Conclusions: Exposure to high calorie, highly palatable foods decreases activation in reward-based brain regions in the obese. Anatomical and metabolic changes associated with RYGB may reset the processing of rewarding stimuli. Individuals with a dampened response to food in reward-based regions such as the VTA may be more likely to benefit from RYGB. Alterations in neural responsiveness to reward may correlate with behavior change and greater weight loss (supported by 1K23DK100559).

A170
PROLONGED DIETARY INSURANCE REQUIREMENTS REDUCE POST-OPERATIVE WEIGHT LOSS AFTER SLEEVE GASTRECTOMY
Lawrence Tabone1; Rachel Allio1; Michelle Garcia1; Lauren Shull1; Gina Kontur1; Salim Abunnaja1; Nova Szoka1; David Borgstrom1; 1West Virginia University, Morgantown WV; 2West Virginia University, Morgantown PA

Background: The length of insurance-mandated medically supervised diet programs for precertification of bariatric surgery varies significantly. In the state of West Virginia policies range from 3 months to 12 months of insurance-mandated medically supervised diet. The current study examined the effects of prolonged insurance-mandated medically supervised diet on weight loss Results three months after sleeve gastrectomy.

Methods: 195 patients who underwent laparoscopic sleeve gastrectomy over a 12 month period within an accredited university based practice were used for the study. All patients underwent a medically supervised nutrition program and were categorized into three groups, those that had 3 months or less(N = 38), 4 to 6 months(N = 116), and greater than 6 months(N = 41). The percentage of excess weight loss(%EWL) was compared across the three groups using Analysis of Variance(ANOVA).

Results: The %EWL from initial consult to day-of-surgery increased with increasing insurance-mandated requirements (5.07 ± 0.824%EWL for 3 months, 7.84 ± 0.77%EWL for 4 to 6 months, 11.34 ± 9.49%EWL for 6+ months F=5.04, p=0.01). Inversely, the %EWL three months after operation decreased with increasing insurance-mandated requirements (39.72 ± 11.64%EWL for 3
months, 35.85 ± 11.18% EWL for 4 to 6 months, 27.70 ± 10.54% EWL for 6+ months; F=12.54, p=0.00).

Conclusions: Longer insurance-mandated medically supervised nutrition requirements led to increased preoperative weight loss. Even with accounting for increased preoperative weight loss, patients having longer medically supervised nutrition requirements achieved lower 3 month postoperative weight loss. Delaying bariatric surgery for additional preparation time beyond 3 months does not improve postoperative weight loss and in this study was detrimental.

A171

MID-BOWEL TRANSIT IS PROLONGED IN PATIENTS WITH FAILED WEIGHT LOSS RESPONSE TO GASTRIC BYPASS

Scott Monte1; Michael Tabone1; Mitchell Pawlak2; Nicole Scovazzo1; Joseph Caruana1; Eyad Wohaibi3; ‘Erie County Medical Center, Williamsville NY; 2State University of New York at Buffalo, Buffalo NY; 3Erie County Medical Center, Buffalo NY

Background: Weight loss success after gastric bypass (GB) is commonly attributed to stomach size and ileal hormone stimulation (i.e.GLP-1, PYY). Inherent to these factors is nutrient transit. Remarkably, there are no reference ranges for proper gastric emptying (GE) or small bowel transit (SBT) times after GB. The objective of this study was to identify GE and SBT times in subjects with failed and successful weight loss response after GB.

Methods: Subjects with failed weight loss response (excess body weight loss; EBWL) were studied. Scintigraphy findings were as follows: TG10% (TICV-transit). Values are reported as minutes; median postoperative weight loss and in this study was detrimental.

Results: 30 subjects with failed response (mean EBWL=22±13%) and 10 with successful response (mean EBWL=70±12%) were studied. Scintigraphy findings were as follows: TG10% = 1 min [all subjects]; NS, TG50% = 1 vs. 1 min [1-150]; NS, TIntMax=143±80 vs. 63±55 min; p=0.002, T ileum10% = 214±85 vs. 119±70 min; p=0.002, T ileum20% = 212 ± 87 vs. 118±70 min; p=0.002, T ileum50% = 36±16 vs. 39±27; p=0.744, T ileum100% =244±158 vs. 158±77; p=0.008.

Conclusions: Subjects with failed weight loss response to GB had an approximate 2-3 times prolonged transit time from jejunum to ileum. No significant differences were identified in GE or amount of time nutrient resided in ileum. These findings implicate the importance of mid-bowel transit to the metabolic response observed after GB.

A172

THE ROLE OF BARIATRIC SURGERY IN PATIENTS WITH OBESITY AND ADVANCED HEART FAILURE AS A BRIDGE TO HEART TRANSPLANTATION: A SYSTEMATIC REVIEW AND META-ANALYSIS

Aristithes Dounoumas1; Yung Lee1; Sama Anvari2; Jorge Wong1; Scott Gmora1; Mehran Anvari3; Dennis Hong1; 1McMaster University, Hamilton; 2McMaster University School of Medicine, Hamilton; 3McMaster University, Hamilton ON; 4McMaster University, Hamilton AZ

Background: Class 3 obesity or greater (BMI >35 kg/m2) is a relative contraindication for heart transplant due to its perioperative risk and mortality. Bariatric surgery has been explored as a potential bridging procedure to transplant by facilitating weight loss and improving cardiac function. The aim of this systematic review and meta-analysis is to investigate the role of bariatric surgery on improving transplant candidacy in patients with ESHF.

Methods: MEDLINE, EMBASE, CENTRAL, and PubMed databases were searched up to February 2019 for studies that performed bariatric surgery on patients with severe obesity and ESHF. Key outcomes included rate of patients listed for heart transplantation after bariatric surgery, rate of patients subsequently receiving transplant, change in BMI after bariatric surgery, 30-day complications. Pooled estimates were calculated using the random effects meta-analysis of proportions. MINORS tool was used to assess quality of evidence.

Results: 10 studies with 92 patients were included. Mean (SD) preoperative BMI was 45.1 (5.1) kg/m2 and BMI after surgery was 33.8 (4.0) kg/m2 with absolute BMI loss of 25.1%. After bariatric surgery, 69% (95%CI, 48%-88%) of patients with ESHF were listed for transplantation. Time to bariatric surgery to receiving heart transplant was 12 (13-20.5) months. Of the listed patients, 67% (95%CI, 45%-86%) successfully received a heart transplant. The rate of 30-day bariatric surgery-related complications was 18% (95%CI 6%-33%) and rate of 30-day mortality after bariatric surgery was 0%.

Conclusions: Bariatric surgery can facilitate sustained weight loss in obese patients with ESHF, thus improving heart transplant candidacy and transplantation.

A173

SAFETY OF BARIATRIC SURGERY IN PATIENT WITH CHRONIC LIVER DISEASE: A NATIONWIDE STUDY

Zhamak Khorgami1; Wei Li1; Theresa Jackson1; Laura Fischer1; Geoffrey Chow1; Nelson Royall1; 1University of Oklahoma College of Medicine - Tulsa, Tulsa OK; 1University of Oklahoma College of Medicine - Oklahoma City, Oklahoma City OK

Background: Chronic liver disease (CLD) is a risk factor for surgical complications and can be a relative contraindication to bariatric surgery. This study evaluates early outcomes after bariatric surgery in patients with CLD with and without liver cirrhosis(LC).

Methods: In a retrospective analysis of 2012–2016 Healthcare Cost and Utilization Project-National Inpatient Sample, adult patients with obesity undergoing laparoscopic sleeve gastrectomy(SG) or Roux-en-Y gastric bypass(RYGB) were studied. CLD and LC were identified along with patient comorbidities. Outcomes were Long Hospital Stay (LHS) defined as ≥ 5 days (as a proxy of complicated course), blood product transfusion, total hospital charges, and in-hospital mortality. Binary logistic regression was used for multivariate analysis(MVA).

Results: 139,952 patients were analyzed (RYGB 36.6%, female 78.6%, age 44.7±12 years). CLD was listed in 17,423(12.4%) patients, including 818(0.6%) with LC. Non-alcoholic fatty liver