

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

Santosh Swaminathan MD	Saint Mary's Hospital
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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 with Sex-based Differences in Age at Diagnosis of Melanoma Among Patients in the V
 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 Major
 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 U.S.
 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 Dysphagia
 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

Metabolic and Bariatric Surgery

Hosted by the CT Chapter of the American Society of Metabolic and Bariatric Surgery

Thioredoxin-1 Overexpression Ameliorates the Progression of Diabetic Cardiomyopathy in Aged Transgenic Mice

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Introduction: Increased production of reactive oxygen species contributes to the etiology of diabetic complications. It acts as an intracellular antioxidant by scavenging reactive oxygen species (ROS) and protect the cells against oxidative stress and cell death. Our study aims to determine the long-term effect of streptozotocin (STZ) induced type-1 diabetes on aging Trx-1 transgenic mice related to their survivability, heart function, fibrosis, and apoptosis up to 180 days (d) compared to its corresponding wild-type (WT C57BL/6J).

Method: WT and Trx-1 overexpressed mice (Trx-1Tg/+) (8-12 weeks old) were injected with STZ (i.p. 50mg/kg-male; 75mg/kg-female for five consecutive days) for induction of diabetes (Dia). Fasting blood sugar level (FBS) was measured 30d after the final injection, and FBS >220mg/dL is used as the cut-off for diabetes. Echocardiography, Survival, FBS measurements were performed on 30, 60, 90, 120, 150, and 180d. Immunohistochemistry was performed on heart tissues (30, 90, and 180d).

Results: Dia-Trx-1Tg/+ mice have preserved EF at 60d (61.14±2.3%), 120d (56.1±1.94%) and 180d (60.8±4.3%), when compared to 30d (64.4±1.94%) representing preserved cardiac functions. On the other hand, Dia-WT mice show significant progressive depression of EF at 60d (53.8±1.9%), 120d (48.8±2.1%), and 180d (48.9±1.5%), ($p < 0.05$) when compared to 30d (68.4±6.1%) Dia-WT. Moreover, Dia-Trx-1Tg/+ mice show significantly higher EF than their corresponding Dia-WT counterparts at each time point measured after diabetic induction ($n=8-12$, $p < 0.05$). Dia-Trx-1Tg/+ mice ($n=71$) also exhibited a survival advantage over Dia-WT ($n=47$) counterparts with a median survival of 150 days compared to 60 days (Log Rank test: $p=0.004$). Dia-Trx-1Tg/+ mice also showed a significant reduction in cardiac fibrosis (4.18±1.08% vs. 17.5±5.1%; $p=0.03$, $n=4$) and TUNEL positive cells (3.81±1.49 vs. 7.66±1.46; $p=0.03$, $n=4$) when compared to their counterpart (Dia-WT) after 180d of diabetes.

Conclusion: These results show that Trx-1Tg/+ mice preserved their cardiac functions, increased survival, along with decreased apoptosis and fibrosis up to 180d under diabetic conditions, and hence suggesting Trx-1 based treatment strategy could prevent heart failure in aging.

Long-Term Outcomes of Revisional Bariatric Surgery

Joseph Carbonaro BS, Ilene Staff PhD, Richard L. Seip PhD, Tara McLaughlin PhD, Connie Santana BS, Darren Tishler MD, Pavlos Pappas MD

Introduction: Revisional bariatric surgery may be indicated for patients with insufficient weight loss after the index procedure and/or persistence of comorbidities. This exploratory study compared weight loss and comorbidity resolution 5 years following revisions that were: adjustable gastric band to laparoscopic sleeve gastrectomy (AGB to LSG) and adjustable gastric band to Roux-en-Y gastric bypass (AGB to RYGB). In patients with BMI>35 at pre-revision, we hypothesized the AGB to RYGB group would yield superior outcomes.

Methods: A retrospective chart review identified all patients who underwent revisional bariatric surgery at two medical centers in a healthcare system from 1/2012 to 11/2015. Pre-operative and 5-year post-revisional procedure weights, presence/absence of comorbidities (diabetes, sleep apnea, GERD, hypertension and hyperlipidemia), and hypertension medications were recorded. Outcomes were compared for AGB to LSG and AGB to RYGB groups. Categorical data were analyzed using the Fisher's Exact or Chi-Square test as appropriate, and continuous data using the Mann-Whitney U test.

Results: Of 142 revisional cases, 104 (72%) had 5Y follow-up data. Of these, n13 patients were excluded (n11, for other revision types; n2, for multiple revisions), leaving n51 AGB-LSG and n40 AGB-RYGB revisions. Of these, 73 had baseline BMI \geq 35. Pre-operatively, we noted higher pre-op weight and BMI in RYGB compared to LSG with no other differences. At 5 years post revision, the RYGB group had a significantly greater %TWL, %EWL, and decrease in BMI compared to the AGB to LSG group (*Table 1*). There were no significant differences in individual comorbidity resolution or number of anti-hypertension medications at 5 years between the two groups. However, revision AGB to RYGB decreased the overall number of comorbidities vs. AGB to LSG ($p=0.008$).

Conclusion: The AGB to RYGB revision induced greater long term weight loss compared to the AGB to LSG revision. Our findings suggest that revisional surgery that includes a malabsorptive component (i.e, RYGB) may induce further weight loss after initial gastric banding. The findings may aid clinicians recommending revisional surgery...

Table 1. Summary of weight loss 5 years following revisional surgery in the subset of patients (n=73; n37 SG, n36 RYGB) whose pre-revisional BMI was 35 or higher.

Cohort	Variable	Group	Mean \pm sd	p value
Subset: Pre-Operative BMI \geq 35 (n=73)	%TWL	LSG (n37)	5.64 \pm 10.85	<0.001
		RYGB (n36)	20.11 \pm 10.53	
	% EWL	LSG	14.03 \pm 28.35	<0.001
		RYGB	47.74 \pm 25.46	
	Decrease in BMI	LSG	2.33 \pm 4.45	<0.001
		RYGB	9.21 \pm 5.61	
Change in number of comorbidities	LSG	-0.30 \pm 1.05	0.008	
	RYGB	0.39 \pm 1.10		

Effect of COVID 19 Lockdown on Weight Change in Post-Surgical Bariatric Patients

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Introduction: Safe and effective weight loss in the year following bariatric surgery occurs in concert with both social support and a series of clinical visits to manage patient weight loss. Interruption of such support may threaten weight loss. In Connecticut, the COVID pandemic of 2020 led to a “lockdown”, during which in-person services were suspended and social support interrupted. This study investigated the effect of exposure to 63 days of COVID lockdown within 12 months following index bariatric surgery on weight loss in patients who underwent sleeve gastrectomy (SG) or Roux-en-Y gastric bypass (RYGB) surgery.

Method: This single center, retrospective chart review identified 1057 patients with 1 year follow-up data who underwent SG or RYGB from 1/9/2016 to 12/30/20. Controls (Group C) (SG n750, RYGB n130) completed surgery and follow up *before* the COVID lockdown (1/9/2016 to 3/15/20). Experimental patients (Group E) (SG n159, RYGB n18) completed surgery before COVID lockdown and follow up *after* the mandatory lockdown (5/20/20 to 12/31/2020).

Results: Within surgery type, there were a few modest differences in baseline characteristics between E and C (*table 1*). At 1 Y follow-up, absolute and relative weight changes did not differ between E and C and days to follow up were not different. Within group E, 21% of SG patients and 22% of RYGB patients experienced virtual (telemedicine) visits with bariatric clinicians during follow up, compared to none in group C.

Conclusion: We detected no effect of 63 days of COVID lockdown on %TWL at 1 year post SG or RYGB surgery. The institution of telemedicine services may have facilitated beneficial care. The findings may be useful to maintain/improve clinical management of surgical weight loss, in preparation for future pandemics and the suspension of health services.

Table 1. Baseline characteristics of patients undergoing SG or RYGB surgery and weight loss data at 1 year post-surgery, in the control (C) and experimental (E) groups. For continuous variables, data are medians and interquartile range (IQR; 25th pctl, 75th pctl). Percentages represent the proportion of the group.

Variable or Factor	Sleeve Gastrectomy			Roux en Y Gastric Bypass		
	C n750	E n159	p value	C n130	E n18	p value
Women (%, N/total)	81.1% (608/750)	84.9% (135/159)	0.255	87.7% (114/130)	66.7% (12/18)	0.019*
Age (years)	44.6 (32.1-57.1)	42.4 (31.3-53.5)	0.070	43.8 (32.6-55.0)	46.1 (38-54.2)	0.382
Hispanic Ethnicity (%) Yes, No, Not Reported	25.3, 71.6, 3.1	32.1, 67.9, 0	0.025*	26.2, 68.5, 5.4	22.2, 77.8, 0	0.532
Race (%) White, Black Other, Not Reported	57.5, 16.5, 0.5, 25.5	52.2, 15.7, 0.6, 30.8	0.169	61.5, 11.6, 0, 26.9	61.1, 16.7, 0, 22.2	0.789
BMI, pre	44.1 (37-51.2)	43.6 (37.3-49.9)	0.615	46.5 (38.3-54.8)	43.8 (36.4-51.2)	0.280
% TWL, 1 Y	19.2 (10.2-28.2)	20.3 (11.2-29.5)	0.870	30.1 (20.3-39.9)	30.4 (19.9-40.9)	0.794
% EWL, 1 Y	34.0 (16.4-51.6)	35.3 (19-51.6)	0.343	56.6 (33.8-79.4)	54.8 (30.0-79.6)	0.657
Days, Surg to 1Y FU	383 (324-442)	388 (325-451)	0.126	398 (336-461)	380 (324-437)	0.560
BMI, 1 Y	35.6(28.8-42.4)	34.8 (28.1-41.5)	0.331	32.5 (25.7-39.3)	30.1 (25.3-34.9)	0.158
TMVisits, Surg to 1Y	0% (0/750)	20.8% (33/159)	0.001	0% (0/130)	22% (4/18)	0.001

Assessment of Blood Transfusion Requirement in Patients on Therapeutic Anticoagulation and Vena Caval Filters following Elective Minimally Invasive Bariatric Surgery: A MBSAQIP analysis

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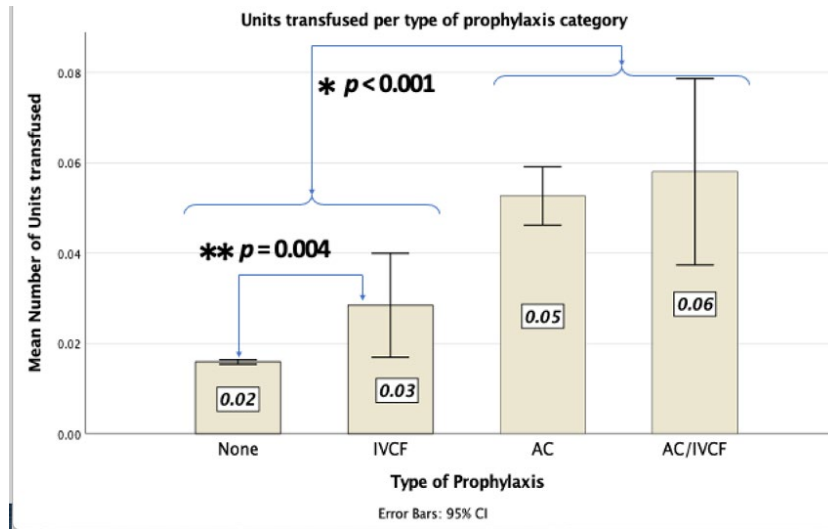
Introduction: Bleeding is one of the most common complications in bariatric surgery and has a risk of being catastrophic. As surgeons are encountering more patients on therapeutic anticoagulation and/or vena caval filters preoperatively, it may become an important consideration to identify the risk of blood transfusions postoperatively in patients undergoing elective bariatric surgery.

Methods: Patients who underwent elective minimally invasive sleeve gastrectomy and gastric bypass from 2015-2019 were identified using the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) database. Patients were classified based on their preoperative state of anticoagulation and postoperative need for transfusion and number of units transfused within 72 hours were analyzed.

Results: Overall, 599,776 patients were identified from the database and categorized into four categories viz. no anticoagulation (96.8%), therapeutic anticoagulation (AC, 2.6%) only, inferior vena caval filter only (IVCF, 0.4%) and patients on both therapeutic anticoagulation and IVC filter (AC/IVCF, 0.2%). After adjusting for significant comorbidities, the risk of need for postoperative blood transfusion on logistic regression analysis expressed as odds ratio (95% CI) are as follows: AC/IVCF group: 3.45 (2.40-4.96), AC: 2.11(1.86-2.40) and IVCF: 1.51 (1.01-2.27). The number of units transfused are indicated in figure 1.

Conclusion: The estimated risk of immediate postoperative need for transfusion is the highest when patients are on therapeutic anticoagulation and have an IVC filter in place and almost two-fold with AC alone. A high index of suspicion for bleeding in the postoperative period in these cohorts of patients is required.

Figure 1. showing the mean number of units of blood transfused within 72 hours postoperatively among the four study categories



Incidence and Short-Term Outcomes of General Surgeons Performing Elective Minimally Invasive Bariatric Surgery: A 5-year Review of MBSAQIP

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Introduction: Surgical weight loss procedures have become pivotal in the management of major comorbidities in patients with obesity. The number of such cases performed across the entire United States is on the rise. These surgeries are mostly being performed by Metabolic and Bariatric Specialty trained surgeons (MBS) however few are still being done by General Surgeons (GS) and thus we would like to study their incidence and the 30-day postoperative outcomes.

Methods: Patients undergoing elective minimally invasive sleeve gastrectomy and gastric bypass from the years 2015 to 2019 were identified using the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) database. Patients were classified based on the specialty of the physician performing the operative procedure and their outcomes analyzed (MBS vs GS).

Results: Of the 632,890 cases identified over the 5 years from the database, 2.5% were performed by GS. Patients in the GS group were white, higher ASA 4 category, lower incidence of preoperative factors such as smoking, hypertension, on dialysis, limited ambulation, cardiac and respiratory comorbidities, and being on therapeutic anticoagulation. Multivariate analysis of post-operative outcomes controlling for significant preoperative factors revealed a 15% increased risk of readmission (95% CI 1.05-1.27) with no significant difference in overall mortality or morbidity.

Conclusion: Approximately 2.5% of all minimally invasive elective bariatric procedures performed across the United States are by general surgeons. In the select patient population being operated by them, their overall outcomes are similar to those of specialty trained Metabolic and Bariatric surgeons.

Incidence of Patients on Psychiatric Medications and Their Outcomes Following Elective Minimally Invasive Sleeve Gastrectomy: Retrospective Review of an Institutional Bariatric Database

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Introduction: With the adoption of enhanced post-surgery recovery protocols, there is an increasing incentive to identify preoperative factors leading to difference in postoperative outcomes and barriers to timely discharge. Consequently, the overall incidence of patients on psychiatric medications as well as their outcomes following elective minimally invasive sleeve gastrectomy was examined.

Method(s): Patients who underwent elective minimally invasive sleeve gastrectomy at a high-volume bariatric program in a community hospital from 2018-2020 were retrospectively entered into an Institutional Bariatric Database. Patients were classified based on their preoperative use of psychiatric medications and their postoperative outcomes were analyzed.

Results: Four hundred and fifty-two patients were analyzed, of which 25% of patients had a preoperative history of taking psychiatric medications. Patients with a history of using psychiatric medications did have a higher, however not a significantly increased, risk of postoperative nausea (66% vs 59%, $p=0.22$), early performed leak test (endoscopic or radiologic), similar incidence of postoperative emesis (17%), length of stay (37 hrs vs 40 hrs) and postoperative complication rate (6% each). In addition, although not statistically significant, there was a higher incidence of non-English speaking patients with psychiatric disorders compared to English speaking population. Lastly, a 30-day readmission rate was noted to be 4%, however not statistically significant from the 2% in the rest of the patients.

Conclusion(s): One-fourth of the patients undergoing elective minimally invasive sleeve gastrectomy have a history of use of psychiatric medications. This cohort of patients are not associated with significant differences in outcomes from the rest of the study population.