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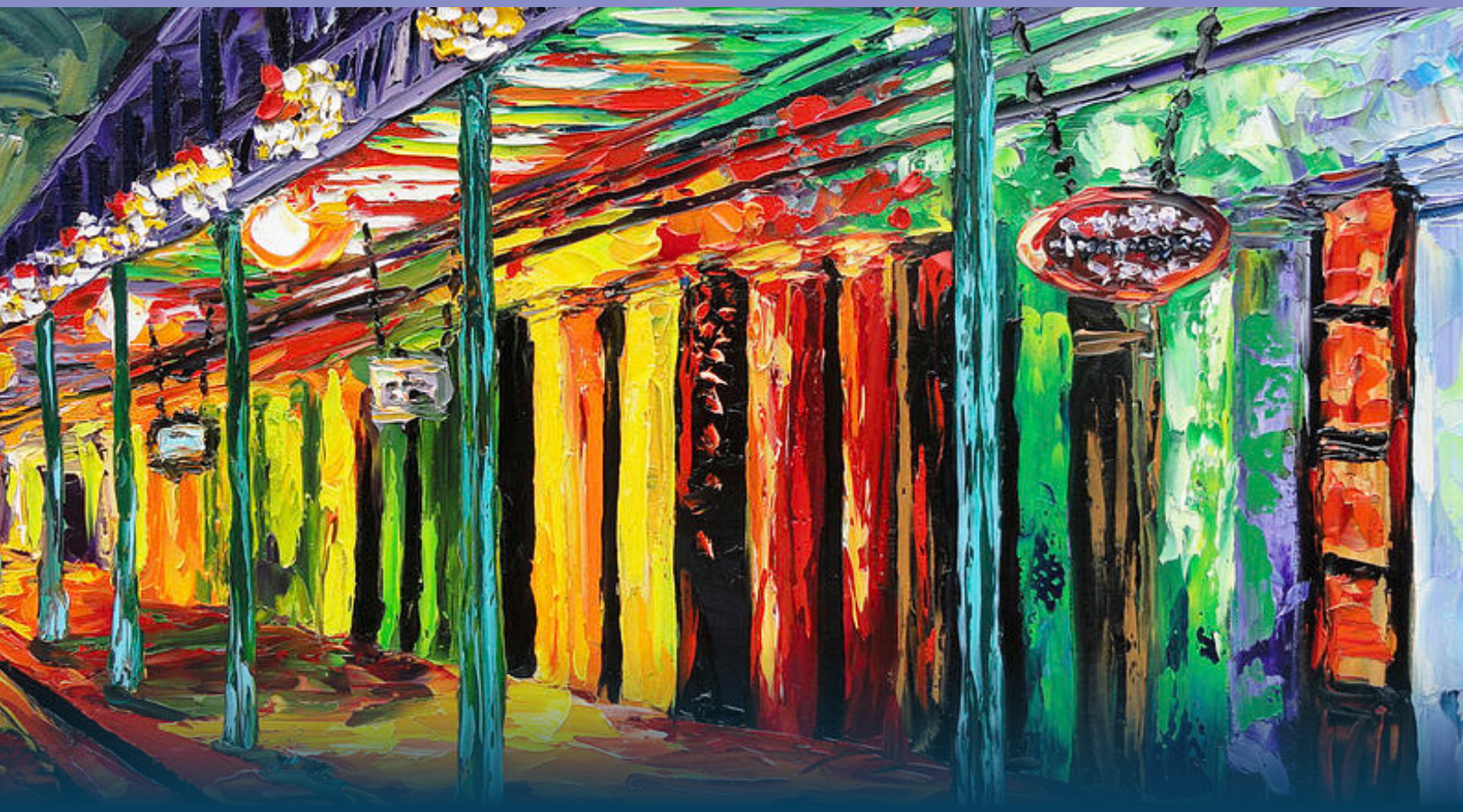


LOUISIANA CHAPTER
ACS 74TH ANNUAL MEETING

RENAISSANCE NEW ORLEANS ARTS WAREHOUSE DISTRICT HOTEL

ePoster #13 | Abstract | Clinical Science | Colon and Rectal Surgery

Characterizing the surgical burden and outcomes of colorectal cancer among rural populations in Louisiana

Connie Shao, Andrew Broussard, Cora Ianiro, W Forrest Johnston, Brian Kann, William Kethman, Charles Whitlow, Danielle Kay, David Vargas, Steven Schuetz, Matthew Zelhart, Dawn Veech, Stephen Bardot, Jennifer Paruch,

Background: Rural–urban differences in colorectal cancer (CRC) care remain poorly understood. Social Vulnerability Index (SVI) offers a framework for assessing the impact of social determinants, but its relationship to disease presentation and outcomes is unclear.

Objective: The objective of this study is to characterize the incidence of colorectal cancer among Louisiana parishes and to determine the predictive value of SVI.

Methods: We conducted a retrospective cohort study of patients who underwent colectomy or proctectomy for CRC at Ochsner Health, captured in the American College of Surgeons National Surgical Quality Improvement Program (NSQIP) database from January 2019 to June 2025. Adult patients undergoing elective or emergent operations were included. We compared rural (n=241) and urban (n=641) patients. Demographics, comorbidities, tumor characteristics, operative details, parish-level incidence, and outcomes were compared. Social Vulnerability Index (SVI) percentile rankings were incorporated, including RPL1 (socioeconomic status), RPL2 (household composition and disability), RPL3 (minority status and language), RPL4 (housing type and transportation), and the overall RPL score representing composite vulnerability (0-1, higher score with greater percentile vulnerability). A subset analysis was performed among patients undergoing proctectomy (rural n=74, urban n=93).

Results: Patients from rural parishes were younger (62.6 vs 65.1 years, p=0.014), more often White (82.6% vs 63.7%, p<0.001), less likely to be Black (12.9% vs 31.5%, p<0.001), and had higher BMI (29.7 vs 28.2, p=0.007). Operative duration was longer for patients from rural parishes (278 vs 225 minutes, p<0.001), likely because they more often underwent proctectomy (30.7% vs 14.5%, p<0.001). Patients from rural parishes had higher levels of CRC incidence in their home parish (25.7 vs 22.7 per 100,000, p<0.001). Overall, rural patients had lower SVI scores (overall 0.710 vs 0.792, p<0.001), though RPL3 was similar. Postoperative morbidity and mortality were comparable.
In the proctectomy subset, rural patients again had higher BMI (29.4 vs 26.6, p=0.006), longer operative times (399 vs 358 minutes, p=0.040), and were more likely to come from parishes with elevated incidence (27.1 vs 23.4 per 100,000, p<0.001). Tumor stage distribution and short-term outcomes were similar. Unlike the overall cohort, composite SVI did not differ significantly (0.771 vs 0.778, p=0.75), though specific domains (RPL2, RPL3) remained higher for urban patients.

Conclusion: Rural patients undergoing CRC surgery experienced a higher burden of operative rectal cancer, longer operations, even for proctectomy alone, and elevated parish-level disease incidence despite residing in areas with lower overall social vulnerability. Within the high-burden proctectomy subset, SVI differences diminish, suggesting that structural or biologic drivers beyond neighborhood-level social risk may contribute to rural disparities. These findings underscore the need for targeted system-level interventions and appropriate social risk stratification to ensure equitable access and outcomes across geographic settings.

ePoster #14 | Case Report | Clinical Science | Surgical Oncology

Incidental high-grade appendiceal mucinous neoplasm in a renal transplant candidate: Literature review and a case report

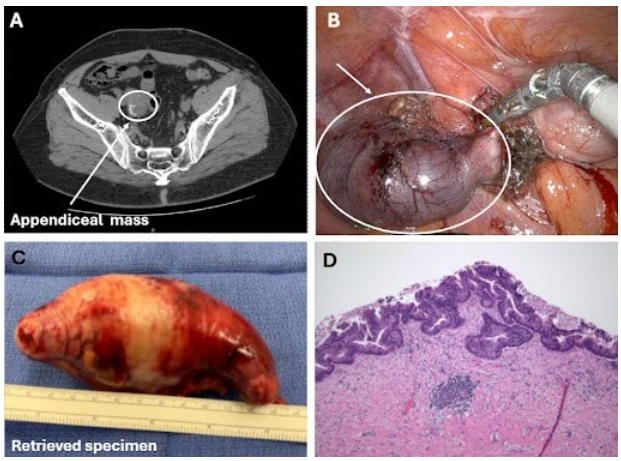
F Fatah, G Melder, H Amiri, A Crane, A Hofmann, A Veluvolu, G Wellman, G Zibari, Willis Knighton Health

Introduction/Objective: High-grade Appendiceal Mucinous Neoplasm (HAMN) is a rare appendiceal epithelial tumor and accounts for about 1% of appendectomy specimens. It stands between Low-grade Appendiceal Mucinous Neoplasm (LAMN) and mucinous adenocarcinoma. It is asymptomatic and detected incidentally during screening. When the symptoms arise, it often mimics acute appendicitis, presenting with abdominal pain, mass, or bowel obstruction. Histologically, it is defined by pushing-type invasion and high-grade cytologic atypia, distinguishing it from the LAMN, while lacking the destructive invasion characteristic of adenocarcinoma.

Case Presentation: A 50-year-old man with stage end-stage renal disease (ESRD), during renal transplant evaluation, he was found to have an incidental appendiceal mass on CT Scan (Figure 1A). The patient was asymptomatic. We performed a robotic appendectomy with partial cecectomy, and the size of the mass was 10 x 5.5 x 3.5 cm (Figure 1B-C). Pathology confirmed high-grade appendiceal mucinous neoplasm confined to the appendix, stage pTis (HAMN), with a negative margin and negative lymph nodes (Figure 1D). The patient recovered well, and he will be monitored for recurrence while awaiting the renal transplant.

Discussion: HAMN is a recently recognized term, and the management line is controversial. Overall, a standard appendectomy is performed for appendix-confined lesions. However, extra appendicular lesions warrant more aggressive therapies, including right hemicoloectomy, cytoreduction, and hyperthermic intraperitoneal chemotherapy (HIPEC).

Conclusion: This case highlights the importance of a comprehensive pre-transplant screening, as occult neoplasms may alter the candidacy and management. A vigilant clinical evaluation, multidisciplinary approach, and resection of HAMN are critical prior to transplantation and immunosuppression.



ePoster #15 | Case Report | Clinical Science | Cardiac Surgery

Airway Collapse from Chronic Ascending Aortic Dissection

A Edmonson, N Dalal, A Divya,

Introduction/Objective: Tracheomalacia is characterized by excessive collapsibility of the trachea due to loss of cartilaginous wall integrity. While acquired forms often result from prolonged intubation or inflammation, vascular compression—particularly from chronic aortic dissection—is an exceedingly rare etiology. This case describes tracheomalacia secondary to chronic Stanford type A aortic dissection.

Case Presentation: A 46-year-old female with a history of medically managed chronic type A aortic dissection presented with progressive ascending aortic enlargement (8.8 cm). She underwent elective ascending aortic and hemiarch replacement. Her postoperative course was complicated by repeated extubation failures and acute hypoxemic respiratory failure. Bronchoscopy on postoperative day 5 revealed moderate to severe tracheomalacia. She underwent tracheostomy and PEG tube placement on postoperative day 14. Despite initial ventilator dependence, her respiratory status improved, allowing transfer to inpatient rehabilitation by postoperative day 46.

Discussion: This case highlights a rare presentation of tracheomalacia due to chronic aortic dissection. Chronic extrinsic compression by a dilated false lumen or intramural hematoma likely caused progressive weakening of the tracheal wall. Although most reported cases involve arch or thoracoabdominal aneurysms, this case demonstrates that ascending aortic pathology can also result in clinically significant airway collapse.

Conclusion: Tracheomalacia is an uncommon but clinically significant complication of ascending aortic disease. In patients with unexplained extubation failure following aneurysm repair, airway collapse should be suspected, and early bronchoscopy pursued for diagnosis. Recognition of this rare association can improve perioperative planning and optimize outcomes in patients with thoracic aortic disease.

ePoster #16 | Abstract | Clinical Science | Cardiac Surgery

Managing Type A Dissection in the Setting of an Undiagnosed Aberrant Right Subclavian Artery

D Spasic, C Castanon, G Defelice, J Borgi, A Divya,

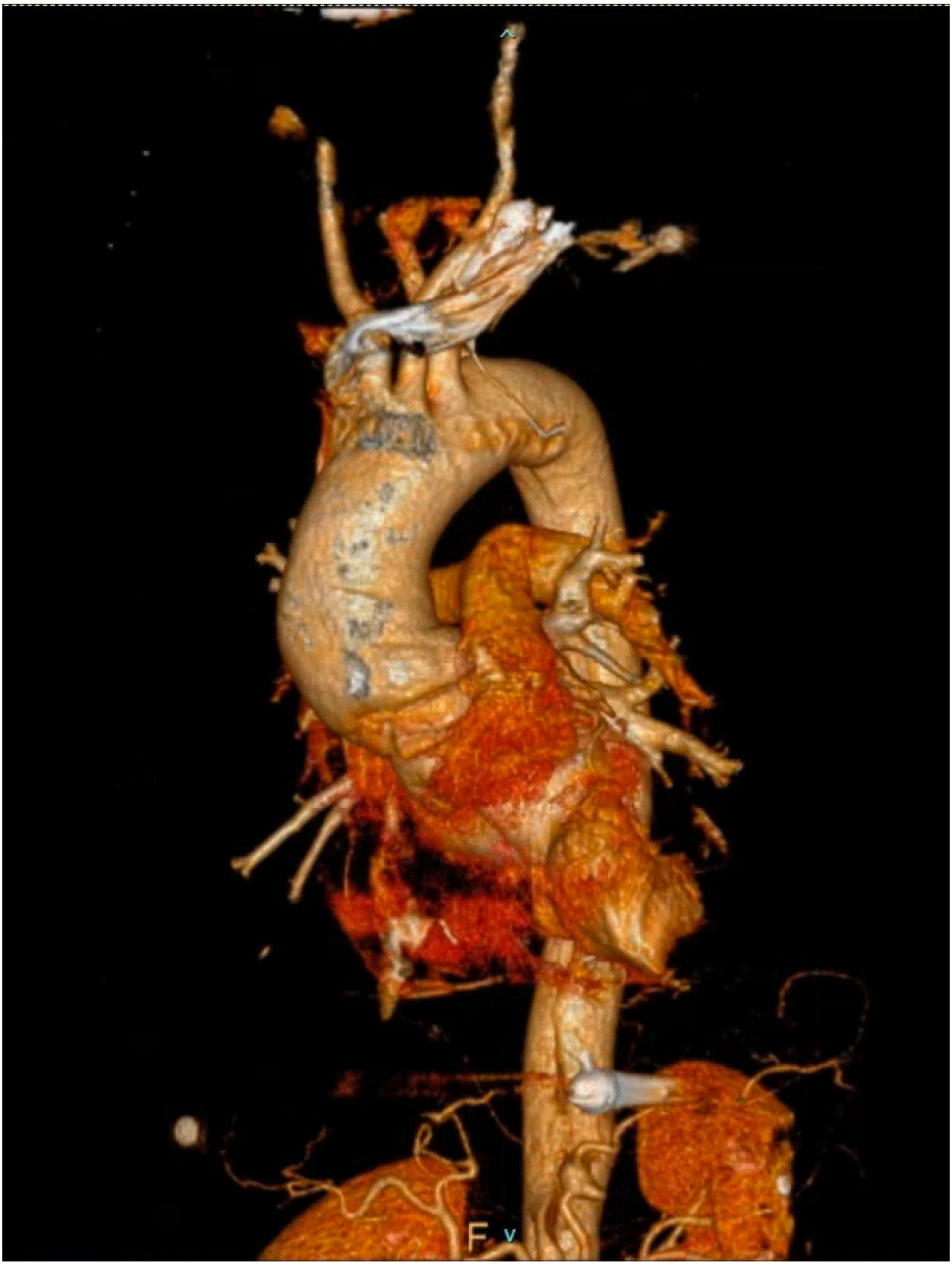
Background: Right axillary artery cannulation is a preferred strategy in type A aortic dissection (TAAD) surgery due to its facilitation of antegrade cerebral perfusion (ACP) and favorable neurological outcomes compared to femoral cannulation [1,2]. However, in patients with an aberrant right subclavian artery (ARSA), which is a congenital arch anomaly present in 0.2–1.7% of the population, cannulation via the right axillary artery cannot be used to achieve ACP, as the right subclavian artery arises independently and distal to the left subclavian artery [3,4]. This anatomical variation prevents antegrade cerebral perfusion, necessitating alternative cerebral protection strategies during deep hypothermic circulatory arrest (DHCA).

Objective: We present a case in which ARSA was identified intraoperatively, requiring the surgical team to abandon planned ACP and proceed with DHCA without adjunctive cerebral perfusion.

Methods: A 41-year-old man presented with an acute type A aortic dissection (TAAD) extending from the aortic root to the superior mesenteric artery. Emergent surgical repair was initiated with right axillary artery cannulation. Following median sternotomy, cardiopulmonary bypass was established, and the patient was cooled to 18°C. After aortic cross-clamping and transection, deep hypothermic circulatory arrest was initiated. Clamping of the presumed innominate artery—later identified as the right common carotid artery—was performed to facilitate ACP. However, the appearance of retrograde bleeding from the aorta revealed the presence of an aberrant right subclavian artery. ACP was aborted, and the procedure proceeded with deep hypothermic circulatory arrest (DHCA) alone for hemiarch repair.

Results: The dissection was repaired with a Bentall procedure and hemiarch. Circulatory arrest time without cerebral perfusion was 20 minutes. Postoperative recovery was uneventful. No neurological deficits were observed. The case illustrates the limitations of right axillary artery cannulation in patients with ARSA and the need for alternate cerebral perfusion strategies.

Conclusion: Surgery for TAAD is challenging, and more so with the presence of ARSA, as standard cannulation strategies by the right axillary artery would not work for antegrade cerebral perfusion. This case underscores the necessity to assess arch anatomy and modify perfusion strategy accordingly. DHCA alone was sufficient in this case, as it was for a short duration, supporting its use as a viable fallback when antegrade perfusion is not possible [5]. Surgical teams should maintain a high index of suspicion for anomalous arch anatomy and be prepared to adapt cerebral protection strategies intraoperatively.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ePoster #17 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

Medial Femoral Condyle Free Flap as Biologic Salvage for Recalcitrant Radius and Ulna Atrophic Nonunion After Failed Reconstruction: Case Report and Targeted Review

B Torres, C Branstetter, R Shekouhi, H Chim,

Background: Management of recalcitrant upper extremity nonunions and post-traumatic bone defects remains challenging. Conventional cancellous grafting may fail in avascular, scarred, or infected beds, while vascularized fibula grafts (VFG) are often excessive for smaller defects. The free medial femoral condyle (MFC) periosteal/corticoperiosteal flap has emerged as a reliable option for biologic augmentation with lower donor morbidity. Recent advances in three-dimensional (3D) planning further enhance surgical precision in flap design and inset.

Objective: To report the salvage of a radial nonunion using a vascularized medial femoral condyle corticoperiosteal flap after multiple failed reconstructive attempts, and to contextualize this case with current literature that supports using the MFC flap for small-to-medium upper extremity bone defects.

Methods: A targeted review of eight clinical and cadaveric studies and case reports (2009–2025) was performed, including prospective pilot series, retrospective cohorts, and case reports on the use of vascularized bone grafts for upper limb reconstruction. Outcomes assessed included union rates, time to union, donor-site morbidity, and comparative applications of MFC versus other vascularized bone flaps.

Results: Across published series, the MFC flap demonstrated consistently high union rates for atrophic nonunions and small-to-moderate defects of the radius, ulna, and humerus. Özdemir et al. reported 100% union in seven upper limb nonunions with a mean union time of three months. Fei et al. reported 13 of 13 successful unions with significant functional improvement in upper extremity scores. Comparative reports indicated faster incorporation of MFC compared to fibula, attributed to its spongious cancellous composition. Donor-site morbidity was low, limited to hematoma, transient knee instability, or rare femoral fracture. Case reports further supported MFC utility in salvage of failed osteoarticular allografts and in combination with fibula flaps for large segmental defects. Recent pilot data suggest 3D simulation and printing improve preoperative planning, flap contouring, and intraoperative efficiency. Vascularized fibula remains the gold standard for defects exceeding 5–6 cm, while MFC provides superior biological stimulation and adaptability in smaller or biologically hostile nonunions.

Conclusion: The vascularized MFC flap is a versatile, osteogenic option for upper extremity reconstruction, offering high union rates, faster bony incorporation, and minimal donor morbidity compared with traditional options. It is particularly suited for atrophic nonunions and smaller defects, with emerging 3D technologies poised to further optimize outcomes. Future comparative and long-term studies are warranted to refine indications and integrate digital planning into routine practice.

ePoster #18 | Case Report | Clinical Science | Plastic & Maxillofacial Surgery

Complex Chronic Abdominal Morel-Lavallée Lesion Wounds - Management with Panniculectomy and Umbilical Transposition: A Case Report

J. Reid, J. Pai, L. Albucker, M. Gaffney, L. Adams, C. Belding, A. Shalek, A. Chaffin,

Introduction/Objective: Morel-Lavallée lesions (MLLs) are post-traumatic fluid collections between subcutaneous tissue and fascia caused by shearing forces that create spaces for blood, lymph, and necrotic tissue. They most commonly occur over the thigh, buttock, and trochanteric regions, with abdominal involvement being rare. Up to one-third of cases remain undiagnosed in acute trauma settings due to prioritization of life-threatening injuries. Chronic MLLs demonstrate fibrosis and persistent seromas when conservative management fails, often requiring surgical intervention. This case demonstrates surgical management of a chronic abdominal MLL.

Case Presentation: A 68-year-old female sustained a high-velocity lower abdominal seatbelt injury resulting in chronic MLL. A large left flank hematoma progressed over six months to persistent pain, erythema, and swelling. Repeated incision-drainage and Penrose drain placement failed, resulting in chronic non-healing wounds, deep seroma cavities tethered to fascia, and extensive fat necrosis. She underwent panniculectomy-style excision of approximately 60x15 cm diseased tissue, removing >5 lbs of skin, fat, and fibrotic scar encasing 15x10 cm seroma cavities with seropurulent fluid. The 900 cm2 defect was reconstructed using adjacent tissue advancement flaps with umbilical transposition.

Discussion: Postoperative thermal imaging demonstrated excellent flap perfusion without hernia, ischemia, or recurrent seroma. Symptoms fully resolved, including fibrosis and pain. This case highlights the morbidity of delayed MLL diagnosis and the need for clinical suspicion after high-velocity trauma.

Conclusion: Wide excision and flap-based reconstruction provide durable resolution of chronic abdominal MLLs. Early recognition and timely intervention are essential to prevent chronic sequelae and optimize reconstructive outcomes.

ePoster #19 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

Morselized Ovine Forestomach Matrix for Lower Extremity Limb Salvage: Evidence from Three Complex Surgical Cases

J Pai, J Reid, C Belding, J Dickerson, M Gaffney, L Adams, A Chaffin,

Background: Complex lower extremity present formidable reconstructive challenges, often leading to limb loss. Traditional free flap reconstruction carries significant operative risks, donor site morbidity, and prolonged recovery, especially in multimorbid populations. Mortality associated with major amputation is high in patients with diabetes and peripheral arterial disease. Thus, a compelling need exists for advanced limb salvage modalities.

Objective: Evaluate the utility of morselized ovine forestomach matrix (OFM) in multimodal reconstructive strategies for limb salvage across three complex lower extremity wound etiologies.

Methods: Three patients with severe lower limb wounds underwent staged surgical management incorporating morselized OFM. Case 1: 62-year-old female with traumatic pressure injury and osteomyelitis, treated via serial debridement, OFM, negative pressure wound therapy (NPWT), and flap/graft reconstruction. Case 2: 78-year-old with extensive degloving injury post-motor vehicle collision, treated by sequential debridement, OFM, and split-thickness skin grafting (STSG). Case 3: 62-year-old diabetic female with circumferential venous ulceration and infection, managed with debridement, hypochlorous acid irrigation, NPWTi-d, OFM, and STSG.

Results: All cases achieved robust limb salvage with prompt granulation, functional restoration, and avoidance of amputation or free flap reconstruction. Case 1 regained full knee range of motion and ambulation by 4-weeks post-op. Case 2 demonstrated satisfactory granulation and mobility at 2-months post-intervention. Case 3 demonstrated full healing and resolution of infection at 6-months follow-up.

Conclusion: Morselized OFM, as part of a multimodal surgical strategy, enabled consistent functional limb salvage in high-risk, complex wounds. This approach constitutes a viable, less morbid alternative to high-risk amputation or extensive flap reconstruction, warranting broader adoption within reconstructive surgical practice.

ePoster #21 | Abstract | Education | Surgical Education

The Current Landscape for Preliminary Residents: Developing a National Database

R Moreci, K Williams, A Pradarelli, J Broecker, C Bae, R Akhund, J Zagory, T Arora,

Background: Preliminary general surgery residents comprise a diverse but understudied group within surgical training. Despite their prevalence, there is no national database to identify and track these residents.

Objective: To describe the national landscape of preliminary surgery residents over five academic years (2019-2024).

Methods: Preliminary surgery residents at general surgery programs in the United States were identified using information collected via publicly available sources (program websites, program Instagrams, and program Twitters). A standard email was sent to every program to fill in any gaps in our data. Descriptive analysis was performed.

Results: A total of 349 general surgery residency programs were identified. Of these, 10% (n=35) of programs do not accept preliminary surgery residents. Out of the remaining 314 programs, 54.1% (n=170) of programs were confirmed to list preliminary surgery residents as part of their resident cohort. Though Instagram was the most common source of preliminary resident data (69.1%), preliminary residents were listed with similar frequencies on all three public domains. The median number of preliminary residents per program was 5 (1-33). Within the 170 programs, 2,677 preliminary residents were confirmed. The majority of preliminary residents (34.7%) were identified from the most recent preliminary year (2023-2024). See Table 1 for additional preliminary resident information.

Conclusion: Our findings suggest that while many general surgery programs offer preliminary positions, visibility of preliminary residents varies between programs. Adopting a standardized reporting system could strengthen both research and support for preliminary residents.

	Number of Programs n= 314 (%)
Source of preliminary resident data	
Program Website	173 (55.1)
Program Instagram	217 (69.1)
Program Twitter	156 (49.7)
Program distinguishes between designated & non-designated preliminary residents	
Yes	19 (6.1)
Program responded directly to email	19 (6.1)
Years of data available	
0	3 (1)
1	59 (18.8)
2	39 (12.4)
3	38 (12.1)
4	11 (3.5)
5	26 (8.3)
	Number of Preliminary Residents n= 2677 (%)
Preliminary residents identified by year	
2109-2020	203 (7.6)
2020-2021	269 (10)
2021-2022	559 (20.9)
2022-2023	689 (25.7)
2023-2024	928 (34.7)
Future position identified	539 (20.1)

Table 1: Preliminary Resident Data Across General Surgery Programs from 2019-2024

ePoster #22 | Case Report | Clinical Science | Transplantation Surgery

Bezoar in allograft duodenum: Rare cause of bowel obstruction 13 years post-pancreas transplant

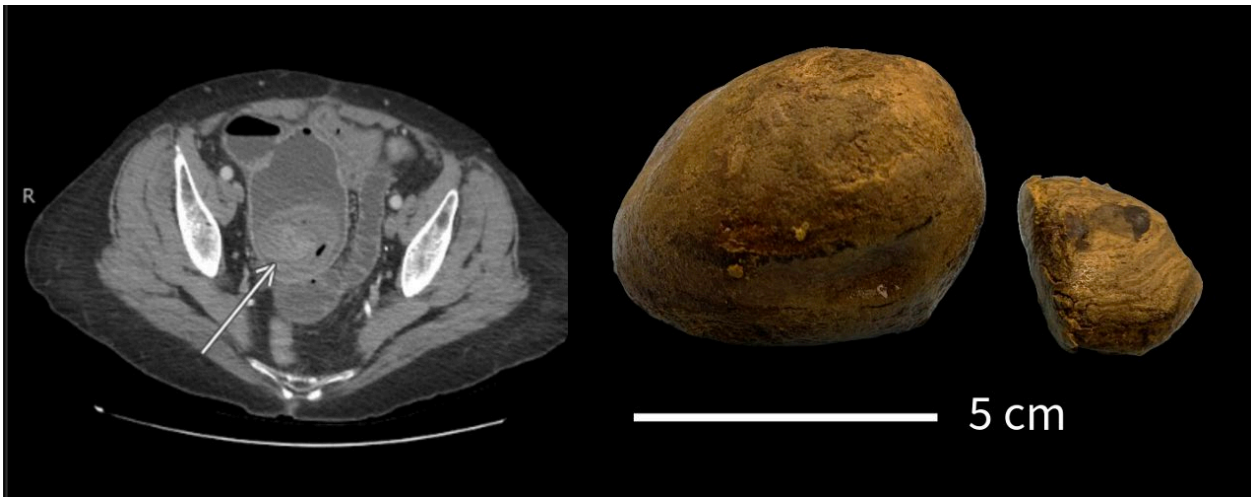
M Urvater, C Ianiro, D Bruce, T Jensen, E Finger, J Barr,

Introduction/Objective: Small bowel obstruction following pancreatic transplantation is a recognized complication. It is most often caused by adhesive disease and hernias; and less frequently, intussusception, or post-transplant lymphoproliferative disease may be implicated. To our knowledge, a pancreatic allograft duodenal bezoar has not been previously described as a cause of obstruction.

Case Presentation: A 69-year-old female presented to the emergency department with severe abdominal pain and computed tomography findings concerning for a small bowel obstruction. Due to imaging characteristics concerning for a mass and her complete obstruction, we performed an immediate exploratory laparotomy. Upon exploration, one large, solidified bezoar within the pancreatic allograft duodenum and one smaller bezoar causing a small bowel obstruction in the efferent jejunal limb were removed.

Discussion: Bezoars are rare causes of small bowel obstruction, usually forming in the stomach and linked to factors like prior gastric surgery, gastroparesis, hypothyroidism, trichophagia, medications, and poor mastication. Bezoar formation within a pancreatic allograft duodenum is exceedingly uncommon and, to our knowledge, not previously reported. In this case, the etiology of the stone formation is unclear.

Conclusion: This case underscores the importance of considering bezoar as a rare but significant cause of small bowel obstruction in pancreas transplant recipients. Potential complications include not only bowel obstruction but also graft pancreatitis, anastomotic disruption, and graft loss, highlighting the importance of timely recognition and intervention.



ePoster #23 | Case Report | Clinical Science | Transplantation Surgery

Grade 4 cytokine release syndrome and cardiogenic shock following anti-thymocyte globulin induction in a kidney transplant recipient: A case report

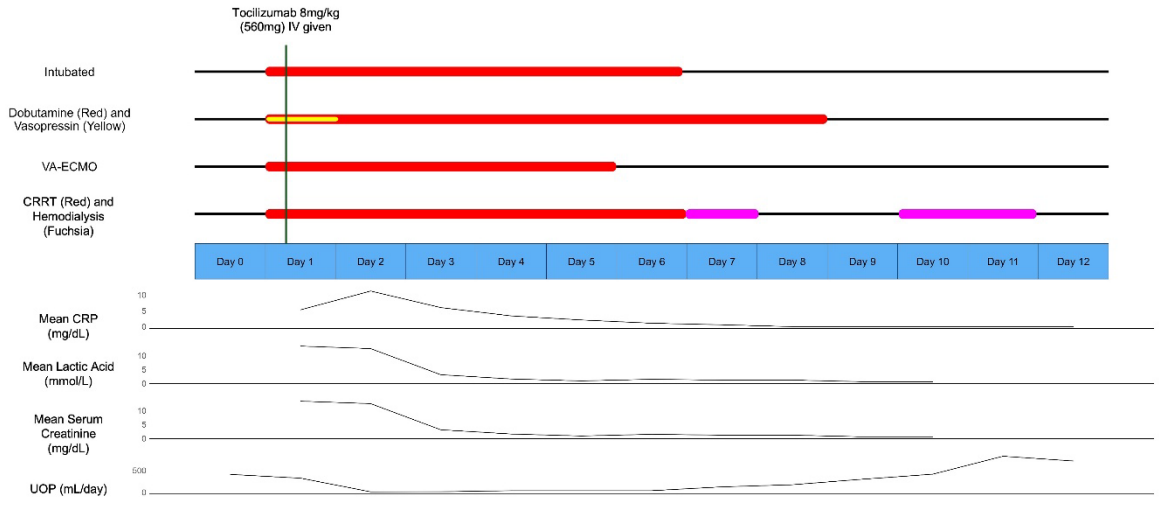
S Yanofsky, S Sachdeva, C Becnel, S Vukelic, K Tulla, A Paramesh,

Introduction/Objective: Cytokine release syndrome (CRS) is a rare but serious complication of anti-thymocyte globulin (Thymoglobulin®), a common induction medication for solid organ transplant recipients. We present a case of grade 4 CRS in a renal transplant patient in whom tocilizumab successfully salvaged the graft function and stabilized the patient.

Case Presentation: A 22-year-old woman with end stage renal disease on hemodialysis and a complex history including systemic lupus erythematosus underwent a deceased donor kidney transplant with thymoglobulin induction. Hours post-operatively, she developed hemodynamic collapse with escalating vasopressor requirements. Markedly elevated IL-6 supported a diagnosis of CRS, and TTE suggested acute cardiogenic shock, requiring veno-arterial extracorporeal membrane oxygenation (VA-ECMO). Treatment with tocilizumab, an IL-6 receptor-blocking monoclonal antibody, resulted in a 76% decrease in IL-6 and subsequent gradual recovery. She was decannulated, weaned off pressors, and extubated over the next week. She was discharged 24 days postoperatively with preserved allograft function and adequate urine output that is stable after 6 months.

Discussion: Initially, the etiology remained unclear. Elevated IL-6 and TTE findings supported cytokine release syndrome with cardiogenic shock as the primary cause. Tocilizumab shows a promising role in treating post-transplant cytokine crisis, though reports of its use in thymoglobulin-induced CRS in kidney transplant patients remain limited.

Conclusion: This report describes CRS as a rare cause of acute cardiogenic shock after thymoglobulin induction and highlights the complexities of diagnosing shock of unknown etiology. We show how a multimodal treatment approach of tocilizumab, VA-ECMO, and best care practices, were able to preserve the function of the allograft transplant.



ePoster #24 | Abstract | Basic/Transactional Science | Vascular Surgery

Current Perspectives on the Use of Paclitaxel and Sirolimus at Anastomotic and Juxta-Anastomotic Sites During Arteriovenous Fistula Creation

Camille F Petty, Michael S Folse, Alex Hollander, Chiravjiv Virk, MD, Paul E Perkowski, MD, LSU Health - Shreveport

Background: After numerous investigations into possible pharmacologic and surgical interventions for preventing stenosis in hemodialysis accesses, maintenance of long-term patency remains a challenge. Neointimal hyperplasia at the artery-vein or graft-vein anastomosis is a primary contributor, prompting increasing exploration into pharmacotherapies, particularly paclitaxel and limus drugs that disrupt smooth muscle proliferation by directly or indirectly interfering with the cell cycle. These drugs are typically delivered via drug-coated balloons or drug-eluting stents to the vessel intima. Additional methods, such as extraluminal delivery using gels, meshes, or droplets, have been examined which aim to reach the adventitia. Animal and human studies report promising outcomes for prevention of neointimal hyperplasia revealed by histology, imaging, and primary patency measures. Although a notable meta-analysis from Katsanos et al. raised concerns about increased mortality with paclitaxel use for these purposes, subsequent investigations have challenged these findings. As a result, antiproliferative agents remain widely used and effective in improving outcomes in both peripheral artery disease and arteriovenous (AV) access.

Objective: To the best of our knowledge, a comprehensive evaluation of these agents during surgical AV access creation has not yet been conducted. This paper aims to summarize and review the current literature on the application of these agents during dialysis access creation at the anastomosis. While the use of paclitaxel for this purpose has historically been a subject of controversy, evolving perspectives and the availability of long-term data has opened new avenues of investigation.

Methods: Systematically searched published and unpublished literature through Cochran library, PubMed, ScienceDirect, Journal of Vascular Surgery, and reference lists for each study were examined for additional relevant studies with the following inclusion criteria:
Type of study: RCTs, animal studies, meta-analysis, systematic review, retrospective studies, observational studies, and case studies
Subject: hemodialysis access or fistula or graft, prevention or treatment of neointimal hyperplasia, evaluation of AV or AG anastomosis or juxta-anastomotic site, use of chemotherapeutic or immunosuppressant or anti-neoplastic agents, with or without comparison
The outcomes of interest included target lesion primary patency (TLPP), target lesion secondary patency (TLSP), assisted primary patency, assisted secondary patency, and absolute patency.

Results: A total of 13 studies were reviewed, including both human and animal studies. Measures studied included method of application, for treatment or prevention, degree of success. Patency, histology, ultrasound, and planimetry findings were included. Complications were recorded.

Conclusion: Several human and animal trials have demonstrated that chemotherapeutics agents are well tolerated and efficacious treatment options in preventing and treating neointimal hyperplasia in dialysis access. Further research directly comparing the efficacy of various chemotherapeutic agents for the prevention of neointimal hyperplasia, coupled with long term follow up studies is warranted.

Authors	Model	Drug	Dose	Delivery	T	Primary outcome	Key Findings
Masaki et al., 2004	Canine	Paclitaxel	0.26, 0.65 mg	Sustained perivascular delivery via fibrin glue	8-9w	Degree of neointimal hyperplasia at graft anastomoses, assessed via histological analysis	Paclitaxel delivered via fibrin glue significantly reduce neointimal hyperplasia compared to controls, with no detectable systemic drug levels
Rotmans et al., 2005	Porcine	Sirolimus	90 ug/cm^2	Sirolimus-eluting stents placed at venous anastomosis of ePTFE grafts	4w	Degree of intimal hyperplasia at venous anastomosis, assessed via histological analysis	Sirolimus-eluting stents significantly reduced intimal hyperplasia and increased graft flow compared to bare-metal stents and unstented controls
Lee et al., 2006	Porcine	Paclitaxel	0.59 ug/mm^2	Coating on expanded ePTFE grafts	6w	Degree of neointimal hyperplasia at graft-venous anastomosis, assessed via histological analysis	Paclitaxel-coated grafts significantly reduced neointimal hyperplasia compared to uncoated controls
Kelly et al., 2006	Porcine	Paclitaxel	5% w/w and 15% w/w polyethylene glycol (PEG)4000	Perivascular wrap (ethylene vinyl acetate polymer) around graft-vein anastomosis	10-11d, 23-24d, 32-38d	Degree of luminal stenosis at graft-vein anastomosis, assessed via histomorphometry	Paclitaxel-loaded wraps resulted in negligible luminal stenosis (<0.5%), compared to 37.9% in controls. No systemic drug levels detected
Kohler et al., 2007	Sheep	Paclitaxel	0.0, 0.3, 0.7, 1.2 ug/mm^2	Bioabsorbable Vascular Wrap™ paclitaxel-eluting mesh at distal end of graft and venous anastomosis	8w	Degree of neointimal hyperplasia at graft-venous anastomosis, assessed via histological analysis	Paclitaxel-eluting mesh significantly reduced neointimal hyperplasia compared to controls
Paulson et al., 2012	Human	Sirolimus	600 ug	Perivascular sirolimus-eluting collagen membrane (Coll-R) implanted around graft-venous anastomosis	24m	Safety (freedom from device-related adverse events); secondary: primary unassisted graft patency at 12 and 24 months	No device-related adverse events observed; 12-month primary unassisted patency was 76%, and 24-month patency was 38%; systemic sirolimus levels remained below immunosuppressive thresholds, indicating localized drug delivery effectiveness
Baek et al., 2012	Porcine	Sirolimus	1.08 ug/ mm^2, 2.41 ug/ mm^2	Sirolimus-eluting ePTFE grafts	6w	Degree of neointimal hyperplasia at graft-vein anastomosis	Sirolimus-eluting grafts significantly inhibited neointimal hyperplasia, though to a lesser extent than paclitaxel-coated grafts used in prior study
Baek et al., 2012	Porcine	Paclitaxel	0.22, 0.69 ug/mm^2	Coating on luminal surface of grafts with biodegradable polymer	6w	Degree of neointimal hyperplasia at graft and vascular anastomosis sites, assessed via histological analysis	Paclitaxel-coated grafts significantly reduced neointimal hyperplasia compared to uncoated controls
Baek et al., 2015	Porcine	Paclitaxel	0.58 ug/mm^2	ReGel injection on terminal portions of ePTFE grafts	6w	Degree of neointimal hyperplasia at venous anastomosis, measured by intimal area and intima-to-media ratio	Paclitaxel-coated grafts significantly reduced neointimal hyperplasia compared to uncoated controls

ePoster #25 | Case Report | Clinical Science | Vascular Surgery

Hybrid Management of Dysphagia Lusoria with Bilateral Subclavian Artery Transposition and Thoracic Endovascular Aortic Repair (TEVAR)

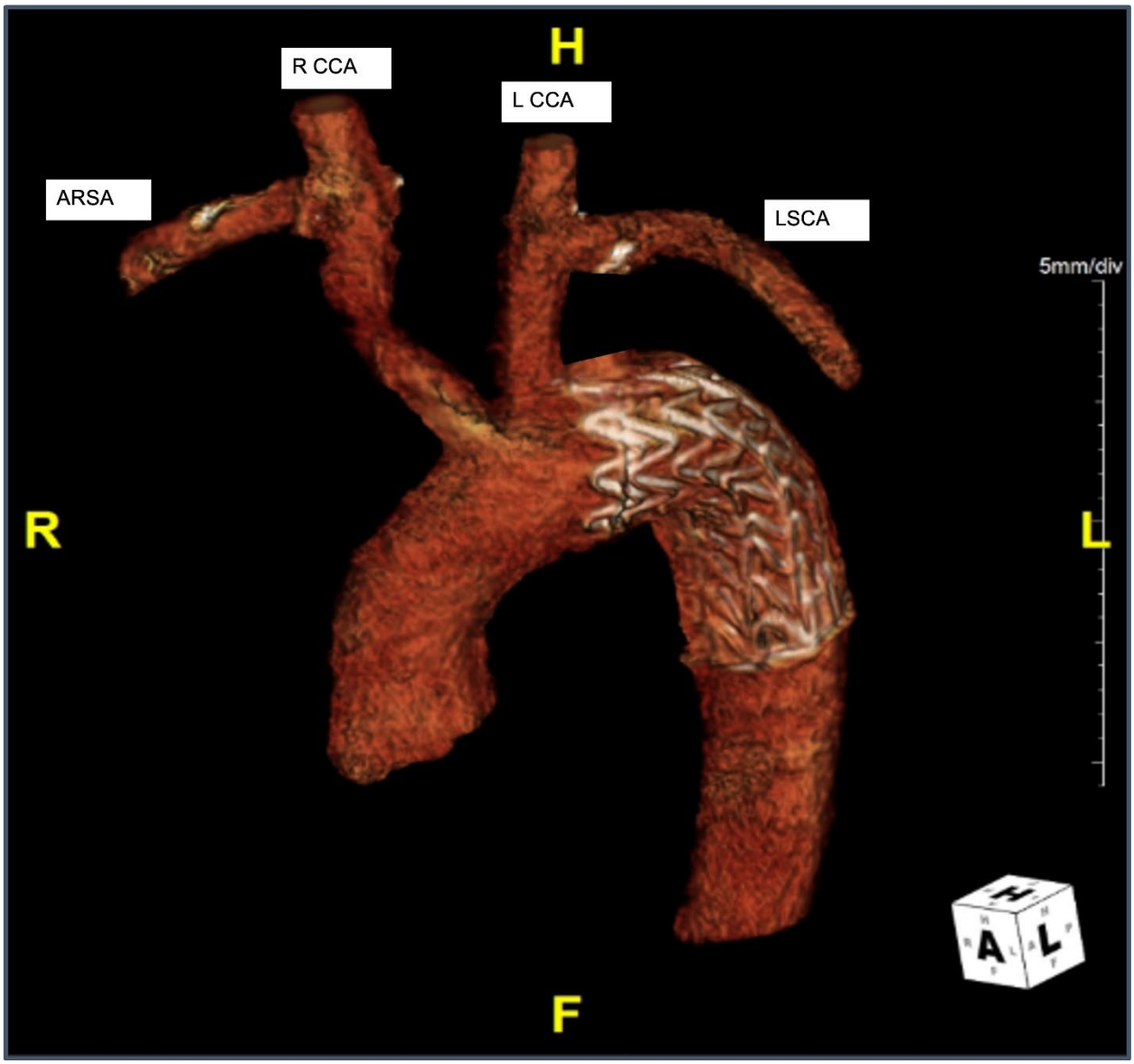
MMinvielle,O'Callaghan Marshall, RDuhon,PPerkowski,CVirk,

Introduction/Objective: To report a novel hybrid approach combining bilateral subclavian artery
transposition and thoracic endovascular aortic repair (TEVAR) in the treatment of dysphagia lusoria due to aberrant right subclavian artery (ARSA).

Case Presentation: A 37-year-old male presented with one year of progressive dysphagia affecting both solids and liquids. Diagnostic studies including EGD and barium esophagram revealed external esophageal compression consistent with ARSA.Past medical history included hypertension, managed with losartan and hydrochlorothiazide, and a remote exploratory laparotomy. He had ceased smoking nine years prior and maintained an active lifestyle.
Imaging confirmed the presence of an aneurysmal ARSA with only a 7 mm distance tothe left subclavian artery (LSCA), insufficient for a proximal seal zone, necessitatingcoverage of both vessels during TEVAR. To preserve upper extremity perfusion and minimize long-term graft-related complications, a staged hybrid repair with bilateral
subclavian transposition was chosen.
Surgical Techniques
Stage 1: Right Subclavian Artery Transposition
Via a right supraclavicular approach, the ARSA was isolated and transected proximal to the vertebral artery. The proximal stump was oversewn, and the distal ARSA was anastomosed end-to-side to the right common carotid artery.
Stage 2: Left Subclavian Artery Transposition and TEVAR
One week later, the LSCA was transposed to the left common carotid artery using similar techniques. A thoracic stent graft (34 mm x 10 cm) was then deployed via femoral access, covering the origins of both the ARSA and LSCA. Angiography confirmed successful exclusion with preserved perfusion of the innominate and left common carotid arteries.

Discussion: This case illustrates a potentially novel technique combining bilateral subclavian artery transposition with TEVAR. Literature review reveals that while bilateral bypass with TEVAR has been documented, bilateral subclavian transposition has not Transpositions may offer superior long-term patency and fewer complications compared to synthetic bypass grafts, especially in young, otherwise healthy patients . Anatomical constraints requiring a 20 mm proximal seal dictated the need to cover both subclavian arteries. This patient's anatomy and clinical profile made him an ideal candidate for this hybrid approach.

Conclusion: Bilateral subclavian artery transposition combined with TEVAR offers a durable solution for treating symptomatic ARSA. To our knowledge this case represents the first published use of this hybrid approach.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ePoster #26 | Abstract | Clinical Science | Vascular Surgery

Endovascular Management of Symptomatic Plantar Varicose Veins with Coils and Sclerotherapy

A Garman, P Perkowski,

Background: The plantar venous plexus is an unusual location for symptomatic varicose veins. Although less prevalent than other varicose vein types, plantar venous plexus varicosities can cause significant discomfort and functional limitations including tenderness and difficulty walking. Traditional surgical interventions may not be optimal due to the unique anatomical and functional aspects of the plantar region along with the disability associated with more invasive surgical techniques.

Objective: To assess the effectiveness of a combined endovascular coiling and sclerotherapy approach for the treatment of symptomatic plantar varicose veins and to establish a clinical framework for management.

Methods: This series includes three patients, aged 35 to 62, presenting with symptomatic plantar venous plexus varicosities characterized by pain, difficulty with weight-bearing, swelling, and visible venous distension. Each patient underwent a preoperative history and physical examination demonstrating prominent venous complexes in the affected foot. Imaging, including MRI, showed dilated venous plexus in the foot. The treatment involved venogram with endovascular coiling to occlude incompetent veins, followed by sclerotherapy using various sclerosing agents (Onyx glue, sodium tetradecyl sulfate).

Results: All patients reported significant symptomatic relief following treatment. At follow-up appointments, patients expressed high satisfaction, citing minimal discomfort and return to normal activities. Two patients required additional ultrasound-guided sclerotherapy for persistent mild symptoms, and one patient had excision of a tender vein on the dorsum of the foot. No major complications, such as deep vein thrombosis or nerve injury, were observed.

Conclusion: The combination of endovascular coiling and sclerotherapy is a safe and effective treatment for symptomatic plantar venous plexus varicosities. This minimally invasive approach offers a promising alternative to traditional surgical methods, potentially improving patient outcomes and satisfaction. Further studies with larger cohorts are needed to validate these findings and refine treatment protocols. This approach aligns with current trends in minimally invasive varicose vein treatments, which have shown efficacy in other venous conditions.