

KIOSK #4

38-49

AZURE I & II

FEBRUARY 19-21

STCAM

2026

south texas chapter annual meeting
The Westin Houston Medical Center

South Texas *Chapter*
ACS Chapters American College
of Surgeons



ePoster #38 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

A Retrospective Comparison of Patient Outcome Studies Following ORIF Distal Radius Fracture Repair Between Orthopaedics- and Plastic Surgery-Trained Hand Surgeons

A Lee, V Cuello, N Black, J Faillace

University of Texas Medical Branch - Galveston

Background: Distal radius open reduction internal fixation (ORIF) is one of the most frequently performed hand surgical procedures and may be performed by a diverse group of surgeons. Prior studies have investigated variability in training and post-operative outcomes, but few examine long term outcomes.

Objective: To characterize long-term patient-reported outcomes following primary distal radius ORIF performed by hand-trained orthopedic surgeons, hand-trained plastic surgeons, and non-hand-trained orthopedic surgeons.

Methods: We conducted a single-center study of 213 patients who had undergone a primary distal radius (ORIF) procedure with one of three types of surgeons in the last five years. Institutional Review Board approval was obtained. Exclusions included incarcerated patients, pediatric patients, and polytrauma injuries. Included patients were contacted for current QuickDASH data. Chart review provided demographic information and mechanism of injury.

Results: Of 213 patients, 71 patients provided QuickDASH data. Twenty patients had surgery by a hand-trained orthopedic surgeon (\bar{x} = 53.15 years, 60% male), 10 patients by a hand-trained plastic surgeon (\bar{x} = 63.7, 70% male), and 41 patients by a non-hand-trained orthopedic surgeon (\bar{x} = 56.2, 73% male). Average QuickDASH scores were 14.06, 10, and 6.37, respectively, with no significant difference between the three by ANOVA ($p=0.12$).

Conclusion: Training background may not significantly influence outcomes following a distal radius ORIF. These findings may be reassuring for patient populations and physicians. Limitations include retrospective nature, single-center design and moderate response rate. This study supports diverse surgical training pathways while continuing efforts to standardize hand-fellowship curriculum to optimize patient outcomes.

Table 2: Analysis of QuickDASH Outcomes Between Specialty Groups

Specialty	Hand-Trained Orthopedic Surgery		Plastic Surgery		Non-hand Orthopedic Surgery		p-value
	Mean	SD	Mean	SD	Mean	SD	
Age	53.15	15.23	63.7	8.73	56.2	13.2	0.046479
QuickDASH Score	14.06	14.43	10	15	6.37	9.66	0.121298

ePoster #39 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

Endoscopic Versus Open Carpal Tunnel Release in Obese Patients

Matthew Q. Dao, BS; Arman Chowdhury, BS; Baijing Qin, MD

University of Texas Medical Branch - Galveston

Background: Obesity affects over 40% of U.S. adults and continues to rise. It is a well-established risk factor for carpal tunnel syndrome (CTS), yet limited evidence compares outcomes of open (oCTR) versus endoscopic carpal tunnel release (eCTR) in this group.

Objective: The present study sought to evaluate differences in postoperative complications between oCTR and eCTR among patients with obesity.

Methods: A national analysis was performed through the US Collaborative Network in the TRINETX Healthcare Database. Patients aged ≥ 18 years with body mass index (BMI) ≥ 30 who underwent oCTR or eCTR between 2010 and 2024 were included. A 1:1 propensity score matching approach was utilized to balance cohorts based on demographics, BMI, A1c levels, and comorbidities. Short-term outcomes included 30-day complications as well as emergency department visits and readmission. Long-term outcome was recurrence of CTS. Outcomes were compared using risk ratios (RR). Statistical significance was regarded as $p < 0.05$.

Results: A total of 72,174 obese patients were identified; after propensity matching, 29,836 patients remained (14,918 per group). Within 30 days after surgery, oCTR was associated with significantly higher rates of wound disruption (RR=2.62, $p < 0.001$), surgical site infection (RR=2.63, $p < 0.001$), reported postoperative pain (RR=2.04, $p < 0.001$), emergency department visits (RR=1.45, $p = 0.009$), and readmission (RR=1.58, $p = 0.001$) compared to the eCTR. At the 2-year follow-up, the recurrence of CTS was significantly lower in the oCTS group (RR=0.30, $p < 0.001$).

Conclusion: In patients with obesity, oCTR is associated with increased early complications and greater healthcare utilization, while eCTR confers a safer short-term profile but a higher likelihood of recurrence.

ePoster #40 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

Surgical Correction of Stahl's Ear: A Systematic Review of Aesthetic and Procedural Outcomes

S Farhat, D Hill, P Andrawes, E Payne
Houston Methodist Hospital

Background: Stahl's ear deformity is a rare congenital auricular anomaly characterized by an abnormal third crus, absent superior crus, and helical and scaphal irregularities. Despite multiple described techniques, no consensus exists on the optimal surgical correction. The two main approaches—cartilage excision and reshaping—show variable outcomes, and comparative results remain unclear.

Objective: To systematically evaluate aesthetic and procedural outcomes of published cases of Stahl's ear correction and compare results between cartilage excision and reshaping techniques.

Methods: A PubMed search identified studies describing surgical repair of Stahl's ear with analyzable pre- and postoperative photographs. Each ear was assessed for correction of four key features: (1) abnormal third crus, (2) absent superior crus, (3) widened or convex scapha, and (4) helical rim deformity. Descriptive statistics were generated, and outcomes between excision and reshaping were compared using Fisher's exact test ($p < 0.05$).

Results: Twenty-one studies met inclusion criteria, encompassing 42 ears with adequate photographic documentation. Cartilage reshaping was performed in 52% and excision in 48%. Complete correction of all four features occurred in 24% of ears. A visible remnant of the third crus persisted in 38%, and a visible scar was noted in 36%. No significant difference in complete correction was observed between excision and reshaping groups ($p = 0.68$).

Conclusion: Stahl's ear correction remains technically demanding, with fewer than one-quarter of reported cases achieving complete aesthetic correction. Both techniques yield variable outcomes, highlighting the need for standardized evaluation and multicenter studies to establish reproducible, evidence-based repair methods.

ePoster #41 | Case Report | Clinical Science | Cardiac Surgery

Early VA-ECMO and Multidisciplinary Management of Postcardiotomy Cardiogenic Shock with Right Ventricular Dysfunction

R Ghamarian, A DeAnda

University of Texas Medical Branch - Galveston

Introduction/Objective: Postcardiotomy cardiogenic shock with right ventricular dysfunction is a life-threatening complication after complex cardiac surgery. This case highlights the management challenges and the importance of early venoarterial extracorporeal membrane oxygenation (VA-ECMO) in improving survival for high-risk patients.

Case Presentation: A 39-year-old male with hypertension, hyperlipidemia, obstructive sleep apnea, and coronary artery disease underwent aortic root replacement and single-vessel coronary artery bypass grafting. Postoperatively, he developed refractory cardiogenic shock with right ventricular dysfunction, requiring intra-aortic balloon pump and subsequent VA ECMO. Management included continuous renal replacement therapy for acute kidney injury, serial transesophageal echocardiography for biventricular function and ECMO weaning, and vascular surgery consultation for left lower extremity malperfusion. Additional procedures included mediastinal washout, sternal closure, and thoracostomy tube placement.

Discussion: VA-ECMO provided rapid hemodynamic stabilization, with lactate clearance from 9.46 to 1.62 mmol/L within 36 hours, indicating restored tissue perfusion. The patient required transfusion support and developed acute kidney injury, limb malperfusion, and transient monocular vision loss. Serial echocardiography showed preserved left ventricular ejection fraction (55–60%) and mild right ventricular dysfunction. ECMO was weaned using daily assessments and a structured protocol, with successful decannulation on postoperative day 4. He was extubated on day 5, weaned off vasopressors by day 15, and discharged home on day 17 in stable condition.

Conclusion: Early VA-ECMO initiation, echocardiographic monitoring, and multidisciplinary management can improve survival in postcardiotomy cardiogenic shock with right ventricular dysfunction. Standardized protocols and coordinated care are essential to optimize outcomes in this high-risk population.

Table 1. Timeline of Postoperative Interventions and Outcomes

Date	Post-op Day	Intervention/Procedure	Support Modalities	Outcome/Notes
6/9/2025	0	Aortic root replacement, CABG, intra-aortic balloon pump (IABP), VA-ECMO	VA-ECMO, IABP, CRRT started	Cardiogenic shock, hemodynamic support
6/10/2025	1	Chest exploration, mediastinal washout	VA-ECMO, CRRT	Vasopressor support, transfusions
6/13/2025	4	ECMO decannulation, vascular repair	CRRT, low-dose vasopressors	Successful decannulation
6/14/2025	5	Extubation to high-flow nasal cannula (HFNC)	CRRT discontinued POD 8	Hemodynamic stability
6/26/2025	17	Discharge	Off support	Ambulating, tolerating diet

ePoster #42 | Abstract | Clinical Science | Otolaryngology

Effect of Alcohol Dependence on Non-Bony vs Bony Flap Success and Post-Operative Secondary Outcomes

C Haines, R Africa, V Ranasinghe

University of Texas Medical Branch - Galveston

Background: Free flap reconstructive surgeries are complex surgeries that can have many complications that arise post-operatively. This multicenter retrospective cohort study utilized the TriNetX database evaluating postoperative outcomes of free flap reconstruction between patients with or without alcohol dependence.

Objective: To generate quantitative data to determine the relationship between alcohol dependence and the risk of post-operative revisions and secondary outcomes after a non-bony or bony free flap reconstructive surgery.

Methods: Patients with head and neck cancer who underwent non-bony or bony free flap reconstruction with varying alcohol dependence time windows including anytime, within one year, and within six months prior their flap procedure were included in the data. Risk ratios (RR), Odds Ratios (OR), and 95% confidence intervals (CI) were calculated to assess flap revisions and secondary outcome risks from one day to a month post-op.

Results: After propensity score matching, the non-bony flap only cohort showed an increased risk for the primary outcome of Other Flap Revisions, as well as increased risk of Sepsis, Cardiovascular Complications, Pneumonia, and UTI's. Bony flap only cohort showed an increased risk for the primary outcome of Other Flap Revisions, as well as increased risk for DVT's, Sepsis, Surgical Site Infection, and Pneumonia.

Conclusion: Both the non-bony and non-bony free flap groups had an increased risk of post-operative flap revisions as well as secondary outcomes due to alcohol dependence prior to the procedure. These results can inform surgeons performing flap procedures the increased risks in flap failure and post-operative complications in patients that have alcohol dependence diagnoses.

ePoster #43 | Case Report | Clinical Science | Pediatric Surgery

Rhabdomyomatous Mesenchymal Hamartoma Presenting as a Perianal Mass in a 4-year-old

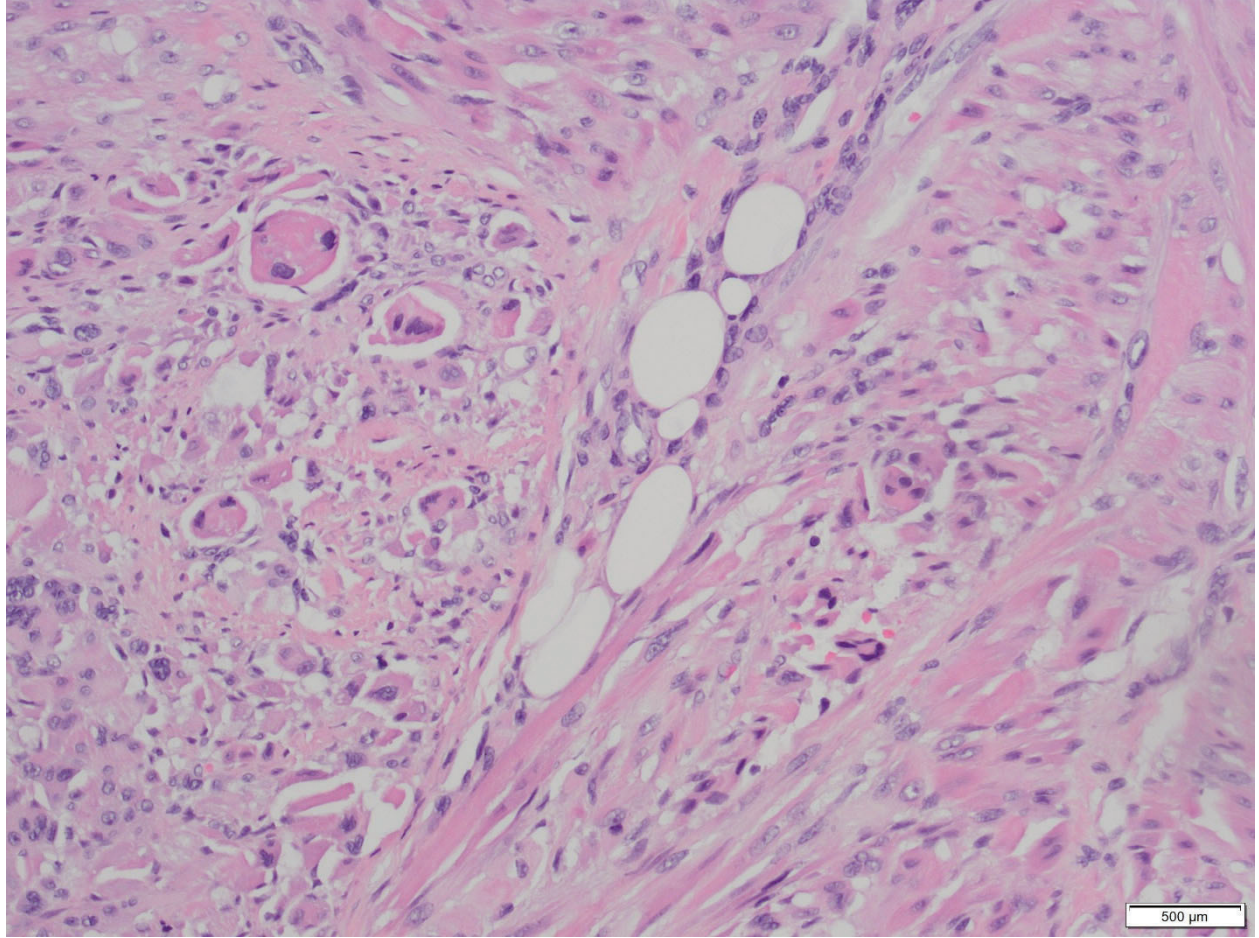
T Jones, E Stewart, T Hayes, I Mitchell
University of Texas Medical Center - San Antonio

Introduction/Objective: Rhabdomyomatous Mesenchymal Hamartoma (RMH) is a congenital, non-neoplastic growth first described in 1986, composed of intradermal skeletal muscle, fibrous, and adipose mesodermal and ectodermal elements with a preference for the head and neck of children. Cases of RMH in the perianal region have been previously reported, but virtually all were diagnosed in infancy. We present the first case of a non-congenital perianal RMH in a 4-year-old girl.

Case Presentation: The patient was referred to our surgical clinic with a non-tender, firm mass at the 9 o'clock position, initially diagnosed as an abscess. An MRI showed an ill-defined, right-sided perianal T2 hyperintensity with mild enhancement, which prompted surgical excision. Immunohistochemical staining with desmin, myogen, and MyoD1 revealed the presence of striated skeletal muscle. The lesion also contained mature adipose tissue, focally dense connective tissue, and a nerve at its periphery, which supported the diagnosis of RMH.

Discussion: Our case highlights the potential for RMH to present as an acquired perianal lesion in patients who lack any detectable congenital lesion at birth. Additionally, our case highlights the possibility of RMH that presents as a subcutaneous nodule which can be confused for other more common perianal soft tissue pathologies like infection.

Conclusion: Therefore, although rare, RMH should be considered in the differential diagnosis of both congenital and newly developed perianal subcutaneous nodules in children.



ePoster #45 | Abstract | Clinical Science | Pediatric Surgery

Forgotten but Fundamental: Evaluating Post-Surgical Debrief Adherence

P Menon, T Sweeney, A Sinnathamby, J Joly, K Sutyak, N Hebballi, E Morris, K Tsao
University of Texas HSC - Houston

Background: The three-phase WHO surgical safety checklist reduces errors and improves peri-operative patient safety. The post-surgical debrief (PSD) standardizes closed-loop communication and ensures proper handoff to the next care phase.

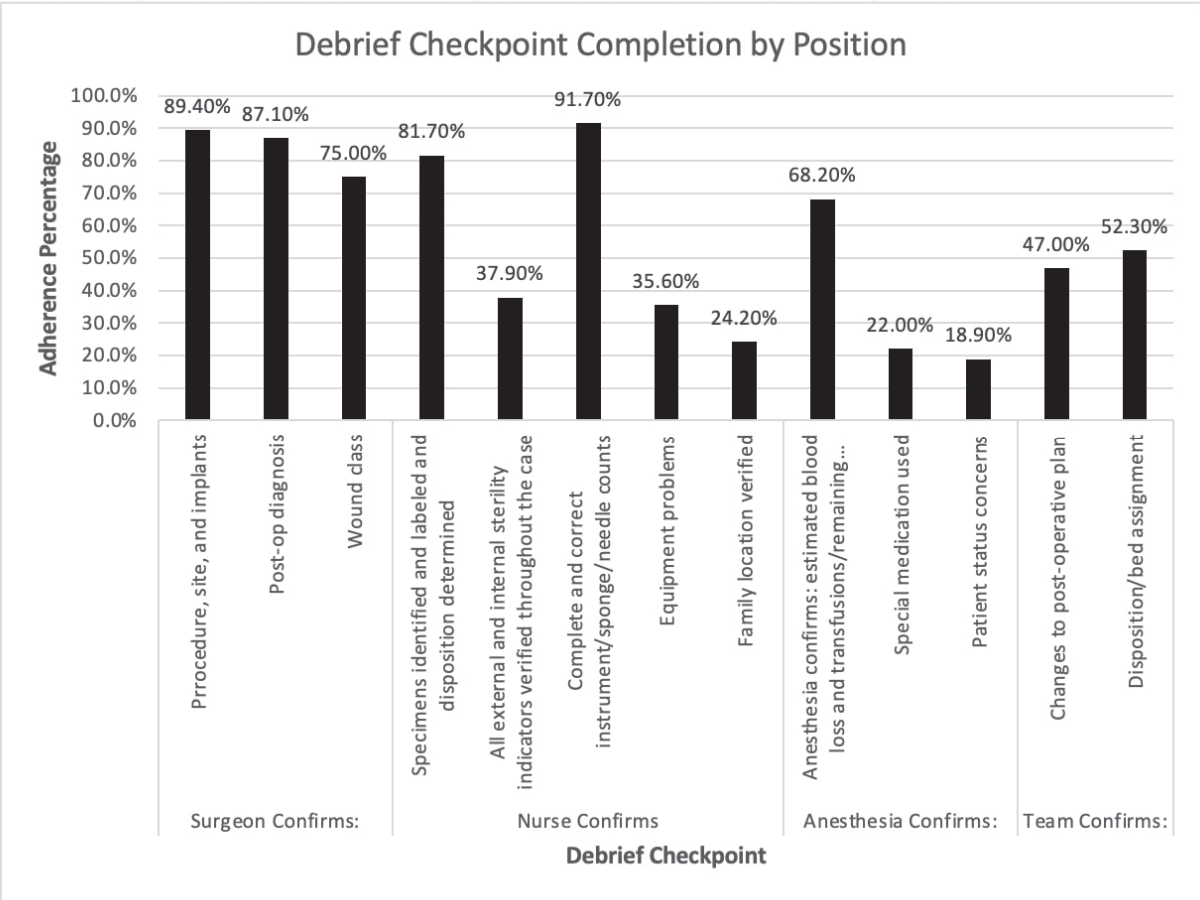
Objective: To evaluate adherence to the PSD checklist and identify improvement opportunities.

Methods: A prospective observational study was conducted of pediatric surgeries (05/2025-07/2025). The institutional PSD includes 13 role-specific items requiring surgeon, anesthesiologist, nurse, and technologist participation. PSD adherence was audited using convenience sampling of pediatric subspecialties. Descriptive statistics, univariate analyses were utilized.

Results: Overall, 144 pediatric surgeries were audited. The PSD was fully completed in 10 cases (7%), partially in 127 (85%), and not performed in 11 (8%). Median checklist completion was 7 of 13 items (IQR: 6–10). Neurosurgery had highest median completion (9, IQR: 7.5–10), while orthopedics (6, IQR: 2.5–7.5) and ENT (6, IQR: 2.75–8) had the lowest ($p = 0.39$). Attending surgeons initiated the PSD in 70 cases (54.7%), circulating nurses in 50 (39.1%), scrub technicians in 5 (3.9%), fellows in 1 (0.8%), and residents in 2 (1.6%). Participation was highest for nurses (87%) and surgeons (77%), lower for scrub technicians (56%) and anesthesiologists (11%). Six items were addressed in <50% of cases: patient status (19%), special medication (22%), family location (24%), equipment issues (36%), sterility (38%), and postoperative plan (47%). Instrument counts (92%), procedure (89%), and diagnosis (87%) were consistently addressed (FIGURE).

Conclusion: PSD adherence was poor. Nurses and surgeons had greater involvement than other roles. Improving participation and interdisciplinary communication could enhance peri-operative safety.

FIGURE. Proportion of checklist items completed stratified by intra-operative position



ePoster #46 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

INDICATIONS AND OUTCOMES IN ENDOSCOPIC CARPAL TUNNEL RELEASE AT A VETERAN AFFAIRS MEDICAL CENTER

Kala T. Pham, BS; Raymond A. Lopez, MD; Umar M. Ghilzai, MD; Christine Yin, MD
Baylor College of Medicine

Background: Carpal tunnel syndrome (CTS) is commonly treated with carpal tunnel release (CTR). In civilian populations, endoscopic CTR (eCTR) offers reduced pain and faster recovery, but outcomes in veterans—who have a higher burden of comorbidities—are less defined.

Objective: This study evaluated clinical outcomes in veterans to identify factors associated with persistent symptoms or complications.

Methods: A retrospective review was conducted of eCTR and open CTR (oCTR) cases at the Michael E. DeBakey VA Medical Center from January to November 2024. Patients were identified using CPT codes 29848 and 64721. Collected data included demographics, comorbidities, electrodiagnostic findings, and complications or symptom recurrence. Primary endpoints were recurrence, early and late complications, and a composite of these outcomes. Statistical analyses were performed using Student's t-test and Chi-square in Stata.

Results: Eighty-two patients (95 wrists) were included. Mean age was 59.3 ± 14.1 years, mean travel distance 76.9 ± 193.8 miles, and mean follow-up 2.1 ± 3.0 months. No significant differences were observed between eCTR and oCTR in recurrence (OR 2.39, 95% CI 0.62–9.25, $p=0.207$) or early complication rates (OR 0.57, 95% CI 0.14–2.39, $p=0.444$). Travel distance >25 miles trended toward significance for the composite outcome (OR 0.38, 95% CI 0.13–1.14, $p=0.086$). Operative time >30 minutes was significantly associated with complications (OR 3.44, 95% CI 1.07–11.00, $p=0.038$).

Conclusion: Among veterans, outcomes were comparable between eCTR and oCTR. Most experienced favorable results with low recurrence and complication rates, though operative time over 30 minutes predicted higher complication risk.

ePoster #47 | Abstract | Clinical Science | Plastic & Maxillofacial Surgery

Comparison of Cranial Vault Remodeling Versus Spring Cranioplasty for Non-Syndromic Unicoronal Craniosynostosis: Analysis of Outcomes

M Shrout, S Frommer, S Kuriakose, P Combs, E Tyler-Kabara, P Kelley
University of Texas Austin - Dell Medical School

Background: Unicoronal craniosynostosis (UCS) causes premature fusion of a single coronal suture, resulting in asymmetric forehead flattening, orbital dystopia, and nasal deviation. Traditional correction with fronto-orbital advancement and remodeling (FOAR) effectively restores cranial shape but is associated with longer operative times, higher blood loss, and greater morbidity. Spring-assisted cranioplasty has emerged as a less invasive alternative, using controlled distraction forces to remodel the cranial vault gradually. While this approach has shown success in other single-suture synostoses, its role in UCS remains less well defined. Given the unique asymmetry of UCS and the importance of restoring orbital and skull-base balance, this study compares outcomes of FOAR and spring cranioplasty to evaluate differences in surgical morbidity and postoperative craniofacial symmetry.

Objective: To compare outcomes of cranial vault remodeling via fronto-orbital advancement and remodeling (FOAR) versus spring cranioplasty in patients with non-syndromic unicoronal craniosynostosis (UCS), focusing on surgical parameters and craniofacial symmetry improvements.

Methods: Retrospective review comparing FOAR and spring-assisted cranioplasty outcomes in non-syndromic patients with UCS undergoing FOAR or spring cranioplasty, with complete pre- and postoperative imaging and surgical data. Statistical analysis was performed using Python (version 3.11). Main outcomes were surgical time, estimated blood loss (EBL), packed red blood cells (PRBC) transfused, intracranial volume (ICV), facial twist (FT), skull-base twist relative to palate (SBT-P) and nasion (SBT-N), and orbital morphology symmetry.

Results: Spring cranioplasty, when considering both placement and removal, significantly reduced operative time (157.9 ± 28.6 vs. 264.7 ± 48.3 minutes), EBL (5.5 ± 1.6 vs. 26.5 ± 9.2 mL/kg), and PRBC transfusion (2 ± 4.2 vs. 27.4 ± 5.9 mL/kg) compared with FOAR ($p < 0.001$). Postoperatively, patients who underwent spring cranioplasty demonstrated significant improvements in FT, SBT-P, and SBT-N ($p < 0.001$), whereas FOAR did not achieve significant changes. Intracranial volume did not differ significantly between groups. Spring cranioplasty patients demonstrated superior orbital symmetry improvement.

Conclusion: Spring cranioplasty offers a less invasive alternative to FOAR for UCS, with shorter surgery, less blood loss, and better craniofacial symmetry correction without compromising intracranial volume expansion.

Clinicopathologic Features and Tumor Size Associations in Children with Wilms Tumor at Kenyatta National Hospital

Z.Dhalla, N.Subramanian, B.Naik-Mathuria, T.Jumbi
University of Texas Medical Branch - Galveston

Background: Wilms' tumor is the most common pediatric renal malignancy globally. In low- and middle-income countries (LMICs), survival is below 50%. Understanding presentation and outlining associations, risks, best treatment actions improves care patients receive in LMICs.

Objective: To analyze the features of children with Wilms tumor at Kenyatta National Hospital (KNH) and explore associations between tumor size and histopathologic risk and type.

Methods: Retrospective review of 30 Wilms tumor patients at KNH. Variables included age, sex, tumor dimensions, volume, laterality, histology. Age was grouped at 3 years (≤ 3 vs > 3). Tumor volumes ≤ 550 cm³ hypothesized to indicate lower risk, with a 550 cm³ cutoff. Laterality was divided into Right (1), Left (2), Bilateral (3). Histological subtypes were classified as cystic partially differentiated nephroblastoma, completely necrotic nephroblastoma, epithelial, stromal, mixed, regressive, focal anaplasia, blastemal, diffuse anaplasia. Associations between categorical variables were analyzed using 2x2 contingency tables and chi-squared tests.

Results: Median presentation age was 3 years. Sex distribution was balanced (F 18, M 17). Laterality was predominantly unilateral (n=30/31). Tumor volumes (n=30) ranged 229-5040 cm³. Tumor volume and risk stratification were compared (Table 1). Histologic subtypes included epithelial (6.7%), stromal (13.3%), mixed (60%), blastemal (16.7%), and anaplastic (3.3%). Sex and age were significantly associated (p=0.026), with females presenting later. Tumor size showed no association with sex, age, histology, or laterality.

Conclusion: In children with Wilms' tumor, larger tumor volume was not associated with higher histopathologic risk. This aids in risk stratification and counseling families at presentation.

Table 1. Association between Tumor Volume and Risk Group

Risk Group	Volume < 550 (n=9)	Volume \geq 550 (n=21)
Low Risk (1)	0	1
Intermediate Risk (2)	6	18
High Risk (3)	3	2

Note: $\chi^2 = 2.86$, p = 0.24. No statistically significant association was observed between tumor volume and risk group.

Osteomyelitis of Facial Bones: Contemporary Management and Reconstructive Strategies

H Marwan, C Mosquera, M Takeuchi
University of Texas Medical Branch - Galveston

Background: Osteomyelitis of the facial bones is a serious condition that can cause progressive bone destruction, compromise of function, and significant morbidity. Management can be complicated by variable clinical presentations and systemic comorbidities. The use of antibiotics usually fails and patients require surgical resection with reconstruction. Microvascular free flaps, virtual surgical planning, and dental implant rehabilitation have become the standard of treatment in complex cases, as they enable restoration of function and quality of life in a single procedure.

Objective: To present a contemporary approach to the management of osteomyelitis of the facial skeleton and analyze the microbiological results of the resected specimen

Methods: Retrospective analysis of all subjects with secondary chronic jaw osteomyelitis was collected. Exclusion criteria include pediatric patients, inmates, and the absence of microbiological results. A minimum follow-up within 6 months was required. Data were collected with a focus on microbial results and reconstructive methods. Postoperative quality of life was measured.

Results: In terms of recalcitrant osteomyelitis, microbial analysis was insignificant, and the host factors made a significant contribution to the failure of the antibiotic therapy. Regarding the reconstructive technique, virtual surgical planning enhances precision, and immediate implants with patient-specific prosthetics further improve outcomes.

Conclusion: Effective management of facial osteomyelitis requires a combination of medical, surgical, and reconstructive approaches. A deeper examination of microbial biofilm is crucial to understanding the reasons behind antibiotic treatment failure.