

Augusta - Clinical Oncology - Hosted by the CT Commission on Cancer

Santosh Swaminathan MD	Saint Mary's Hospital
Santosh Swaminathan MD	Saint Mary's Hospital
Sue Ting Lim MD	Saint Mary's Hospital
Alexander Frey MD	Yale School of Medicine
Andrew Seto MD	Stamford Hospital
Richard Maduka MD	Yale School of Medicine
Tomasz Kasprzycki MD	Frank H Netter Quinnipiac School of Medicine - WH
Richard Maduka MD	Yale School of Medicine
Sean Ramras MD	Frank H Netter Quinnipiac School of Medicine - WH

Impact of Clinical Vs Laboratory Markers of Malnutrition on Outcomes Following Rigid Prosthesis Reconstruction following Resection of Chest Wall Chondrosarcoma
 Defining the Utility of Combined Positron Emission Tomography – Computed Tomography
 The Incorporation of Palliative Care into a Multidisciplinary Approach to Stage IV Radiation-Induced Osseous Metaplasia of the Breast: A Rare Anomaly Following
 Indoor Versus Outdoor Occupational Exposure and Cutaneous Melanoma Risk: A
 Does pancreatitis on imaging matter? The Risk of Adenocarcinoma in Situ in Patients
 Sex-based Differences in Age at Diagnosis of Melanoma Among Patients in the
 Small bowel obstruction from Urothelial carcinoma metastasis: A rare presentation

Montpelier**John MacArthur Trauma/Critical Care - Hosted by the CT Committee on Trauma**

Kathleen O'Neill MD, PhD	Yale New Haven Hospital
Sean Ramras MD	Frank H Netter Quinnipiac School of Medicine - WH
Leah Aakjar MD	University of Connecticut
Nicholas Druar MD, MPH	Saint Mary's Hospital
Suraj Panjwani MD	St. Mary's Hospital
Santosh Swaminathan MD	Saint Mary's Hospital

The Effect of the COVID-19 Pandemic on Community Violence: Minority Communities
 A dangerous meal: an acute perforation after foreign body ingestion
 Does Statin Therapy Reduce the Risk of Stroke in Blunt Cerebrovascular Injury
 Investigation of Shock Index as an Indicator for Level of Trauma Activation: Retrospective
 : Impact of the Affordable Care Act on Management of Ankle Fractures - A National
 Global Deletion of Pellino-1 Triggers Cardiac Dysfunction, Cell Death and Increased

Sultan Ahamed, MD, FACS General Surgery - Hosted by the CTACSPA

Santosh Swaminathan MD	Saint Mary's Hospital
Shayan Ahmed MD	Saint Mary's Hospital
Tian Sheng Ng MD	Saint Mary's Hospital

Implications of Obesity in Patients with Ulcerative Colitis undergoing Ileocolic
 Outcomes of Robotic-Assisted versus Laparoscopic Cholecystectomy – Experience
 Effects of COVID-19 Pandemic on Cholecystectomies Performed in a Community

Hartford**Plastic & Reconstructive Surgery - Hosted by the CTACSPA**

Brittany Davis MD	Stamford Hospital
Tiahna Spencer MD	UConn Health

A Case Series of Reverse-Flow Anterolateral Thigh Perforator Flap for Peri-Patellar
 Reduction Mammoplasty Performed to Treat Chronic Headaches in a Patient with

Medical Student Research- Hosted by the CTACSPA

Olohirere Ezomo MPH	Frank H. Netter MD School of Medicine at QU
Blake Acquarulo MPH	Frank H. Netter MD School of Medicine at QU
Olohirere Ezomo MPH	Frank H. Netter MD School of Medicine at QU
Ian Whittall BA	University of Connecticut School of Medicine
Shashwat Kala BA	Yale School of Medicine

Global Research Trends on the impact of the COVID 19 pandemic on Orthopedic
 Racial Disparities in Outpatient Versus Inpatient Total Hip Arthroplasty
 Ischemia of the thumb, a rare case of emboli to the princeps pollicis artery
 The BITE Score: a Novel Scoring System to Improve Dog Bite Care in Children
 Ethnoracial Disparities in Surgical Pediatric Cancer Care During the COVID-19 Par

Providence - Metabolic & Bariatric Surgery - Hosted by CT Chapter ASMBS

Sue Ting Lim MD	Saint Mary's Hospital
Joseph Carbonaro BS	Frank H. Netter MD School of Medicine at QU
Katarina Bade BS	Trinity College
Santosh Swaminathan MD	Saint Mary's Hospital
Santosh Swaminathan MD	Saint Mary's Hospital
Chelsea Paterson MD	Saint Mary's Hospital

Thioredoxin-1 Overexpression Ameliorates the Progression of Diabetic Cardiomyopathy
 Long-Term Outcomes of Revisional Bariatric Surgery
 Effect of COVID 19 Lockdown on Weight Change in Post-Surgical Patients
 Assessment of Blood Transfusion Requirement in Patients on Therapeutic Anticoagulation
 Incidence and Short-Term Outcomes of General Surgeons Performing Elective
 Incidence of patients on psychiatric medications and their outcomes following el

Boston - Surgical Quality, NSQIP and ERAS - Hosted by the CtSQC

Alexander Ostapenko Dr	Danbury Hospital
Josh Sznol MD	Yale School of Medicine
Nupur Nagarkatti MD	Yale School of Medicine
Pharis Sasa BS	Spine Institute of CT
Samuel M. Miller MD	Yale School of Medicine
Thomas Tritt MD	Stamford Hospital
Suraj Panjwani MD	St. Mary's Hospital
Tyler Glaspy MD	Danbury Hospital

Synchronous major hepatic resection with primary colorectal cancer increases risk
 Adverse Impact of Ascites on Outcomes of Open Inguinal Hernia Repair in the
 Is Patient Sex Associated with Surrogate Consent for Surgical Intervention?
 Assessing the Accuracy of the American College of Surgeons' Surgical Risk Calculator
 A Descriptive Analysis of Older Adult Patients who Underwent Surgery Based on
 Effects of Physician Education on the Identification of Moderate and Severe Malnutrition
 Bearing of BMI on Surgical Outcomes After Ostomy Reversal-NSQIP Analysis
 Role of Ablation Therapy in Conjunction with Surgical Resection for Neuroendocrine

Concord - Surgical Subspecialties- Hosted by the CTACSPA

Austin Alecxih BS	Frank H. Netter MD School of Medicine at QU
Brienne Ryan, MD	Connecticut Children's Medical Center
Krist Aplaks MD, MBA	Danbury Hospital
Minha Kim MD	Danbury Hospital
Nicolle Burgwardt MD	Stamford Hospital
Sue Ting Lim MD	Saint Mary's Hospital
Olohirere Ezomo MPH	Frank H. Netter MD School of Medicine at QU

BIOMECHANICS OF THE PROXIMAL TIBIOFIBULAR JOINT: QUANTIFYING NORMAL
 Esophageal Stenosis Secondary to Cavitary Lesions: A Unique Presentation of
 Neoadjuvant radiation therapy prior to a pancreaticoduodenectomy for adenocarcinoma
 Pancreatic Paraganglioma and Hyperparathyroidism in a Patient with RET Gene Mutation
 Patent Urachus in Neonate Requiring Surgical Repair
 Prolyl-4-Hydroxylase 2 (PHD-2) Inhibition Promotes Pro-angiogenic and Anti-apoptotic
 The Association between Quadriceps Weakness and Persistent Knee Pain after Total

Plastic & Reconstructive Surgery - Hosted by the CTACSPA

A Case Series of Reverse-Flow Anterolateral Thigh Perforator Flap for Peri-Patellar Wound Coverage

Brittany Davis MD, David Ianacone MD, Ryan Pettit MD, Yuen-Jong Liu MD

Stamford Hospital- Columbia University Vagelos College of Physicians and Surgeons

Introduction: Lower extremity wounds compose a large portion of all acute and chronic wounds and can be treated with a variety of approaches from conservative medical treatment to invasive surgical intervention. Measures involving flap coverage allow for improved perfusion and tissue coverage when compared to more conservative approaches such as chronic antibiotic use or skin grafting. These procedures potentially save the patient from repeated trips to the OR for repeat debridements or painful wound vac changes. Moreover, for wounds around the knee, preserving the mobility of the joint is essential. The reverse-flow anterolateral thigh (ALT) perforator flap is a propeller flap that can cover wounds around the knee without limiting the mobility of the joint. However, this type of flap is rarely used. The aim of our case-series is to demonstrate the utility in this approach to providing a single-step surgery that allows for peri-patellar wound coverage.

Methods: Between October 2020 and January 2021, a case series of 3 patients with wounds in the peri-patellar region underwent fasciocutaneous island propeller perforator flap from the left anterolateral thigh based on the left superolateral genicular artery. All patients underwent doppler evaluation of the lateral thigh of the involved leg and the perforators were identified and marked. The island fasciocutaneous flap was elevated with electrocautery and tenotomy scissors, incorporating a wide cuff of superficial muscle fascia around the perforators to minimize the risk of kinking. The fasciocutaneous island perforator flap based on the superolateral genicular artery was then elevated and rotated in propeller fashion and the distal end of the flap (formerly at the proximal thigh) reached beyond the open wound of the knee. The flap was tailored in size and the remaining skin bridge was excised. The flap was sutured into place and doppler was used to confirm no disruption of flow. The patients were followed for readmission and complications; including hematoma, infection, and flap necrosis.

Results: All 3 patients were male (Ages 38, 51, 83) and had peri-patellar wounds. The 38 and 58 year old males both suffered open fractures of the lower extremity, infection, and wounds over their hardware. The 83 year old male had infected hardware after a total knee replacement that required hardware removal, a medial gastrocnemius muscle flap and split thickness skin graft that unfortunately had necrosed. All 3 underwent the reverse flow ALT flap as detailed above. The 38 year old patient returned to the OR for partial flap necrosis after continued recreational PCP and tobacco use. He underwent revision with debridement of the necrotic area and wound vac placement, with delayed split thickness skin graft. The 51 and 83 year old patients had no complications from their flaps, required no further revisions of the wound area, and did not have any impaired mobility.

Conclusions: In conclusion, the reverse flow ALT flap is an excellent choice for both acute and chronic peri-patellar wound coverage without compromise of joint mobility in a carefully selected patient population without vascular risk factors for flap failure.

Reduction Mammoplasty Performed to Treat Chronic Headaches in a Patient with a Ventriculoperitoneal Shunt

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Hartford Hospital, Hartford CT and UConn School of Medicine, Farmington CT

Introduction: According to the American Society of Plastic Surgeons, over 107,000 reduction mammoplasty procedures were performed in 2019. These procedures have a variety of clinical indications, ranging from reconstructive to aesthetic. While reduction mammoplasty is most commonly performed for macromastia resulting in chronic pain in the neck and back, there are other benefits to the procedure as well. Studies have also documented improvements in headaches, respiratory status, psychological wellbeing and aesthetics. We present a 29-year-old female with a past medical history of hydrocephalus and Chiari malformation type 1 status post ventriculoperitoneal (VP) shunt placement, and redundant breast tissue that reportedly pulled on her VP shunt which led to chronic headaches.

Method(s): This case study was conducted where the patient's electronic medical records were reviewed retrospectively to monitor the initiation of the symptoms and have been examined post operatively to monitor for the resolution or recurrence of the chronic headache. Consent was obtained for participation in this study.

Results: A bilateral reduction mammoplasty was performed, using an inferiorly based pedicle, with 288g of breast tissue removed from the right breast and 352g removed from the left breast. The patient was seen in the office post-operatively with subjective remission of chronic headaches. Postoperatively, she had visibly less tension on the subcutaneous shunt. To date, there are no further documented visits to her neurosurgeon or to the ED for headaches.

Conclusion(s): Breast reduction mammoplasty may serve as a benefit for patients with a ventriculoperitoneal shunt and chronic headaches.

Medical Student Research- Hosted by the CTACSPA

Global Research Trends on the impact of the COVID 19 pandemic on Orthopedic Surgery: a bibliometric analysis.

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2. Johns Hopkins School of Medicine, Department of Orthopedic Surgery.

Introduction: The COVID-19 pandemic affected the world of medicine and orthopedic surgery was not an exception. The pandemic created situations that required surgeons to respond to rapidly evolving guidelines and patient management approaches. Due to the growing interest in the role COVID-19 pandemic continues to play in the field of orthopedic surgery, we identified the most cited publications related to COVID-19 and orthopedic surgery.

Objective: To assess for clinical guidelines, surgeon experiences, innovations, and possible research trends and central themes in orthopedic surgery with respect to COVID 19 pandemic.

Methods: Two databases were searched, PubMed and SCOPUS using keywords - "orthopedic surgery," "orthopedics," "SARS COVID-19", "coronavirus" and "COVID-19". Results were exported the same day to prevent discrepancies with frequent database updates. Our inclusion criteria included articles published after 2020, while our exclusion criteria were articles outside the field of orthopedic surgery or COVID-19, and with less than 25-citations. Titles, abstracts and full texts were screened, and selected articles were used for this analysis.

Result: Of the initial 2048 articles produced from the database search, 68 titles were selected, 23 duplicated were excluded, yielding 45 abstracts for final assessment. After abstract screening, 30 articles were selected for this bibliometric analysis. The mean of the number of citations was 52 with a median of 44. The number of citations of the selected articles range from 34-109 citations each. The top 5 countries where the papers were published were Singapore, China, United States, and Italy. Of the 30 articles, the top five journals that published them were from Journal of Bone Joint Surgery (eight articles), Journal of American Academy of Orthopedic Surgery (3 articles), Journal of Arthroplasty (2 articles), Journal of the American Academy of Orthopedic Surgeons (2 articles) and Knee Surgery and Sports Traumatology and Arthroscopy Journal (2 articles). The top 5 articles with the highest citations had 109, 95, 78, 77 and 76 citations respectively. These articles covered diverse topics such as orthopedic surgeon experiences treating COVID 19 patients in the early wake of the pandemic, infection rates among patients who had fractures and the influence of telemedicine on the practice of Orthopedic Surgery.

Conclusion: Further research into the development of validated, modified examination techniques specifically targeted towards virtual visits is needed. Furthermore, the need for new technology to allow for improved interactive physical examinations is critical as the world of medicine moves towards the era of growing spurt of telemedicine.

Racial Disparities in Outpatient Versus Inpatient Total Hip Arthroplasty

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Introduction: By 2026, estimates predict that nearly half of all arthroplasty procedures will be done in the outpatient setting. Racial disparities have previously been described in the utilization and outcomes of total hip arthroplasty (THA), but the potential role of racial disparities in patient selection for inpatient and outpatient THA has not been explored. The objective of this study is to determine if racial disparities exists for patients who underwent inpatient versus outpatient THA. A secondary objective is to identify differences in rates of complications for inpatient versus outpatient THA.

Method(s): A retrospective review of the 2010-2018 American College of Surgeons National Surgical Quality Improvement Program was performed. Asian, Black, Hawaiian/Pacific Islander, Hispanic, Native American/Alaskan, and White patients who underwent THA were compared in terms of outpatient versus inpatient treatment and adverse events.

Results: 182,841 patients were analyzed. After controlling for baseline differences, compared to Whites outpatient THA was higher in Asians (OR=1.64, p<.001), Blacks (OR=1.37, p<.001) and Hispanics (OR=1.62, p<.001). However, complication rates for Blacks (12.4%) and Asians (13.3%) were significantly higher (p<.001) than Whites (10.8%), but Asians had a lower readmission rate (2.3% vs 3.4%). No significant differences in outpatient treatment or complication rate were found between Whites and Native Americans or Hawaiians.

Conclusion: There are racial disparities in outpatient THA treatment that is not explained by patient clinical features. To explain these disparities, more precise patient criteria based on preoperative comorbidities for each procedure need to be established. Identification and mitigation of racial selection bias is an important modifiable risk factor to mitigate disparities in outcomes at the surgeon level.

Ischemia of the Thumb, a Rare Case of Emboli to the Princeps Pollicis Artery Abstract

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2. Quinnipiac University

Introduction/ Significance: Acute digital ischemia is relatively rare due to collateral blood supply to the hand from ulnar and radial arteries. This case highlights the importance of thorough investigation for systemic causes of distal upper extremity ischemia.

Objective: We present a case of thumb ischemia secondary to embolic occlusion of the princeps pollicis artery, a branch of the radial artery, with concomitant atherosclerotic occlusion of the ipsilateral subclavian artery

Case: Patient is a 61-year-old man with a complaint of recurrent sudden right thumb pain. Previous episode was 2 weeks ago with spontaneous recovery. Pain was sudden in nature, constant, throbbing and associated with a bluish discoloration of the thumb and numbness. No associated swelling noted. Pain does not radiate, is not alleviated by manual pressure and nothing makes it worse. **Physical examination** demonstrated cold right thumb with cyanosis distal to the distal interphalangeal (DIP) joint over volar aspect with diminished sensation. Doppler ultrasound of the right thumb confirmed the presence of a thrombus in the princeps pollicis artery with 80% blockage. Investigation for a potential embolic source using echocardiogram (essentially normal) and CT angiogram identified a plaque with local protrusion (approximately 55%) into the lumen of the right subclavian artery compared with adjacent intima media thickness.

Discussion: Differential diagnosis for digital ischemia include trauma such as an underlying fracture and atraumatic diseases like Raynaud’s disease. Never miss diagnoses such as an atherosclerotic embolus, septic emboli from infectious endocarditis and paradoxical emboli from a deep vein thrombosis through a patent foramen ovale are crucial diagnosis that must be either ruled out or ruled in. Treatment modalities for digital ischemia include medical therapy such as anti-platelet drugs e.g., clopidogrel, aspirin⁶. Unfractionated or low molecular weight heparin therapy endovascular tissue plasminogen activator nitroglycerin patch and iloprost. In severe acute digital ischemia with imminent risk of finger loss, microsurgical dissection of the digital collateral arteries with reconstruction may be needed emergently to restore blood flow to the affected finger^{9,25}

Conclusion: Thumb pain in a patient with high risk for atherosclerosis should raise suspicion for thumb ischemia and such patient will require prompt workup and intervention.

The BITE Score: A Novel Scoring System to Improve Dog Bite Care In Children

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Introduction: There are 76 million pet dogs in the United States and 4.5 million dog bites are reported every year. Twenty percent of dog bites in pediatric patients require medical management, surgical repair, or both. The spectrum of severity of dog bites makes evaluating treatment options challenging. Despite the frequency of dog bite injuries and the spectrum of recommended treatment, there exists no simple evaluation tool to triage bite severity and guide subsequent operative or non-operative management. We created a novel scoring system for pediatric dog bite injuries in an effort to streamline and standardize decision-making processes.

Methods: We conducted a 10 year, retrospective review of dog bite injuries among pediatric patients from 2009-2019 at a tertiary care children’s hospital. We evaluated patient and injury-related factors that are independently associated with a need for operative intervention of dog bite injuries. Categorical data was analyzed using Pearson’s and likelihood-ratio Chi-squared test to determine associations with operative management. Significant variables were included in a binary logistic regression model to create a predictive model for the likely need for operative management based on these variables in combination.

Results: A total of 698 patients with dog bite injuries were included in the study, with a mean age of 8.1 ±7.1 years old. 54.8% were male, and 53.9% of patient’s families were the dog’s owners. Other variables including dog provocation by the patient prior to the injury, dog size, dog breed, wound size, and wound location were also collected. 51.9% of patients received operative treatment upon presentation to the hospital. Patient age ($p<0.01$), dog ownership ($p<0.01$), dog size ($p=0.01$), and the head as the location of injury ($p<0.01$) were found to have significant associations with operative management.

$$y = -1.674 + x_1 + x_2 + x_3 + x_4$$

x_1	Presence of head lesion	Absence: $x_1=0$ Presence: $x_1=1.658$
x_2	Age	0-3.7 years: $x_2=0$ 3.7-7.7 years: $x_2=0.316$ 7.7-11.8 years: $x_2=0.389$ 11.8 years and older: $x_2=-0.291$
x_3	Dog size	Small: $x_3=0$ Medium: $x_3=0.966$ Large: $x_3=-0.862$
x_4	Dog ownership status	Absence: $x_4=0$ Presence: $x_4=0.230$

This model indicates need for operative management when its output value, y , is greater than 0.5. The model was found to have a sensitivity and specificity of 76.8% and 61.2%, respectively. A receiver-operating characteristic curve for this 280 sample analysis yielded an area of 0.733.

Conclusion: Our novel scoring system indicates that child age, dog ownership status, dog size, and injury location are among the most crucial variables in determining the need for operative management among children with dog bite injuries. Wide adoption of this scoring system may improve the efficiency and quality of care in pediatric dog bites.

Ethnoracial Disparities in Surgical Pediatric Cancer Care During the COVID-19 Pandemic at Yale New Haven Hospital

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Introduction: While the COVID-19 pandemic has posed an undeniable risk to the public at large, communities of color have emerged as particularly vulnerable. Cancer patients, especially those requiring surgical management, also represent an at-risk population, given the prolonged disease treatment course and increased risk of immunological complications. This study focuses on the interrelationship between these demographics and assesses the ethnoracial disparities in surgical pediatric cancer care during the first 10 months of the COVID-19 pandemic.

Method(s): A single-institution retrospective chart review identified pediatric cancer surgery patients receiving care at Yale New Haven Hospital's Smilow Cancer Center between 3/12/2019-1/12/2020 (pre-COVID cohort) and 3/12/2020-1/12/21 (COVID cohort). Additional inclusion criteria included 1) cancer diagnoses within the predetermined inclusion periods; 2) <18 years old. Up to 58 variables (demographics, treatments, surgeries, number and length of hospital stays, protocol deviations, etc.) were collected for each patient. Group differences were analyzed using independent-samples t-tests.

Results: N=33 and n=46 patients were included in the pre-COVID and COVID cohorts, respectively. Proportion of racial/ethnic minority patients (39.4% pre-COVID, 37% COVID, $p=0.464$) and specifically of Black/African American patients (12.1% pre-COVID, 19.6% COVID, $p=0.385$) did not significantly differ in the cohorts. Group-level comparisons indicate no differences in variables between non-Hispanic whites and racial/ethnic minorities in either the pre-COVID or COVID cohorts (all $p>0.05$).

However, within-demographic comparisons of variables between the pre-COVID and COVID cohorts reveal significant differences. On average, the racial/ethnic minority COVID cohort spent more in-hospital days at 90 days after diagnosis than their pre-COVID comparison group (8.08+SD days pre-COVID, 20.12+SD days COVID, $p=0.050$). They also experienced an increase in protocol deviations (0.08+SD pre-COVID, 1.18+SD COVID, $p=0.015$). Additionally, patients who identified as a member of a racial/ethnic minority experienced an increased number of hospitalizations 90 days after diagnosis (2.08+SD pre-COVID, 3.76+SD COVID, $p=0.05$). These differences were not experienced by the non-Hispanic white cohort.

Conclusions: Although in a small sample, this study suggests a disproportionate impact of the COVID-19 pandemic on pediatric cancer surgery patients identified as racial/ethnic minorities. Further studies in larger populations of patients are warranted to better understand the potential impact of the pandemic on clinical outcomes including endpoints of recurrence and death and what medical, social/cultural, and/or institutional factors might explain discrepancies within the provision of surgical care.