A PROPENSITY MATCHED COMPARISON OF GENDER IMPACT ON ROUX-EN-Y GASTRIC BYPASS IN OUTCOMES: REDEFINING THE MALE GENDER RISK

Jason Kuhn; Anthony Petrick; Marcus Fluck; Robert Cunningham; Voranaddha Vacharathit; Ryan Horsley; Jon Gabrielsen; Mustapha Daouadi; David Parker; Alex Falvo; 1Geisinger Medical Center, Danville, PA; 2Geisinger Medical Center, Cleveland OH; 3Geisinger Medical Center, Scranton PA

**Background:** Male gender has long been identified as a risk factor for adverse outcomes, including mortality, after RYGB. The objective of this study was to compare short-term outcomes of patients undergoing laparoscopic RYGB based on gender.

**Methods:** Patients undergoing RYGB in the 2015, 2016 and 2017 MBSAQIP database were propensity matched 1:1 to compare 30-day outcomes between males and females. A total 47,906 patients were included (23,953 Male/23,953 Female).

**Results:** The overall complication rate was higher in females (11.5% vs. 10.2% p<0.001) with no difference in mortality related to RYGB. No significant differences between gender were seen for organ space SSI or septic shock. Females had significantly more superficial SSIs (p=0.002), UTIs (p<0.001), readmissions (p<0.001) and reinterventions (p<0.001). Males had significantly more episodes of unplanned intubation (p=0.008) and extended ventilator use (p=0.01), progressive renal insufficiency (p=0.01) and acute renal failure (p=0.008), cardiac arrest (p=0.005), ICU admission (p<0.001) and all-cause 30-day mortality (p=0.038).

**Conclusions:** Male gender has been identified as a risk factor for adverse events and mortality after RYGB in several risk models, including our own. This matched analysis demonstrates no specific increased mortality risk for males related to bariatric surgery, although the all-cause mortality risk for males is significantly higher. The prevalence of both major and minor complications was mixed between males and females while females had a higher overall complication rate after RYGB. The availability of the MBSAQIP PUF suggests it is time to create risk models for bariatric surgery.

MID-TERM RESULTS OF REVISIONAL BARIATRIC SURGERY POST SLEEVE GASTRECTOMY: RESLEEVE VS. BYPASS

Salman Al Sabah; Eliana Haddad; 1Al Amiri Hospital, Kuwait; 2Amiri Hospital, New York NY

**Background:** Bariatric surgery has been shown to produce the most predictable weight loss results, with laparoscopic sleeve gastrectomy (LSG) being the most performed procedure as of 2014. However, inadequate weight-loss may present the need for a revisional procedure. The aim of this study is to compare the efficacy of laparoscopic re-sleeve gastrectomy (LRSG) and laparoscopic Roux-en-Y gastric bypass (LRYGB) in attaining successful weight loss following LSG.

**Methods:** A retrospective analysis was performed on all patients who underwent LSG at Amiri Hospital from 2008-2018. A list was obtained of those who underwent revisional bariatric surgery after initial LSG, and their demographics were analyzed.

**Results:** A total of 2,858 patients underwent LSG, of which 84 patients (3%) underwent either a revisional rLRYG or LSG. 82% of the patients were female. The mean weight and BMI prior to LSG for the LRSG and rLRYGB patients were 136.7Kg and 49.9Kg/m², and 133.9Kg and 50.5Kg/m², respectively. The mean BMI showed a drop from 42.03 to 31.7 (p=0.000) 1-year post-revisional surgery for the LRSG group, and 42.7 to 34.5 (p=0.000) for the rLRYGB group, correlating to an excess weight loss (EWL) of 61.7% and 48.1% respectively. At 3 years post-revisional, LRSG patients showed a decrease in BMI to 30.71 (EWL=61.4%), while those that underwent rLRYGB showed an increase to 35.3 (EWL=40.3%).

**Conclusions:** Revisional bariatric surgery is a safe and effective method for the management of failed primary LSG. LRSG patients tended to do better in the mid-term than those that underwent rLRYGB.
METABOLIC AND BARIATRIC SURGERY IN PRIOR SOLID ORGAN TRANSPLANTATION PATIENTS: IS RACE A PREDICTOR OF ADVERSE OUTCOMES?

Michael Edwards¹; Alexander Fagenson²; Michael Mazzei²;
¹Mayo Clinic, Jacksonville FL; ²Temple University Hospital, Philadelphia PA

Background: Metabolic and Bariatric Surgery (MBS) in increasingly performed in patients with previous solid organ transplantation (PSOT). There also remains controversy about whether racial disparity in outcomes following MBS exists. Little is known about outcomes in MBS racial cohorts who have PSOT. Our aim was to determine if race independently predict outcomes in MBS patients with PSOT.

Methods: We performed a retrospective analysis of the 2017 Metabolic and Bariatric Surgery Accreditation Quality and Improvement Project (MBSAQIP) database. We included Sleeve Gastrectomy (SG) and Roux-en-Y gastric bypass (RnYGB) patients. Selected cases were stratified by race, comparing non-Hispanic Black and non-Hispanic White patients. Outcomes were compared by Mann-U-Whitney, Chi-square Test and Multivariable Logistic Regression (MLR) analysis.

Results: Of 614 MBS cases with PSOT in the 2017 MBSAQIP database, we analyzed 297, including 220 (74%) White and 77 (26%) Black patients. Procedure-type (p = 0.66) and surgical approach (p = 0.55) were similarly distributed. Black patients were more likely to have an ASA >3, hypertension, an IVC filter, be on chronic steroid (p = 0.03) and dialysis-dependent (Table 1). There were no significant differences in outcomes, except a 3-fold higher rate of ED visits in Black patients (p = 0.004). Black patients had non-significantly higher rates of morbidity, 30-day adverse outcomes, VTE, and aggregate pulmonary and renal complications.

Conclusion: MBS in racial cohorts with PSOT is safe, with very low rates of morbidity and mortality. Black race was not an independent predictor of outcomes. Larger cohort studies are needed to validate our findings.