneurysms in high-risk patients, particularly when conventional open surgery poses excessive morbidity and mortality risks.

Material and Methods: A 59-year-old female patient, with a history of mitral valve replacement and tricuspid annuloplasty via median sternotomy, presented with new-onset chest pain and dyspnea seven months after surgery. CT angiography revealed a saccular ascending aortic pseudoaneurysm, likely originating from the previous cannulation or antegrade cardioplegia site.Due to elevated surgical risk related to prior sternotomy, mediastinal adhesions, and pseudoaneurysm proximity to the sternum, an endovascular approach was selected. The procedure was performed under general anesthesia with vascular access via the right femoral and brachial arteries. A temporary pacing lead was inserted through the femoral vein. Rapid pacing and brief ventricular fibrillation were induced to minimize cardiac motion during deployment.A thoracic stent graft (Ankura™ TAA46/46/60 mm) was deployed 1.5 cm above the right coronary ostium. Final angiography confirmed accurate positioning with complete exclusion of the pseudoaneurysm and no evidence of endoleak.

Results: The patient tolerated the procedure well without any intraoperative complications. She was extubated in the catheterization laboratory and transferred to the cardiovascular surgery intensive care unit for close monitoring. Postoperative recovery was uneventful.Control imaging demonstrated proper stent graft placement in the ascending aorta, with no evidence of type I or type II endoleak. Coronary and supra-aortic branch perfusion was preserved. No signs of infection, neurological deficit, or access site complications were observed. The patient was discharged on postoperative day 5 in stable condition and remained symptom-free at follow-up.

Conclusion: TEVAR can be a safe and effective alternative in select patients with ascending aortic pseudoaneurysms when conventional open repair carries prohibitive risk. This case highlights the expanding role of endovascular solutions for complex thoracic aortic pathologies and the importance of individualized, multidisciplinary decision-making in high-risk cardiac patients.

Keywords: Ascending aortic pseudoaneurysm, thoracic endovascular aortic repair, aortic cannulation complication, off-label tevar, thoracic endovascular aortic repair

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DPP-17

When endovascular retrieval fails: Open surgical removal of an inferior vena cava filter

Gokce Sirin

Ataköy Medicana Hospital, İstanbul, Türkiye

Abstract

Aim: Inferior vena cava (IVC) filters are lifesaving in patients with acute deep vein thrombosis and high risk of pulmonary embolism. However, long-term placement or malpositioned filters can result in severe complications such as venous wall penetration, migration, fracture, thrombosis, and stenosis. The risk of complications is particularly increased when filters are not retrieved in a timely manner. In cases where endovascular retrieval fails due to filter embedment or penetration into the vessel wall, open surgical removal becomes a viable and effective option. In our case,direct venotomy and removal of the embedded filter followed by patch venoplasty provided a safe reconstruction method, ensuring long-term venous patency and preventing stenosis.

Material and Methods: A 53-year-old female patient underwent arthroscopy for a medial meniscus root tear in the left knee two weeks earlier.She presented with swelling and pain in the left leg. Venous Doppler ultrasonography revealed extensive venous thrombosis involving the iliac vein, superficial femoral vein, and deep femoral vein. The patient was diagnosed with iliofemoral venous thrombosis and underwent successful inferior vena cava (IVC) filter placement followed by pharmacomechanical thrombolysis. However, during attempted retrieval, the filter could not be collapsed and was pulled down into the right common femoral vein confluence, where it remained lodged.The patient was referred to our clinic for surgical removal.

Results: Under general anesthesia, a right femoral incision was performed,and the skin and subcutaneous tissue were dissected. Surrounding tissues revealed extensive hematoma and ecchymosis.Through blunt and sharp dissection, the common femoral vein, superficial femoral vein, deep femoral vein, and the great saphenous vein were exposed. Intraoperative exploration demonstrated that the struts of the IVC-filter had penetrated the venous wall. The common femoral, superficial femoral, and deep femoral veins were encircled with vessel loops.Venotomy was performed,including the filter region. The protruding filter-struts were carefully cut with wire cutters to avoid venous wall injury, and the filter was successfully removed. Subsequently, the great saphenous vein was harvested and used as a patch for venoplasty to prevent postoperative venous stenosis.The procedure was completed without complications.The patient was discharged on the third postoperative day with low molecular weight heparin.Follow-up examinations showed no complications.At the 9-month postoperative follow-up,the patient remained asymptomatic under medical-therapy.

Conclusion: IVC filters should be retrieved as early as possible to minimize long-term complications.When endovascular retrieval is not feasible,surgical removal with venous reconstruction represents a safe and effective alternative.A multidisciplinary approach is crucial in managing such complex cases to preserve venous integrity and optimize long-term outcomes.

Keywords: Vena cava filter, iliofemoral venous thrombosis, endovascular failure, surgical removal, venous reconstruction

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DPP-18

Endovascular management of iatrogenic aortic rupture caused by pedicle screw penetration

Ahmet Samil Demirok, Ilker Ince, Mustafa Enes Bostankolu

Ankara Etlik City Hospital Cardiovascular Surgery Clinic, Ankara, Türkiye

Abstract

Aim: To present a rare but life-threatening vascular complication—iatrogenic aortic rupture—resulting from malpositioned thoracic pedicle screw, and to discuss its successful endovascular management.

Material and Methods: A 27-year-old female patient had undergone posterior spinal fixation following a motorcycle accident. She was admitted to our hospital's physical therapy unit for rehabilitation. Persistent back pain led to repeated high-resolution thoracic CT imaging, which revealed a left-sided hemothorax. Multidisciplinary consultation identified a malpositioned T6 pedicle screw penetrating the descending thoracic aorta.

Results: Emergency intervention was planned. In a hybrid operating room, under general anesthesia and supine position, a 10–20% oversized thoracic endovascular stent graft (Hercules, MicroPort, China) was implanted via right femoral artery access at zone 2 level. Afterward, the patient was placed in prone position, and T5–T6 pedicle screws were removed. Intraoperative control angiography confirmed successful sealing with no extravasation. A left chest tube was then placed percutaneously, and hemothorax was drained. The patient experienced no postoperative complications and was discharged back to rehabilitation. At 45-day follow-up, thoracic CT showed a stable aortic repair without endoleak or graft migration.

Conclusion: Iatrogenic aortic injury after spinal surgery is rare but potentially fatal. In patients presenting with unexplained thoracic symptoms postoperatively, vascular complications should be considered. Preoperative CT with multiplanar reconstructions is critical for surgical planning. When major vascular injury is suspected, a hybrid OR setting enabling simultaneous endovascular and neurosurgical intervention is essential. Prophylactic stent graft placement prior to screw removal minimizes the risk of catastrophic bleeding. Endovascular techniques offer a less invasive, effective treatment and should be considered the gold standard in selected cases.

Keywords: Aortic rupture, endovascular procedures, vascular surgical procedures

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DPP-19

A typical koebner response: Psoriasis remission following endovenous laser ablation for venous insufficiency : A novel case report and literature review

Gokhan Arslan, Yigit Tokgoz

University of Health Sciences, Gulhane Faculty of Medicine, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: The aim of this case report is to present the unexpected remission of psoriasis lesions following endovenous laser ablation (EVLA) in a patient with co-existing venous insufficiency and to discuss the potential mechanisms underlying this observation.

Material and Methods: We present the case of a 41-year-old male patient with psoriasis vulgaris of 25 years duration and concomitant venous insufficiency. The patient's varicose veins were carefully evaluated considering the risk of the Koebner phenomenon, and the patient opted for the EVLA procedure, a thermal treatment.

Results: Surprisingly, following the EVLA procedure, the patient's psoriatic lesions on his left lower extremity achieved complete remission. This unexpected improvement began within a few weeks of the procedure and culminated in complete remission within six months.

Conclusion: While the Koebner phenomenon suggests that trauma may exacerbate psoriasis, this case demonstrates that controlled trauma can paradoxically lead to psoriasis remission. This case report highlights the need for further research to illuminate the complex relationship between venous insufficiency treatments and psoriasis activity. Understanding these mechanisms could inform future treatment strategies.

Keywords: Psoriasis, koebner phenomenon, venous insufficiency, varicose veins

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DPP-20

Coil embolization in a warfarin-user with mechanical aortic valve following vascular trauma

Busra Karakoc Kaplan, Ceylan Gurcan, Mustafa Enes Bostankolu, Ali Aghayev, Ahmet Erkam Cevik, Medine Sarac, Levent Altinay

Etlik City Hospital, Ankara, Türkiye

Abstract

Aim: Coil embolization is a minimally invasive procedure in which small, spiral-shaped metal coils are placed into blood vessels to block blood flow, commonly used in limb or trunk arteries. Compared to open surgery, it offers lower morbidity.This report presents a case of a patient with a mechanical aortic valve on warfarin who underwent endovascular coil embolization due to vascular trauma.

Material and Methods: A 63-year-old male presented to the emergency department after sustaining bilateral lower extremity gunshot wounds. He was conscious, cooperative, and oriented. There was no active bleeding, but a hematoma was present on the lateral aspect of the left thigh. Distal pulses were palpable. His medical history included an aortic valve replacement 25 years ago, and he was on warfarin and metoprolol therapy.Laboratory results were: hemoglobin 9.1 g/dL, hematocrit 27.3%, platelets 156 $\times 10^3/\mu L$, creatinine 0.92 mg/dL, and INR 3.94.CT angiography revealed contrast extravasation from a lateral intramuscular branch of the left profunda femoris artery. During observation, hemoglobin dropped to 7.8 g/dL, and urgent intervention was planned.In a hybrid operating room, a left lower extremity arteriogram was performed via right femoral artery access. The site of extravasation was confirmed. A microcatheter was advanced into the injured vessel, and coil embolization was performed using two 4 mm × 8 cm and one 4 mm × 12 cm coils. Follow-up angiography confirmed complete cessation of bleeding.

Results: In patients with mechanical heart valves on anticoagulants, open surgery poses a high risk due to potential bleeding and the need to interrupt anticoagulation, which may cause valve thrombosis. Additionally, accessing injured vessels in vascular trauma can be challenging due to their anatomical location. Therefore, endovascular approaches like coil embolization offer a safer and effective alternative in selected cases.

Conclusion: Coil embolization can be a lifesaving endovascular option in emergency vascular trauma, particularly in patients where anticoagulation cannot be safely discontinued and open surgery is high risk or not feasible.

Keywords: Coil embolisation, vascular trauma, emergency

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DPP-21

Carotid web syndrome: An overlooked anatomical risk in ischemic stroke etiology

Hakan Guven

Medical Park Bursa Hospital, Bursa, Türkiye

Abstract

Aim: Cryptogenic strokes account for a significant portion of ischemic strokes, particularly in young patients without traditional vascular risk factors. Among these cases, an underrecognized vascular anomaly known as the carotid reticulum (CRA), a thin, membranous, intimal prominence located in the proximal internal carotid artery, has recently emerged as a potential embolism source. This presentation aims to summarize the anatomic, pathophysiologic, and therapeutic aspects of carotid reticulum syndrome and discuss its clinical significance for vascular surgeons.

Material and Methods: A comprehensive literature review was conducted for the period 2015–2024, including case series, observational studies, and retrospective analyses that documented carotid web lesions diagnosed by DSA, CTA, or high-resolution MRI. The clinical outcomes of patients managed with medical therapy versus surgical or endovascular interventions were comparatively analyzed.

Results: Carotid webs are typically located along the posterior wall of the proximal internal carotid artery and are frequently missed on standard Doppler ultrasound. While antiplatelet therapy alone is associated with high rates of stroke recurrence (> 25%), surgical endarterectomy or stenting has been shown to reduce recurrence to below 5%. Carotid web is histologically related to the fibromuscular dysplasia spectrum and induces turbulent flow, promoting thrombus formation and distal embolization.

Conclusion: Carotid web represents a clinically significant and often underdiagnosed cause of ischemic stroke in younger patients. Incorporation of advanced imaging modalities into diagnostic algorithms may enhance detection and prevent secondary strokes through definitive surgical intervention. Increased awareness of this distinct vascular entity among vascular surgeons is essential for improved patient outcomes.

Keywords: Carotid web, ischemic stroke, non-atherosclerotic carotid lesions, young stroke patients, intimal fibromuscular dysplasia

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DPP-22

Effect of caffeic acid phenethyl ester in doxorubicin induced descending aorta damage

Olcay Murat Disli[1], Nevzat Erdil[2], Baris Akca[1], Onural Ozhan[1], Merve Durhan[1], Azibe Yildiz[1], Yilmaz Cigremis[1]

[1]İnonu University, Malatya, Türkiye
[2]Antalya City Hospital, Antalya, Türkiye

Abstract

Aim: Doxorubicin (DOX) is a widely used chemotherapeutic agent known to cause cardiotoxicity and vascular damage as adverse effects. This study aimed to investigate the potential protective effect of Caffeic Acid Phenethyl Ester (CAPE), a well-known antioxidant agent, against DOX-induced damage in the descending aorta.

Material and Methods: A total of 28 adult Wistar albino rats were randomly divided into four groups: Control, DOX, CAPE+DOX, and CAPE. DOX was administered intraperitoneally at a dose of 10 mg/kg for 3 consecutive days, while CAPE was administered at 10 µmol/kg for 10 days. The control group received saline and ethanol as vehicles. Oxidative stress markers including glutathione (GSH), malondialdehyde (MDA), copper-zinc superoxide dismutase (CuZn-SOD), and catalase (CAT) were measured in the descending aorta. In addition, histopathological changes, particularly tunica media thickness, were evaluated.

Results: GSH levels were significantly higher in the CAPE group compared to the other groups ($P < 0.05$). However, no significant differences were found among the groups in terms of MDA, CuZn-SOD, or CAT levels ($P > 0.05$). Histologically, the tunica media of the aorta was significantly thinner in the DOX group compared to the CAPE and CAPE+DOX groups. The tunica media thickness in the CAPE+DOX group was significantly higher than in the DOX group, indicating a protective effect of CAPE on vascular structure.

Conclusion: CAPE treatment appears to ameliorate doxorubicin-induced structural damage in the aortic wall, particularly by preventing tunica media thinning. However, its effect on oxidative stress markers was limited. These findings suggest that CAPE may offer partial protection against vascular damage induced by doxorubicin, primarily through histopathological improvements rather than through strong antioxidant activity.

Keywords: Doxorubicin, aorta, antioxidant, rat

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DPP-23

Chronic leg ischemia caused by arterial bullet embolization

Tuna Demirkiran, Tayfun Ozdem, Furkan Burak Akyol, Gokhan Erol, Kubilay Karabacak

University of Health Sciences, Gulhane Training and Research Hospital, Department of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: Intravascular shrapnel or bullet embolization following gunshot injuries is an extremely rare phenomenon, with fewer than 200 cases reported over the past century. This report aims to present a case of chronic leg ischemia caused by arterial bullet embolization in a young military personnel.

Material and Methods: A 22-year-old male soldier with a history of gunshot injury was evaluated. He had been hospitalized four months earlier due to pneumohemothorax. Clinical and imaging studies were performed to identify the cause of his chronic leg ischemia.

Results: Diagnostic tests revealed a 21 mm bullet lodged in the popliteal artery, resulting in chronic arterial obstruction and ischemic symptoms in the affected limb. The patient was scheduled for elective vascular surgery for bullet removal and revascularization.

Conclusion: Although rare, bullet embolization should be considered in patients with a history of gunshot injuries presenting with ischemic symptoms. Early recognition and appropriate surgical intervention are essential for preventing complications and ensuring successful outcomes.

Keywords: Foreign bodies, ischemia, vascular surgery, military medicine

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DPP-24

Complex aortic reoperation with hybrid total arch replacement following previous ascending aortic replacement for type 1 dissection: A giant aneurysm case

Sahin Bozok, Ahmet Daylan, Omer Faruk Rahman, Alper Ozbakkaloglu, Daglar Cansu, Mert Arslangilay

Bakırçay University, İzmir, Türkiye

Abstract

Aim: Aortic aneurysms and dissections are among the most demanding conditions in cardiovascular surgery, associated with high perioperative and long-term risks. Reoperative cases carry additional challenges due to adhesions and altered anatomy. Hybrid strategies combining open and endovascular approaches aim to reduce operative morbidity and improve outcomes. This report describes a patient managed with hybrid total arch replacement using a novel Xuper graft, followed by thoracic endovascular aortic repair (TEVAR).

Material and Methods: A 61-year-old male with a history of type 1 aortic dissection had previously undergone ascending aortic replacement and left carotid interposition after glomus tumor excision. During follow-up, progressive dilatation of the distal dissected segments was noted. Considering the complexity, total arch replacement was planned with the Xuper graft, a novel open surgery stent graft incorporating stented branches for the left carotid artery, left subclavian artery, and proximal descending aorta. Its pre-sewn multi-branched configuration facilitated rapid supra-aortic vessel reimplantation and anastomosis, reducing cerebral and visceral ischemia times compared to conventional prostheses.

Results: The arch replacement was successfully completed, followed by TEVAR to extend the repair distally and exclude the dissected segments. This staged approach enabled complete thoracic aortic reconstruction while minimizing the risks of a single extensive open procedure. The postoperative course was uneventful, and early follow-up showed satisfactory graft function.

Conclusion: To our knowledge, this is the first reported case in Turkey of hybrid total arch replacement with a Xuper graft followed by TEVAR, and the first such experience in our clinic. The case highlights the feasibility of combining novel graft technologies with staged endovascular repair in complex aortic pathologies. By shortening ischemia times and facilitating supra-aortic reconstruction, the Xuper graft may enhance surgical safety and efficiency. Further studies are required to clarify its role in modern aortic surgery.

Keywords: Aortic dissection, aortic aneurysm, thoracic; aortic arch/surgery, blood vessel prosthesis implantation, endovascular procedures

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DPP-25

Closing the gap: A single-center comparison of percutaneous vs. surgical femoral cannulation in minimally invasive mitral valve surgery

Tuna Demirkiran, Isil Tasoz Ozdas, Murat Kadan, Alihan Bastan, Nihan Tuten, Gokhan Erol, Kubilay Karabacak

University of Healt Sciences, Gulhane Training and Research Hospital, Depertment of Cardiovascular Surgery, Ankara, Türkiye

Abstract

Aim: This study aims to evaluate the safety and efficacy of percutaneous femoral cannulation compared to the standard surgical cut-down approach in minimally invasive mitral valve surgery (MIMVS).

Material and Methods: We retrospectively analyzed data from 104 patients who underwent MIMVS at our center between September 2018 and May 2025. The study cohort included 78 patients who received percutaneous cannulation and were compared to a historical control group of 26 patients who underwent the conventional surgical cut-down procedure. Patient characteristics, perioperative and postoperative outcomes, and specifically, access site complications were analyzed.

Results: A total of 104 patient records were reviewed. The percutaneous cannulation group had a significantly lower rate of access site complications and wound infections compared to the surgical cut-down group. The surgical cut-down group had a 3.8% complication rate (wound infection and lymphocele), while no complications were observed in the percutaneous cannulation group. The average hospital length of stay was shorter in the percutaneous cannulation group (6.4 ± 2.3 days) compared to the surgical cut-down group (7.6 ± 3.1 days; $p < 0.05$). However, the intensive care unit stay was longer in the percutaneous cannulation group (2.2 ± 1.1 days) compared to the surgical cut-down group (1.6 ± 0.4 days; $p < 0.01$). No significant differences were found between the groups regarding perioperative mortality, major vascular complications, or stroke rates.

Conclusion: Our findings suggest that the percutaneous approach for femoral cannulation in MIMVS is a safer method associated with lower morbidity. This technique may contribute to faster patient recovery and a shorter hospital stay, making it a viable and beneficial alternative to the traditional surgical cut-down method.

Keywords: Cannulation, cardiac surgical procedures, heart valve prosthesis implantation, femoral artery, retrospective studies

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DPP-26

One pathology, multiple sides: Midaortic syndrome

Osman Eren Karpuzoglu, Naci Cem Aydogdu

Dr Siyami Ersek GKDC Research and Training Hospital, İstanbul, Türkiye

Abstract

Aim: Mid-aortic syndrome (MAS) is a rare vascular disorder characterized by segmental or diffuse narrowing of the distal thoracic and/or abdominal aorta, often involving visceral and renal artery origins. Accounting for 0.5–2% of aortic coarctations, MAS predominantly affects young adults. Its etiology includes congenital anomalies, inflammatory diseases, or idiopathic forms. Patients most frequently present with severe, treatment-resistant hypertension due to renal artery involvement, but symptoms such as claudication or abdominal angina may also occur. Computed tomographic angiography (CTA) is essential for diagnosis, defining the extent of stenosis and collateral circulation. MAS is associated with high morbidity and mortality, and while endovascular approaches have gained attention, surgical revascularization remains the mainstay for durable outcomes.This study aims to highlight the diverse clinical presentations of MAS and emphasize that therapeutic strategies must be tailored individually due to marked variability in disease course and management, by presenting two different cases.

Material and Methods: The first case was a 26-year-old woman referred with refractory headaches and uncontrolled hypertension. Imaging revealed complete interruption of the descending aorta with reconstitution only at the iliac arteries. The celiac trunk, superior mesenteric artery (SMA), and both renal arteries were not identifiable. Surgical repair included an ascending-to-abdominal aortic bypass with a size 20 Dacron graft. A bifurcated size 14/7 graft was anastomosed to previous graft and used to reconstruct iliac flow. The hepatic artery and SMA were revascularized with a 7 mm Dacron graft, while the left renal artery was connected to the SMA graft via a saphenous conduit. The right renal artery was reimplanted directly into the neo-aorta with a 7 mm graft.

Results: The second case was a 27-year-old man presenting with bilateral claudication under 100 meters. CTA demonstrated severe narrowing of the descending aorta from just distal to the left subclavian artery to the T9 level, with extensive collateral formation. Through a left thoracotomy, the hypoplastic segment was exposed, and an interposition bypass was performed using a 16 mm Dacron graft between healthy proximal and distal aortic segments under lateral clamping.

Conclusion: These cases demonstrate how MAS may present with vastly different symptoms and anatomical involvement. CTA remains the diagnostic modality of choice to delineate stenotic segments and collateral circulation. Management strategies vary from conservative approaches to complex surgical reconstructions requiring reimplantation of multiple visceral vessels. Surgery, though demanding, provides definitive symptom relief and prevents long-term complications in patients with persistent or severe manifestations. ALL THE CASES HAVE CTA AND OPERATION IMAGES.

Keywords: Midaortic syndrome, vascular medicine, midaortic syndrome, vascular medicine

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DPP-27

A rare longterm complication of evar: Detached graft

Yigit Kose, Okan Ersan, Fahmin Samadli, Gokhan Kiral

Dr Siyami Ersek GKDC Research and Training Hospital, İstanbul, Türkiye

Abstract

Aim: Abdominal aortic aneurysm (AAA) is a potentially life-threatening condition, and endovascular aneurysm repair (EVAR) has become an established alternative to open surgery due to its lower perioperative morbidity and mortality. However, EVAR is associated with long-term complications, most notably endoleaks. Type I endoleak, caused by an incomplete proximal or distal seal, maintains direct pressure within the aneurysm sac and carries a high risk of rupture, often necessitating reintervention. Herein, we report a case of a patient with type I endoleak who underwent open repair with aortobifemoral bypass and EVAR graft excision.

Material and Methods: A 66-year-old male patient presented with abdominal pain at the emergency department. The patient had previously undergone EVAR for AAA 5 years ago. Computed tomography angiography showed a type I endoleak with an abdominal aneurysm sac with a width of 10 cm. The patient was hemodynamically stable, with no signs of peripheral ischemia. The patient had a history of peripheral arterial disease leading to right leg amputation, previous PCI history, and bilateral carotid artery interventions. Due to the high rupture risk, the patient was scheduled for open surgical repair via laparotomy. Intraoperatively, with blunt and sharp dissection, the aneurysmal sac was carefully dissected, and a cross-clamp was placed at a suprarenal level due to the juxtarenal adjustment of the aneurysmal sac. After the clamp, the aneurysmal sac opened carefully, and the EVAR graft appeared detached. The EVAR graft was explanted, and a Dacron graft was used to perform an aortobifemoral bypass. After the proximal anastomosis, the cross-clamp was transferred to the infrarenal level. The postoperative course was uneventful; the patient was extubated in the early postoperative period with stable hemodynamics and was discharged in good condition.

Results: Type I endoleaks remain a significant limitation of EVAR and frequently require secondary intervention in the long term. Open approach options after EVAR are technically challenging, particularly in bigger aneurysmal sacs and high-risk patients with multiple comorbidities. In this case, despite a significant enlargement in the aneurysmal sac and detachment of the EVAR graft, surgical management was successful and provided definitive exclusion of the aneurysm sac and the EVAR graft.

Conclusion: Open surgical approach with graft explantation and aortobifemoral bypass can be a safe and effective treatment in patients with progressive aneurysm sac enlargement due to type I endoleak after EVAR, even in those with substantial comorbidities.

Keywords: Abdominal aortic aneurysm, endovascular repair, endoleak

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DPP-28

Creation of arteriovenous fistula by forearm endoscopic basilic vein transposition

Mustafa Baris Kemahli, Cuneyt Narin

Acıbadem İzmir Kent Hospital, İzmir, Türkiye

Abstract

Aim: Basilic vein transposition is a valuable option for autogenous vascular access in the creation of arteriovenous fistula (AVF) in the upper extremity. However, long skin incisions may lead to wound complications. This case report aims to demonstrate the feasibility and advantages of basilic vein transposition in the forearm using an endoscopic harvesting technique.

Material and Methods: A 68-year-old female patient on a hemodialysis program was evaluated due to thrombosis of a pre-existing radiocephalic AVF. Physical examination and imaging revealed an adequately calibrated basilic vein in the forearm and a well-developed radial artery. Anastomosis with the radial artery was planned. Under regional anesthesia, the basilic vein was exposed through a 2.5-cm distal forearm incision and freed along the forearm using an endoscopic vein harvesting system. After creating an appropriate tunnel, the basilic vein was transposed to the radial artery, and an end-to-side anastomosis was performed.

Results: The basilic vein was successfully prepared with sufficient length and quality. A palpable thrill was obtained after anastomosis. On postoperative day 36, Doppler ultrasonography showed a fistula diameter of 5 mm. The patient was able to undergo effective dialysis, and no wound complications were observed.

Conclusion: Endoscopic preparation for forearm basilic vein transposition eliminates the need for long skin incisions and allows safe surgery with less dissection. This approach may help reduce postoperative complications, particularly in patients at risk of impaired wound healing.

Keywords: Basilic vein transposition, vascular access, endoscopic vein harvesting, arteriovenous fistula

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DPP-29

Endovascular strategies for long total iliac artery occlusions: Early experience from a newly established angiography center

Tarik Tastekin

Burdur State Hospital, Burdur, Turkiye

Abstract

Aim: To present our early institutional experience with endovascular treatment of long total iliac artery occlusions extending from the common iliac bifurcation into the external iliac artery, and to evaluate technical success and early clinical outcomes.

Material and Methods: Between January and July 2025, six patients with long total occlusions of the common iliac artery extending into the external iliac artery underwent endovascular intervention at our center. All procedures were performed by a single surgeon in a newly established angiography unit. Treatment strategies included balloon angioplasty, stent implantation, and atherectomy in selected cases. Technical success was defined as successful crossing and revascularization of the occlusion with restoration of continuous in-line flow. Patients were evaluated clinically and with Doppler ultrasonography during the first six months after the procedure.

Results: Successful recanalization was achieved in 5 of 6 patients (technical success rate 83%). In all successful cases, full luminal patency was obtained. One patient with a pre-existing common iliac artery stent underwent in-stent atherectomy followed by balloon angioplasty. In another patient with a high calcification burden, atherectomy was performed in the external iliac artery segment; however, due to residual stenosis, stent implantation was subsequently required. Three additional patients underwent stent implantation following balloon predilatation.During the six-month follow-up period, Doppler ultrasonography demonstrated normal flow velocities in the femoral arteries of all successfully treated patients. On physical examination, femoral pulses were consistently palpable. Claudication symptoms showed significant improvement in all cases. No major periprocedural complications were observed.

Conclusion: Endovascular treatment of long total iliac occlusions extending from the bifurcation into the external iliac artery is feasible and effective even in newly established angiography centers. These early single-surgeon, single-center results emphasize both the applicability of complex endovascular strategies and the challenges posed by heavily calcified lesions and difficult re-entry. Although limited by the small number of patients and the absence of a comparative group, our findings are consistent with previously reported technical success rates of 75–90% for endovascular management of iliac occlusions. Larger studies with longer follow-up are warranted to further validate these observations.

Keywords: Peripheral arterial disease, chronic total occlusion, endovascular procedures, vascular patency

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DPP-30

Post-TEVAR aorto-esophageal fistula: A rare case presenting with an atypical clinical picture

Serkan Sonmez[1], Ozer Gazioglu[1], Abdurrahman Seramet[1], Volkan Burak Taban[2]

[1]Aksaray Training and Research Hospital, Aksaray, Turkiye
[2]Aksaray University Faculty of Medicine, Aksaray, Turkiye

Abstract

Aim: Thoracic endovascular aortic repair (TEVAR) has become the standard treatment for thoracic aortic aneurysms and dissections. However,one rare but fatal complication is aorto-esophageal fistula (AEF). Its reported incidence in the literature is less than 0.4%,and its mortality rate is extremely high.The clinical presentation typically involves findings known as Chiari's triad:pain or dysphagia in the mid-thoracic region,sentinel hematemesis of warning nature,and subsequent massive,often fatal gastrointestinal bleeding.

Material and Methods: A 60-year-old female patient presented to the emergency department with nonspecific abdominal pain.After acute coronary syndrome was ruled out, CT angiography revealed a fusiform aneurysm in the thoracic aorta, an ulcerated intramural hematoma, and contrast extravasation. The aneurysmal segment was closed with emergency TEVAR. The patient was stable after the procedure but reported progressively increasing back and chest pain in the months following discharge. Follow-up CT angiography and echocardiography showed the stent-graft was normal. However, due to persistent pain complaints, an esophagogastroscopy performed at an external center revealed ulceration and a fistula opening on the posterior wall of the esophagus at 25 cm from the incisors; protrusion of the stent-graft into the esophageal lumen was observed within the defect. No gastrointestinal bleeding or associated hemoglobin decrease was detected at the time of presentation. The patient was referred to an external center for further evaluation and treatment from an esophageal surgery perspective.

Results: .

Conclusion: AEF after TEVAR usually manifests weeks to months after the procedure.The pathogenesis involves mechanical pressure exerted by the graft ends on the esophageal wall and accompanying infection. In large series in the literature, the 6-month mortality rate approaches 50% after endovascular treatment alone, whereas this rate is significantly lower in cases where surgical repair is added. However, most patients are not suitable for open surgery due to their general condition.Esophageal stents and long-term antibiotic therapy may provide palliative benefit, but the chance of a permanent cure is limited.As in our case,unexplained refractory thoracic pain may also be a precursor to fistula.Furthermore, most AEF cases present to the hospital with gastrointestinal bleeding and decreased hemoglobin, but our case differed from most cases in the literature in that no decrease in blood values was detected in the patient.Therefore, in patients who have undergone TEVAR,not only hematemesis but also atypical symptoms should be carefully evaluated. It should be kept in mind that AEF may have developed in patients who describe pain but do not have a decrease in hemoglobin, even if they do not meet the Chiari triad criteria.

Keywords: Thoracic endovascular aortic repair, chiari triad, aorto-esophageal fistula

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DPP-31

Failure to remove catheter after endovascular treatment and rapidly developing carotid artery aneurysm: Surgical repair with sternotomy and foreign body excision

Vural Polat, Fatih Ada, Hasan Bascil, Salih Toy, Ahmet Turan İnce

Sivas Cumhuriyet University, Faculty of Medicine, Cardiovascular Surgery Department, Sivas, Türkiye

Abstract

Aim: Endovascular embolization of cerebral arteriovenous malformations (AVMs) is an effective treatment method. However, rare complications can lead to serious morbidity. In this study, we present the treatment of a patient who developed a carotid artery dissection and subsequent deep neck infection as complications during embolization, which was successfully managed surgically.

Material and Methods: A 40-year-old male patient was found to have a hemorrhagic AVM in the left temporal lobe. During endovascular embolization performed by interventional radiology, attempts to remove the catheter caused repeated damage to the carotid artery. Bleeding and extravasation from the carotid artery were controlled with coil embolization. However, as the procedure was concluded with the catheter left in place, the patient subsequently developed a deep neck infection.Despite administration of antibiotic therapy, effective resolution was not achieved, and surgical intervention was planned. A neck incision was made to remove coils and other foreign material from the carotid artery. However, the integrity of the carotid artery was completely compromised, and the infection was assessed to be extending toward the aorta. When bleeding began from the proximal carotid artery, it was temporarily controlled with pressure. The patient was placed on cardiopulmonary bypass via the femoral artery and vein, and a median sternotomy was performed. After mobilizing the aortic arch and its branches, the catheter, which extended to the femoral region, was withdrawn from the carotid artery under total circulatory arrest. Surrounding tissues around the aorta were debrided, and the aorta was repaired using a Dacron graft. Hemostasis was achieved, the layers were closed appropriately, and the patient was transferred to the intensive care unit.

Results: In the postoperative period, extubation was performed without complications, inotropic support was discontinued, and the patient's neurological status remained stable. The patient continued receiving targeted antibiotic therapy based on tissue culture results and was transferred to the neurology service. After completing the antibiotic course and obtaining negative culture results, the patient was discharged from the neurology service in good condition.

Conclusion: Endovascular embolization is one of the commonly used and effective treatment methods for cerebral aneurysms. However, serious complications can occasionally occur. Timely and appropriate interventions can prevent these potentially severe complications. Extensive use of coil embolization may be a risk factor for deep neck infections. This case serves as a good example of how complications arising during patient treatment can be managed through a multidisciplinary approach, with coordinated evaluation and planning of effective therapy by the relevant departments.

Keywords: Vascular malformation, carotid artery dissection, catheter adverse effects, intracranial aneurysm