

Found 105 Abstracts

ABSTRACT FINAL ID: P1;

TITLE: Outcomes of Laparoscopic Fundoplication vs. Laparoscopic Gastric Bypass in Morbidly Obese with Gastroesophageal Reflux Disease

AUTHORS/INSTITUTIONS: E. Varela, Surgery, UT Southwestern, Dallas, TX; M.W. Hinojosa, N.T. Nguyen, , UC Irvine, Orange, CA;

ABSTRACT BODY:

Background: Gastroesophageal reflux disease (GERD) is commonly associated with morbid obesity. Laparoscopic fundoplication is the standard surgical treatment for GERD. However, laparoscopic gastric bypass has shown to effectively resolve GERD symptoms in morbidly obese. The outcomes of laparoscopic fundoplication and gastric bypass in morbidly obese with GERD were compared at US academic medical centers.

Methods: Using ICD-9 procedural code diagnoses for 27,264 morbidly obese patients with GERD diagnosis who underwent laparoscopic fundoplication or laparoscopic gastric bypass were identified from the University Health-System Consortium Database over a 5-year period (2003-2007). Outcomes measured included patient's demographics, length of stay (LOS), in-hospital overall complications, mortality, risk adjusted mortality ratio (observed/expected mortality) and hospital costs.

Results: Table

Conclusion: In morbidly obese patients with GERD symptoms, laparoscopic gastric bypass is associated with significantly shorter length of stay and overall complications when compared to laparoscopic fundoplication. Both procedures appear to be safe with similar hospital costs. Laparoscopic gastric bypass should be offered to morbidly obese patients when GERD is present as comorbid condition.

ABSTRACT FINAL ID: P2;

TITLE: Central Venous Line Placement Prior to Gastric Bypass Improves O.R. Efficiency

AUTHORS/INSTITUTIONS: D.W. Overby, K. Colton, J.M. Stavas, R.G. Dixon, T.M. Farrell, Surgery, UNC Chapel Hill SOM, Chapel Hill, NC;

ABSTRACT BODY:

Background: Bariatric surgery is increasing across the U.S. Achieving venous access is one challenging aspect in the immediate preoperative period. When preoperative efforts fail, anesthesiologists often utilize valuable OR time acquiring reliable intravenous lines. These services may not be compensated and can prevent other billable activity.

Methods: In our practice, selected bariatric surgery patients are referred for outpatient preoperative placement of prophylactic inferior vena cava (IVC) filters in Interventional Radiology. Since 2003, these patients have received central venous lines (CVL) at the completion of the IVC filter placement. We identified 269 patients who had gastric bypass between 1/01 and 11/06, and queried operating room databases to compare time between patient OR entry and skin incision ("in-to-skin") for patients with and without central venous access. In addition, we searched billing databases for CVL collection rates. Non-paired t-test was used for comparison of continuous data.

Results: Patients with preoperative CVL had mean "in-to-skin" time of 35.6 +/- 12.5 minutes versus 42.5 +/- 13.9 minutes for those without preoperative CVL ($p < 0.0001$). When assessed in quarter-hour increments, the presence of a preoperative CVL was associated with 34.9% of preop-CVL patients having skin incision by 30 minutes versus 16.36% of non-preop-CVL patients (graph). Regarding reimbursement, interventional radiologists collected 28.2% of billings for CPT code 36556, compared with anesthesiologist who collected less than 1% when placing CVL in the OR.

Conclusion: Outpatient placement of central line prior to gastric bypass improves the efficiency of the operating room with earlier skin incision. Professional reimbursement is better for preoperative outpatient CVL placement than intraoperative placement.

ABSTRACT FINAL ID: P3;

TITLE: A Surgical Adhesive Increases Burst Pressure and Seals Leaks in Stapled Gastrojejunostomy

AUTHORS/INSTITUTIONS: G. Nandakumar, B. Richards, K. Trencheva, G. Dakin, Surgery, Weill Cornell Medical College, New York, NY;

ABSTRACT BODY:

Background: Leakage from a gastrointestinal anastomosis in bariatric surgery is a catastrophic complication and is the second most preventable cause of death after Roux-en-Y gastric bypass. The purpose of our study was to determine if a commercially available tissue sealant (Bioglue™) could reinforce a stapled gastrojejunal anastomosis and whether it could seal an artificially created anastomotic leak.

Methods: Circular-stapled gastrojejunostomies were performed on freshly explanted porcine stomach and intestine. Experiment 1 consisted of 10 control un-reinforced gastrojejunostomies and 10 gastrojejunostomies reinforced with Bioglue™. The staple lines were submerged in saline and exposed to increased intraluminal pressure by a constant-rate infusion of air. Burst pressures were recorded at the time of visible leakage from the anastomosis. In Experiment 2, a small defect was created in 10 gastrojejunostomies. Burst pressures were recorded before and after application of Bioglue™ to the anastomosis. Data were analyzed with the two-tailed paired t-test.

Results: In Experiment 1, burst pressure significantly increased in the reinforced gastrojejunostomies from 27.4 +/- 8.4 mmHg to 59.1 +/- 19.2 mmHg ($p < 0.001$). This represents a 116% increase in burst pressure for the reinforced group. In Experiment 2, the defective gastrojejunostomies had an average burst pressure of 1.2 +/- 0.8 mmHg. After application of Bioglue™, the burst pressure increased to 42.8 +/- 15.9 mmHg ($p < 0.001$), a 35-fold increase.

Conclusion: These ex-vivo findings suggest that the surgical adhesive Bioglue™ can reinforce both intact and defective stapled gastrojejunal anastomoses. Further in vivo study is warranted to determine if Bioglue™ can prevent or help seal gastrojejunal leaks.

ABSTRACT FINAL ID: P4;

TITLE: Patient-Centered Care (PCC) and its Effect on Gastric Bypass Patient's Level of Satisfaction Upon Discharge

AUTHORS/INSTITUTIONS: D.M. Wolf, L. Lehman, R. Quinlin, , UPMC St.Margaret, Pittsburgh, PA;

ABSTRACT BODY:

Background: Patient-Centered Care (PCC), also known as individualized patient care or negotiated care, focuses on the patient's right to have his/her values and beliefs respected as an individual. This respect is viewed as part of a commitment to build a deep understanding of the patient as a thinking and feeling individual with the ability to change and develop. The Institute of Medicine (IOM) has listed PCC as one of six national quality aims for improvement. The IOM's vision is that all health professionals will be educated to provide and deliver PCC as part of an interdisciplinary team.

Methods: This pilot study used a posttest design to determine the impact of PCC on patient satisfaction, perceptions of nursing care, and quality of care. 36 participants scheduled for bariatric bypass surgery were randomly assigned to an experimental or control group. Both completed the Schmidt Perception of Nursing Care Survey (SPNCS) and the Baker & Taylor Measurement Scale (BTMS) prior to discharge. Measures of quality of care included; infection, falls, and hospital LOS. Participants randomized to experimental group were called 24-48 hours prior to the admission and cared for by nurses trained in providing PCC. Control group received usual care. Both groups were contacted 24-48 hours post discharge to complete an interview.

Results: Subjects were 45.89 ± 14.52 years of age, predominately female, white and married. Significant differences were seen for two of the three BTMS subscales. Patients in the experimental group rated their satisfaction ($p = 0.042$) and quality of services ($p = 0.026$) more positively than control subjects. Alpha for BTMS and SPNCS was > 0.90 .

Study was IRB approved

Conclusion: PCC appears to have an impact on patient's perception of satisfaction and quality of care received, but a larger N is needed to test the hypothesis.

ABSTRACT FINAL ID: P5;

TITLE: Redo-Surgery of Failures and Complications After Restrictive Procedures: 10 Years Experience on 132 Patients.

AUTHORS/INSTITUTIONS: S. Cariani, L. Agostinelli, L. Leuratti, E. Giorgini, E. Amenta, , Azienda Ospedaliero-Universitaria di Bologna - Dipartimento di Chirurgia - Chirurgia Generale Prof. B.Cola, Bologna, ITALY;

ABSTRACT BODY:

Background: The number of patients who need revisional bariatric surgery is increasing, and the dilemma for surgeons is how to treat the bariatric surgical patient who is experiencing recurring morbid obesity and/or complications after restrictive procedure. Revision of failed bariatric procedures is a significant challenge, especially when the previous surgery was a gastric restrictive procedure, for the high probability of complications.

Methods: Of 132 patients undergoing bariatric redo-surgery from November 1998 until July 2007, 107 were followed in a retrospective cohort study. Revisional surgery after restrictive bariatric procedure failures was requested for staple line disruption, pouch dilatation and outlet stenosis, as well as weight regained. At reoperation, the overall mean age was 47 and the mean BMI was 36.1 ± 7.7 SD. 56 and 51 patients were undergoing respectively to re-VBG (1st group - from 1998 to 2002) and RYGB-on-VBG (2nd group - from 2003 to 2007).

Results: The follow-up rate was 90%. In the 1st group, the mean BMI decreased to 30.5, 30.9, 31.2, 31.7, 32.5, 32.4, and 32.9 after 1,2,3,4,5,6 and 7 years, respectively. In the 2nd group, the mean BMI decreased to 28.6, 30.2, and 28.4 after 1,2, and 3 years, respectively. Early surgical complications rate was 14.8% in the 1st group and 3.8% in the 2nd, and the late rate was 3.7% and 0.7%, respectively. The statistical comparison with the student t-test showed a significant difference between the 2 groups in term of complications, and no significant difference in term of weight loss.

Conclusion: Despite both the operations are effective in bariatric redo-surgery, at medium term the outcomes RYGB-on-VBG seem to be better, more in term of complications and quality of life.

ABSTRACT FINAL ID: P6;

TITLE: Predicting Sleep Apnea in Bariatric Surgery Patients

AUTHORS/INSTITUTIONS: R.L. Kolotkin, , Obesity & Quality of Life Consulting, Durham, NC; J.M. Walker, T.V. Cloward, R.J. Farney, , Intermountain Sleep Disorders Center, LDS Hospital, Salt Lake City, UT; R.D. Crosby, , Neuropsychiatric Research Institute, Fargo, ND; R.E. Gress, S.C. Hunt, T.D. Adams, , University of Utah School of Medicine, Department of Cardiovascular Genetics, Salt Lake City, UT;

ABSTRACT BODY:

Background: Due to the high prevalence and potentially serious complications of obstructive sleep apnea (OSA) in obese individuals, Dixon et al., 2003, identified six variables that predicted moderate/severe OSA (Respiratory Distress Index of ≥ 15) in lap-band surgery patients with sensitivity and specificity of 89% and 81%: BMI ≥ 45 , age ≥ 38 , observed sleep apnea, HbA1c $\geq 6\%$, male sex, and neck ≥ 43 cm.

Methods: We tested this prediction model on 491 obese individuals (315 gastric bypass patients; 176 matched obese controls) (Mean BMI = 45.8; mean age = 44.1, 82.3% female).

Results: The model failed to replicate in the current sample, producing a sensitivity of .728 and specificity of .551. An alternate prediction model was developed on half the sample using 31 biological, psychosocial, anthropometric, and demographic predictor variables. Multivariate analyses identified three significant predictors: neck ≥ 40.75 cm; age > 45 ; and reports of loud snoring by others. The presence of ≥ 2 of these predictors was associated with sensitivity of .718 and specificity of .628. When applied to the other half of the sample, this model produced a sensitivity of .701 and specificity of .666.

Conclusion: We conclude that neck circumference, age, and reports of loud snoring can be successfully used to predict moderate/severe sleep apnea in bariatric surgery patients. Of note, age and neck circumference were two of the six predictors reported by Dixon et al. A limitation of this study is that we had no data on observed sleep apnea, one of Dixon's six predictors.

ABSTRACT FINAL ID: P7;

TITLE: Gayet-Wernicke Encephalopathy Caused by Roux-En-Y-Gastric Bypass For Morbid Obesity

AUTHORS/INSTITUTIONS: E.K. Chouillard, , centre hospitalier, Poissy, FRANCE; P. Mognol, , BICHAT Hospital, Paris, 75018, FRANCE; C.H. Tayar, , Henri Mondor, Creteil, 94010, FRANCE;

ABSTRACT BODY:

Background: Gayet – Wernicke (GW) encephalopathy is usually associated to chronic alcoholism. However, bariatric surgery may rarely be a cause of such a grave neurological disorder. To our knowledge, there is not more than 30 cases of GW encephalopathy due to bariatric surgery.

Methods: Retrospective review of the charts of 1554 patients who had bariatric procedures over a five-year period (2001-2005). A literature review of this syndrome (GW) is performed.

Results: A 42-year old woman was admitted for diplopia, confusion and memory deficiency. Two months earlier, She had, gastric bypass surgery for morbid obesity (BMI = 66 Kg/m²). Immediate postoperative outcome was uneventful. However, just after discharge, she started vomiting. She did seek medical assistance and stayed home for 6 weeks. Meantime, she lost 71 kg (89 % of EWL). Upper digestive tract endoscopy revealed stenosis of the gastro-jejunal anastomosis, which was immediately dilated. The patient condition worsened, with neurological deficits (paralyzed ocular abduction, vestibular syndrome, temporel disorientation, dyslexia). MRI showed typical signs of GW encephalopathy. Treatment was immediately implemented including IV administration of vitamin B1, B6, and PP. Rapid amelioration was noticed.

Conclusion: After bariatric surgery, especially RYGB, continuous vomiting and severe weight loss must alert the physician. Gastro-jejunal stenosis must be immediately ruled out and rapid, preemptive, IV vitamin B1 therapy performed.

ABSTRACT FINAL ID: P9;

TITLE: Laparoscopic Mesh Repair of a Giant Hiatal Hernia with Simultaneous Laparoscopic Adjustable Gastric Banding: 18-Month Outcome

AUTHORS/INSTITUTIONS: J.G. Zografakis, S. Valente, A.G. Dan, D.D. Pasini, Surgery, Summa Health System, Akron, OH;

ABSTRACT BODY:

Background: The presence of a large hiatus hernia (> 5 cm) is problematic and may preclude successful weight reductive surgery. While cruroplasty may be combined with successful LAGB, this alone is often unsatisfactory for diaphragmatic repair in patients with a large hiatal hernia.

Methods: A 61 year old female presented for weight reductive surgery (BMI 39.1 kg/m²). She has a history of symptomatic gastroesophageal reflux disease with reflux esophagitis. Preoperative EGD was performed and a 7 cm hiatal hernia was noted. The patient underwent laparoscopic hiatal hernia repair performed over a 50 Fr. lighted bougie. The GE junction was reduced 4 cm into the abdomen, confirmed by intraoperative endoscopy. GORE-TEX Dual Mesh Plus (1 mm thick) was cut into a keyhole configuration and secured to the diaphragm (circumferentially around the esophagus) using 4.8 mm staples. Care was taken to prevent contact of the mesh with the esophagus. After completing the hiatal hernia repair and mesh reinforcement of the diaphragm, a 10-cm Lap-Band was placed in standard fashion (pars flaccida technique).

Results: A water soluble gastrograffin evaluation was completed on POD #1. The hiatal hernia was successfully repaired and the band was in good position. She was discharged to home. 18 months after surgery she no longer requires PPI therapy and she has lost 41.4 lbs, equivalent to 42% of her EBW.

Conclusion: Laparoscopic hiatal hernia repair with mesh reconstruction of the diaphragm combined with adjustable gastric banding is effective in both symptomatic control of gastroesophageal reflux disease and effective weight loss.

ABSTRACT FINAL ID: P11;

TITLE: Short-Term Results of Laparoscopic Adjustable Gastric Banding in a Low BMI (30-35) Population.

AUTHORS/INSTITUTIONS: R.L. Michaelson, J.H. Ahroni, K.F. Montgomery, , Northwest Weight Loss Surgery, Everett, WA;

ABSTRACT BODY:

Background: The Laparoscopic Adjustable Gastric Band (LAGB) is currently FDA approved for use in patients with a BMI of 40, or a BMI of 35 with one or more severe co-morbid conditions. Since 2003 we have offered the LAGB to selected patients with a BMI between 30 and 35, after informed consent specifically indicating that this is an "off-label" use of the device

Methods: Between May 2003 and October 2007, 118 patients (108 [91.5%] women and 10 [8.5%] men) with a BMI 30-35 underwent successful LAGB implantation in an ambulatory surgery setting. From this population, 91 patients had at least 6 months follow-up at the time of this writing. Data are presented as mean \pm SD. Mean weight was 91.6 kg \pm 9.3, with a BMI of 33.2 kg/m² \pm 1.5 and an excess body weight (based on a BMI of 25) of 22.7 kg \pm 4.7. Mean age was 45.6 \pm 10.2.

Results: Mean weight loss at 6 months was 15.0 kg \pm 7.2, and the mean percent of excess body weight lost was 63.7% \pm 36.6.

The majority of patients reported improvement or resolution of co-morbidities as follows: sleep apnea 67%; diabetes mellitus type II 100%; insulin resistance 100%; hypertension 75%; hyperlipidemia 70%; gastroesophageal reflux 68%; joint pain 77%; low back pain 72%; stress urinary incontinence 67%; asthma 75%; depression 68%; polycystic ovarian syndrome 71%.

In the entire group of 118 patients, there were 8 (6.8%) complications. Two patients had port revisions for flipped ports, two had port replacements for port leaks, and four patients had slipped bands which were repositioned laparoscopically.

Conclusion: The LAGB is an effective tool for weight loss and improvement of obesity related co-morbid conditions in an obese population not currently considered candidates for surgical intervention.

ABSTRACT FINAL ID: P12;

TITLE: Laparoscopic Roux-en-Y Gastric Bypass (LRYGBP) as a Revision Procedure

AUTHORS/INSTITUTIONS: H.A. Sanchez, K. Cabrera, M. Mosti, C. Zerrweck, M. Sierra, G. Dominguez, M. Herrera, American British Cowdray Medical Center, Mexico D.F., MEXICO;

ABSTRACT BODY:

Background: Adjustable Gastric Banding (AGB) and Vertical Banded Gastroplasty (VBG) have been extensively used to treat morbid obesity. Patients with insufficient results or complications may require surgical revision. LRYGBP is one of the most common procedures used for revision. The aim of the study is to analyze surgical outcomes of 30 consecutive patients who underwent revision to LRYGBP in a 2-year period.

Methods: The prospectively constructed bariatric data base and the medical records of all patients were reviewed. Demographics, surgical details, results and complications were analyzed.

Results: There were 23 females and 7 males with a mean age of 41.1 years (25–61). Median BMI was 39.9 kg/m² (27.2–65.2). Initial operation was AGB in 24, VBG in 5, and both in 1 patient. In 10 patients the band had been removed before revision and in 15 cases band removal and LRYGBP were performed in the same surgical intervention. There were 2 conversions to open surgery. Six major surgical complications occurred in 4 patients (2 gastric leaks, 1 with empyema, 1 stricture of the gastrojejunostomy and 1 of the jejunojejunostomy with subsequent abdominal wall infection). Hospital stay averaged 5.1 days (3-25). Weight loss is shown in the table.

Conclusion: LRYGBP as a revision procedure is feasible in most patients. Surgical complications are more frequent.

ABSTRACT FINAL ID: P13;

TITLE: Improvement in Comorbid Conditions after Gastric Bypass: Patient-Reported Outcomes

AUTHORS/INSTITUTIONS: K.L. Ryskina, K.M. Miller, J. Aisenberg, , Division of Gastroenterology, Department of Medicine, Mount Sinai School of Medicine, New York, NY; D.M. Herron, S.U. Kini, , Division of Laparoscopic Surgery, Department of Surgery, Mount Sinai School of Medicine, New York, NY;

ABSTRACT BODY:

Background: Morbid obesity is associated with a high prevalence of comorbid conditions including diabetes, hypertension and joint disease. This study aimed to assess patient-reported outcomes in major comorbid conditions after gastric bypass.

Methods: Charts of patients who underwent laparoscopic Roux-en-Y gastric bypass in 2000-2007 were reviewed. Patients were followed at 1, 3, 6, and 12 months after surgery and annually thereafter. At each follow-up visit, patients were asked to report changes in their comorbid conditions using a standard form. Patients with less than one month of follow-up were excluded.

Results: At baseline, 187 patients with the following comorbid conditions were identified: 72 had diabetes, 87 hypertension, 70 hypercholesterolemia, 155 degenerative joint disease, 70 obstructive sleep apnea, and 43 asthma. Mean pre-operative body mass index (BMI) was 49 ± 7 kg/m². Patients achieved significant weight loss after surgery: BMI and %EWL were 31 ± 6 kg/m² and 80%, respectively, at 12 months follow-up. After gastric bypass, a large proportion of responders reported improvement or resolution of the comorbid conditions studied, ranging from 39% for obstructive sleep apnea to 69% for diabetes. On average, patients who reported improvement achieved greater weight loss than patients who reported no change for hypertension, joint disease, sleep apnea and asthma. Patients reporting improvement for diabetes or hypercholesterolemia achieved weight loss similar to those not reporting improvement in these conditions (mean %EWL of 58% vs. 63% for diabetes and 67% for both groups for hypercholesterolemia).

Conclusion: Patients who underwent gastric bypass for morbid obesity report considerable improvement in comorbid conditions after surgery.

ABSTRACT FINAL ID: P17;

TITLE: Mucosal and Serosal Ischemia after Gastric Stapling as Determined by a New 'Real Time' Non-Invasive Tissue Surface Probe Measuring Tissue Oxygenation.

AUTHORS/INSTITUTIONS: G. Mutafyan, C.J. Myers, A.D. Pryor, J.D. Reynolds, E.J. DeMaria, , Duke University Medical Center, Durham, NC;

ABSTRACT BODY:

Background: Although tissue ischemia at surgical anastomoses may cause leak, stricture, and ulceration, surgeons rely on non-quantitative measures of detecting ischemia (e.g. color change, pulsation), not likely to detect transient or small degrees of ischemia. A microvascular tissue oximeter probe (T-STAT, Spectros, CA) provides non-invasive real-time measurement of tissue hemoglobin oxygen saturation (StO₂). We measured local gastric StO₂ during stapling for transection/pouch creation to assess the reproducibility of measurements, sensitivity of the mucosa versus serosa to ischemia, and the impact of proximity to the staple line.

Methods: Anesthetized adult swine (n=8) underwent laparotomy to transect gastric tissue in vivo with measurements made in 2 locations using 4.8 mm staple height cartridges (Endo-GIA, Covidien, Connecticut).

Results: Mucosal and serosal gastric StO₂ measurements (Table, n=24 at each location) were compared. Mucosal baseline StO₂ was lower than serosal baseline (t test, #p < 0.05). Both mucosal and serosal StO₂ decreased significantly in adjacent to the staple line, but not at 2 cm distance (ANOVA, *p<0.05). No color or pulsation changes were observed.

Conclusion: Although significant reproducible mucosal and serosal decreases in StO₂ were seen in proximity to gastric staple lines, the fall in mucosal StO₂ was dramatic in the absence of any visible changes. Persistence of tissue ischemia with gastric stapling or in the creation of an anastomosis may contribute to complications. Utilization of a real-time, non-invasive tissue probe may ultimately assist surgeons in identifying patients at risk for complications.

ABSTRACT FINAL ID: P18;

TITLE: Use of the da Vinci Robot in LAP BAND Surgery: Initial Data from a Retrospective Review

AUTHORS/INSTITUTIONS: M. Johnell, P. Shellenbarger, E. Amend, S. Toth, R. Roberts, C. Runge, Bariatric Surgery Clinic, North Colorado Medical Center, Greeley, CO;

ABSTRACT BODY:

Background: Our Center began using the da Vinci Robot with LAP BAND surgery in March 2006. A steep learning curve can increase the length of the surgical procedure as use of the da Vinci is initiated, declining again with continued use.

Methods: We retrospectively reviewed clinical data of patients undergoing LAP BAND surgery between March 2006 and September 2007. We compared OR and PACU times from 2005 (prior to initiating use of the da Vinci) with the first quarter of 2006, as use of the da Vinci began, to those times in the 3rd quarter of 2007, after 18 months of using the da Vinci.

Results: Data from 91 LAB BAND cases in 2005 and 200 in 2006/2007 were collected. There was no use of the da Vinci in 2005. The da Vinci was used in 159 of the 200 cases in 2006/2007. Factors resulting in exclusion of da Vinci use included: excessive abdominal girth, and unavailability of the robot. OR times were found to be longer at initiation of da Vinci use, but decreased quarterly with continued use, to times comparable with 2005, before use of the da Vinci began. PACU time was not affected by use of the da Vinci throughout this review.

Conclusion: The da Vinci was found to be safe and effective for use with Lap Band surgery at this Bariatric Surgery Center. OR time did initially increase, but then declined to previous OR times seen prior to using the da Vinci. PACU times were unchanged.

ABSTRACT FINAL ID: P20;

TITLE: Primary Laparoscopic Gastric Bypass (LGBP) Can Be Performed Safely In Patients With BMI>60kg/m²

AUTHORS/INSTITUTIONS: D. Abeles, J. Kim, M. Tarnoff, S. Shah, S.A. Shikora, , New England Medical Center, Boston, MA;

ABSTRACT BODY:

Background: Several studies suggest patients with a BMI > 60 kg/m² have a greater operative risk and therefore advocate a staged approach to bariatric surgery. However, this requires two separate operations and all associated risks. At our institution, we do not perform staged bariatric surgeries for these patients; we execute a single stage LGBP. Here, we analyze our experience in this population with a single stage LGBP.

Methods: 95 patients with a BMI > 60 kg/m² were compared to 1311 patients with a BMI < 60 kg/m² undergoing LGBP from December 2001 to May 2007. Data recorded included age, BMI, estimated blood loss, operating time, length of stay, and complications within the first thirty days after surgery. Analysis of the data was performed using an unpaired student's t-test with P < 0.05 as significant.

Results: There were no differences in age, estimated blood loss, or length of stay in patients with BMI > 60 kg/m² as compared to patients with BMI < 60 kg/m². The difference in operating time between the two groups was statistically significant. Most importantly, there were no significant differences in 30 day mortality or complications (Table 1).

Conclusion: In our experience, there were no differences in the incidence of complications or mortality for patients with a BMI > 60 kg/m² undergoing LGBP as compared to those with a BMI < 60 kg/m². Therefore, these high risk patients can safely undergo a single stage LGBP.

ABSTRACT FINAL ID: P25;

TITLE: Bariatric Patient Handling Presents Caregivers with Heightened Risk of injury

AUTHORS/INSTITUTIONS: S.B. Randall, Safety & Infection Control, Pitt County Memorial Hospital, Greenville, NC;

ABSTRACT BODY:

Background: Nurses have reported that care of morbidly obese clients poses significant challenges to mobility, safety, and nurse staffing ratios. The purpose of this study was to examine staff injuries associated with care of the morbidly obese, to describe a process for identifying injuries associated with their care and the need for safer bariatric patient handling.

Methods: A new indicator was added to the OSHA 300 log at the study site to identify injuries staff attributed to bariatric patient handling. OSHA 300 logs were analyzed to identify and describe the frequency, severity and nature of bariatric versus non-bariatric patient handling injuries.

Results: The analysis revealed that between January and September of 2007, 29 percent of staff injuries related to patient handling was linked to working with a bariatric client. 25 percent of lost workdays and 36 percent of restricted workdays related to patient handling were associated with bariatric patient handling. 69.5 percent of bariatric patient handling injuries affected registered nurses or nursing assistants. Turning and repositioning the patient in bed accounted for a third of the injuries incurred.

Conclusion: Data supports the concept that care of morbidly obese clients increases the risk of caregiver injury. The use of a tracking indicator on OSHA 300 logs for obesity related staff injury could focus efforts more precisely to prevent future injury. More research and funding are needed to ensure that caregivers have the skills, knowledge, equipment and human resources available to ensure patient and caregiver safety.

ABSTRACT FINAL ID: P26;

TITLE: Addressing Post-Operative Needs in the First 24 Hours for the Bariatric Weight Loss Surgery Patient: A Nursing Perspective

AUTHORS/INSTITUTIONS: J. Drake, A. Kukic, , Inova Fair Oaks Hospital, Fairfax, VA;

ABSTRACT BODY:

Background: Nursing noticed that post-op patients had a lower satisfaction when they were placed in a room with a roommate. They were unable to follow post-op instructions in regards to their strict dietary regimine because they could smell their roommates meals. They would feel deprived and depressed because they could not have the same meals. The bariatric patients often have C-PAP machines due to sleep apnea, and they were uncomfortable wearing the C-PAP in the presense of a roommate. Also the patients were embarrassed about their bodies in the traditional hospital gowns and were less likely to get OOB to ambulate.

Methods: We educated our charge nurses and clinical coordinators to be aware of appropriate bed placements and provided private rooms. Education of patient and families was also provided to assist with being able to deal with future exposures to the smell and presence of food. The private rooms also assisted with the sensitivity to using C-PAP in the hospital. Larger gowns and socks enabled the patients to feel comfortable ambulating post-op again reducing complications.

Results: Patient and families express high satisfaction. All bariatric patients are assigned to private rooms and staff that care for baritric patients takes mandatory baritric sensitivity training once a year. We also added bariatric sensitivity training for all employees of the hospital, no matter where they work. This mandatory training will be provided upon hire. Patients express their satisfaction with the equipment that we use in their care; we have bigger gowns, bigger socks and wider showersand armchairs.

Conclusion: By providing appropriate equipment and training to staff we have been able to elevate our quality of care for our post-op bariatric patients. Sensitivity training for all staff have proven to be effective tool in providing excellent patient care.

ABSTRACT FINAL ID: P27;

TITLE: Variation in Surgical Technique with Laparoscopic Roux-en-Y Gastric Bypass – Results from the Michigan Bariatric Surgery Collaborative

AUTHORS/INSTITUTIONS: J.F. Finks, A.M. Osborne, H. Ji, J. Birkmeyer, N. Birkmeyer, , University of Michigan, Ann Arbor, MI; A.M. Carlin, J. Genaw, , Henry Ford Hospital, Detroit, MI; S.C. Poplawski, , Forest Health Medical Center, Ypsilanti, MI; T. Zeni, , St. Mary Mercy Hospital, Livonia, MI; A. Nunn, , Harper University Hospital, Detroit, MI; K.R. Krause, , William Beaumont Hospital, Royal Oak, MI;

ABSTRACT BODY:

Background: Current techniques used with laparoscopic Roux-en-Y gastric bypass (LRYGBP) and their association with patient outcomes remain largely unexplored.

Methods: The Michigan Bariatric Surgery Collaborative (MBSC) is a statewide registry of patients undergoing bariatric surgery in Michigan and involves 21 hospitals and 71 surgeons. Annual surveys are sent to all participating surgeons, requesting information about specific techniques used in bariatric surgery. For this study, surgeon survey data were linked with 30-day patient outcomes data from the registry, which includes 2,824 patients operated on between June, 2006 and October, 2007.

Results: 52 (73%) surgeons completed the surveys, 42 (81%) of whom perform LRYGBP. When performing the gastrojejunostomy, most surgeons use a circular stapler (64%), followed by the linear stapler (26%) and a completely handsewn technique (10%). The respective anastomotic leak rates were 0.3%, 1.1% and 1.0% ($p=0.14$). About half (52%) of surgeons use staple-line buttressing when creating the gastric pouch, with an associated perioperative hemorrhage rate of 1.5% vs. 2.5% ($p=.18$) by those who reported no use of buttress material. Most (73%) surgeons close the mesenteric defect at the jejunostomy, while only 41% close the Petersen's space defect. Rates of early bowel obstruction were not significantly associated with variation in closure of mesenteric defects.

Conclusion: Surgeons vary widely in techniques used during LRYGBP. Given low overall complication rates, further evaluation with a larger sample size will be required to identify optimal surgical techniques during LRYGBP.

ABSTRACT FINAL ID: P28;

TITLE: Laparoscopic Sleeve Gastrectomy with Duodenal Jejunal Bypass

AUTHORS/INSTITUTIONS: K. Kasama, E. Kanehira, T. Oshiro, A. Umezawa, Y. Negishi, Y. Kurokawa, Minimally Invasive Surgery Center, Yotsuya Medical Cube, Tokyo, JAPAN;

ABSTRACT BODY:

Background: Obesity and metabolic disorders are becoming big problems in Asia.

But in Asia, gastric cancer is frequent disease. We performed Laparoscopic Sleeve Gastrectomy with Duodenal Jejunal Bypass (LSGB) for cases with risk of gastric cancer.

Method: We have performed 10 cases of LSGB for the cases with risk of gastric cancer. High risk of gastric cancer was determined as Helicobacter pylori positive with atrophy mucosal change or family history of gastric cancer.

Methods: We have performed 10 cases of LSGB for the cases with risk of gastric cancer. High risk of gastric cancer was determined as Helicobacter pylori positive with atrophy mucosal change or family history of gastric cancer.

We performed LSGB with 5 trocar (15mm, 12mm x3, 5mm). Lap Sleeve Gastrectomy and dissection of posterior wall of duodenum were done. Then Duodenal Jejunal Roux en Y Bypass was done with 50-100cm of biliopancreatic tract and 150-200cm of alimentally tract. Jejunojejunostomy was performed by linear stapler and hand suturing closure and duodenojejunostomy was by hand suturing with 2 layers.

Results: We performed 10 cases of LSGB. Gender was 1 males and 9 females. Average preoperative weight and BMI was 106.6±10.7kg and 41.7±5.2. Eight patients had diabetes or IGT.

Mean excess weight loss was 46±10, 64±4, 76% at 3, 6, 9 month postoperatively and it was almost same with result of gastric bypass. We had no mortality but one patient had leakage from EGJ staple line and needed drainage and stenting. Postoperative 75g OGTT revealed LSGB improved both insulin resistance and insulin secretions more than Lap sleeve gastrectomy only procedure.

No dumping, no stenosis and no marginal ulcer were observed.

Conclusion: LSGB is effective, safe and feasible procedures for treatment of morbid obesity and diabetes for patient with risk of gastric cancer.

ABSTRACT FINAL ID: P29;

TITLE: Metabolic Over-Adaptation to Calorie Restriction after Roux-en-Y Gastric Bypass Does Not Predict the 1-Year Weight Loss

AUTHORS/INSTITUTIONS: G. Becouarn, P. Topart, , Clinique de l'Anjou-Societe de Chirurgie Viscerale, Angers, FRANCE; P. Ritz, , Centre Hospitalier Universitaire-Service de Nutrition, Angers, France, FRANCE;

ABSTRACT BODY:

Background: After weight loss and/or energy restriction energy expenditure is dramatically reduced, even more than what could be predicted by changes in body compartments in some patients (over-adaptation). Low energy expenditure may expose to weight gain, or resistance to weight loss.

Methods: In a group of 55 patients (BMI 47.0 ± 7.2 , 40 ± 11 years, women/men: 2/1) energy expenditure and body composition were measured before surgery as well as 6 and 12 months after a gastric bypass. All patients were operated on by the same surgeon using the same laparoscopic Roux-en-Y gastric bypass with a 30cc vertical gastric pouch, 100cm biliopancreatic limb and 150cm Roux limb .

Results: Patients lost $56 \pm 17\%$ excess weight within 6 months, and $63 \pm 14\%$ within 1 year. Patients were pooled into 3 equal groups depending on the degree of over-adaptation. Weight loss either in kg (or expressed as the % excess weight loss) at 1 year did not differ between the three groups (39 ± 18 , 39 ± 12 , 39 ± 24 kg). Patients displaying the greatest over-adaptation were taller and had the greatest energy deficit, estimated to be 1140 kcal/day, as compared to 897 kcal/day in the group with little adaptation. The changes in the fat-free mass (the most energy expending compartment of the body) were similar in the 3 groups.

Conclusion: In conclusion, the degree of metabolic over-adaptation is a consequence of energy deficit and not of the changes in body compartments and does not predict the magnitude of future weight changes after gastric bypass.

ABSTRACT FINAL ID: P30;

TITLE: One-Year Weight Loss After Primary or Revisional Roux-en-Y Gastric Bypass for Failed Adjustable Gastric Banding.

AUTHORS/INSTITUTIONS: P. Topart, G. Becouarn, , Clinique de l'Anjou, Angers, FRANCE; P. Ritz, , Centre Hospitalier Universitaire-Service de Nutrition, Angers, FRANCE;

ABSTRACT BODY:

Background: Adjustable gastric banding has been widely used in Europe but recently gastric bypass (RYGB) has become the procedure of choice because of a better quality of life. The aim of this retrospective study was to compare the 1 year weight loss after gastric bypass as the initial surgical choice or as a revision surgery for a failed adjustable gastric banding (either due to complications or failure to lose weight/weight regain).

Methods: Two hundred fifty nine patients were reviewed, 58 after RYGB for failed gastric banding, 201 after primary RYGB. All the procedures were identical and laparoscopically performed by the same surgeon and the patients were clinically assessed at the same institution.

Results: The 2 groups were similar for age (42 ± 11 years), and for bypassed small bowel length (2.25 ± 0.32 meters)(biliopancreatic + Roux limbs). The initial BMI was lower after band failure (43.2 ± 7 vs. 47.7 ± 6.7). After 6 and 12 months the percentage of excess weight loss was similar in both groups ($68\pm 17\%$ primary RYGB, $63\pm 30\%$ after RYGB for band failure, $p=.89$). In patients who had a primary RYGB excess weight loss did not differ between men ($n=43$) and women during the follow up (months 1, 3, 6, 12).

Conclusion: In conclusion, when RYGB is performed after a band failure to restore weight loss or because of a complication the weight loss curve is similar. Therefore, the two steps strategy (adjustable gastric banding and revisional RYGB if necessary) is an option that does not seem to preclude future weight loss.

ABSTRACT FINAL ID: P31;

TITLE: Roux-en-Y Gastric Bypass and the Development of Leukopenia/ Atypical Infections

AUTHORS/INSTITUTIONS: C. Hsu, J. Monk, , York Hospital, York, PA;

ABSTRACT BODY:

Background: In the bariatric literature there are no studies on the relationship of roux-en-Y gastric bypass (RYGB) and the development of leukopenia and/or atypical infections. Leukocytes are known to play a significant role in the defense against microorganisms. We want to find out the incidence of post gastric bypass leukopenia and whether it contributes to the development of atypical infections, such as cytomegalovirus (CMV) or Epstein-Barr virus (EBV).

Methods: We performed a retrospective chart review of 220 patients undergoing either laparoscopic or open procedure. 89 were laparoscopic and 181 were open. Outcome measures include leukopenia (WBC < 4.0) or atypical infections. Mean follow-up time was 12 months. Two patients were excluded from the study secondary to baseline leukopenia.

Results: Mean age of patients who developed leukopenia was 45 years and mean BMI was 48.4. Incidence of leukopenia post RYGB total is 16 out of 220 (7.27%). The incidence for laparoscopic cases was 7.86% and for open was 4.97%, but there was no significant difference between them. Mean time to develop leukopenia is 3.3 months. No significant differences in BMI, 12 month weight loss, or comorbidities were found except for a higher percentage of DM in the control group.

3 out of 220 patients (1.36%) developed leukopenia and an atypical infection.

Conclusion: There is a significant portion of roux-en-Y gastric bypass surgery patients that develop leukopenia post-operatively. The risk is not significantly different between laparoscopic vs. open surgery. No causal relationship can be ascertained between the development of leukopenia and atypical infections. Developing leukopenia after gastric bypass is not a disastrous event but should be made a consideration.

ABSTRACT FINAL ID: P32;

TITLE: Retrievable Inferior Vena Caval Filters and Extended Pharmacologic Prophylaxis in High-Risk Bariatric Surgery Patients.

AUTHORS/INSTITUTIONS: M. Borkgren-Okonek, R.W. Hart, , Suburban Lung Associates, S.C., Alexian Brothers Medical Center, Elk Grove, IL; J.W. Wallace, J.M. Kane, P.C. Rantis, , Suburban Surgical Care Specialists, S.C., Kane Center for Advanced Surgical Weight Solutions, Arlington Heights, IL, IL;

ABSTRACT BODY:

Background: Patients with severe venous stasis disease, superobesity (BMI \geq 60 kg/m²), prior venous thromboembolism (VTE) or hypercoagulability are at greatest risk for thromboembolic complications following bariatric surgery. We evaluated use of retrievable IVC filters accompanied by extended pharmacoprophylaxis in high-risk patients undergoing gastric bypass or laparoscopic adjustable gastric banding (Lap-Band) surgery.

Methods: Between July 2006 and October 2007, 20 patients (mean age 50.29 \pm 10.8 years, mean BMI 54.75 \pm kg/m², 75% female) underwent placement of an optional retrievable Gunther Tulip IVC filter 0-2 days before scheduled bariatric surgery. BMI-stratified enoxaparin (40 or 60 mg b.i.d.) was administered to all patients during hospitalization; pharmacologic prophylaxis (daily enoxaparin or warfarin) was continued for a minimum 14 days beyond hospital discharge.

Results: All patients had prior VTE; 10/20 (50%) had a hypercoagulable condition. The IVC filters were removed at 16-68 (mean 36.6 \pm 14.97) days postoperatively in 17 patients. Deep vein thrombosis developed in 2 patients: one with hyperhomocysteinemia in whom enoxaparin was discontinued after 14 days and another without known hypercoagulability receiving extended enoxaparin 80 mg daily. In patients continuing pharmacoprophylaxis until 1 day prior to filter removal, there were no occurrences of DVT or filter thrombus. The incidence of postoperative pulmonary embolism was 0%. No major bleeding events or fatalities occurred.

Conclusion: Retrievable IVC filter placement accompanied by extended pharmacologic prophylaxis warrants consideration and further study as an approach to prevention of life-threatening pulmonary embolism in high-risk bariatric surgery patients with hypercoagulability or previous VTE.

ABSTRACT FINAL ID: P33;

TITLE: Relation Between Degree of Weight Loss after Bariatric Surgery and Reduction in High-Sensitivity C-Reactive Protein.

AUTHORS/INSTITUTIONS: V. Agrawal, K.R. Krause, D.L. Chengelis, K. Zalesin, L. Rocher, P.A. McCullough, , William Beaumont Hospital, Royal Oak, MI;

ABSTRACT BODY:

Background: Bariatric surgery achieves long-term weight loss in obese adults with improvement of diabetes and hypertension. Little is known about the effect of this weight loss on high sensitivity C-reactive protein (CRP), an inflammatory marker of cardiovascular disease risk. Also it is not known if there exists a relation between the degree of weight loss and reduction in CRP.

Methods: We performed a retrospective study on 62 obese adults who had laparoscopic Roux-en-Y gastric bypass surgery at our institute with a median 15 month follow-up. Baseline (pre-operative) mean age was 46 yrs, 82% were female, 26 had blood pressure (BP) $\geq 140/90$ mmHg and 25 had type 2 diabetes.

Results: At follow-up (post-operative), we observed a decrease in mean body mass index (49.2 to 34.1 kg/m²; $p < 0.0001$), excess body weight (76.1 to 34.9 kg; $p < 0.0001$), hemoglobin A1c (6.5 to 5.6%; $p < 0.0001$), systolic BP (133.7 to 112.9 mmHg; $p < 0.0001$) and low density lipoprotein cholesterol (114.8 to 102.4 mg/dl; $p = 0.035$). There was a significant reduction in CRP (geometric mean with 95% confidence intervals) from 7.8 (6.1-10.0) to 2.3 (1.6-3.3) mg/l; $p < 0.0001$. There were fewer patients with elevated CRP (> 3 mg/l) after surgery (83.0 to 43.4%; $p < 0.0001$). There were fewer patients on statins after surgery (20.8 to 7.8%, $p = 0.013$). A mild correlation existed between % change in CRP and % change in excess body weight that approached significance ($r = 0.27$; $p = 0.053$). The study population was divided into tertiles of % excess body weight loss (%EBWL). The % change in CRP was maximum (-88.3%) in the third tertile (-75.8%EBWL), intermediate (-64.9%) in the second tertile (-54.3%EBWL) and lowest (-20.3%) in the first tertile (-37.1%EBWL); $p < 0.0001$.

Conclusion: We conclude that there is reduction in CRP in obese adults after surgical weight loss, with greater weight loss producing more reduction in CRP.

ABSTRACT FINAL ID: P34;

TITLE: General Anesthesia via Laryngeal Mask Airway in Laparoscopic Adjustable Gastric Banding (LAGB)

AUTHORS/INSTITUTIONS: M. Foletto, P. Bernante, , Clinica Chirurgica II, Padova, ITALY; M. Carron, F. Innocente, U.F. Freo, , Dept Of Anesthesiology, Padova, Italy, ITALY;

ABSTRACT BODY:

Background: The use of ProSeal(TM)LMA (PLMA) has been reported in obese patients undergoing abdominal surgery procedures but not yet in super obese undergoing LAGB.

Methods: Since Sept. 2007, 10 super-obese patients (mean BMI 61,7 kg/m², range 58.3-68,5) underwent LAGB under general anesthesia with the PLMA and intravenous propofol. The conventional orogastric calibration tube was replaced by a 14-G Salem gastric tube passed through the drainage tube of the PLMA. Outcome measures were O.R. times, surgeon evaluation of the adequacy of the anesthetic technique, and patient evaluation of postanesthesia satisfaction.

Results: Mean total times in the operating room was 42 +/-12 mins. Immediate or intraoperative problems were encountered in 1 (10%) out of 10 patients (poor relaxation that made pneumoperitoneum more difficult). Surgeons rated analgesia as good or excellent in all 10 patients and muscle relaxation as good or excellent in 9 out of 10 patients. Surgeons rated overall satisfaction for the anesthetic technique as good or excellent in all 10 patients. Patient satisfaction with anesthetic technique was high and all 10 patients agreed or strongly agreed that they were satisfied. The awakening phase was prompt after surgery (< 5 minutes), post-op nausea and vomiting was absent in all the patients, who were able to stand and walk within one hour after completion of surgery.

Conclusion: General anesthesia via PLMA with intravenous propofol is safe and effective for LAGB and yields to a high degree of satisfaction for patients and surgeons.

ABSTRACT FINAL ID: P35;

TITLE: Obesity is Associated with Increased Prevalence and Severity of Pelvic Floor Disorders

AUTHORS/INSTITUTIONS: P.R. Schauer, S.A. Brethauer, General Surgery, Cleveland Clinic, Cleveland, OH; C. Chen, C. Williams, L.D. McElrath, M.D. Barber, , Urogynecology, Cleveland Clinic, Cleveland, OH;

ABSTRACT BODY:

Background: Although an association between obesity and urinary incontinence (UI) has been reported, the association between obesity and pelvic organ prolapse (POP) and anal/ fecal incontinence (AI/FI) is less clear. The aim of this study was to determine the prevalence of pelvic floor disorders (PFD) in obese women seeking bariatric surgery compared with normal weight subjects.

Methods: From 9/06 to 9/07, obese women (BMI > 35) seeking bariatric surgery completed the validated Sandvik incontinence severity index and Rockwood fecal incontinence severity index and questions regarding POP. Women with BMI < 30 from general screening gynecology clinics also completed the questionnaires. Demographic variables and other clinical parameters were also obtained.

Results: 220 obese women (mean BMI of 50 kg/m²) and 120 normal weight controls (mean BMI 24 kg/m²) were screened. The presence of any PFD was 72% and 35%, respectively (P < 0.0001). Stress UI was the most common disorder (60% v. 27%, P<0.0001) followed by urge UI (52% v. 23%, P<0.0001), AI/FI (23% v. 7%, P<0.0004) and POP (5% v. 4%, NS). Moderate or severe UI symptoms were more common among obese patients than controls (55% v. 26%, P=0.002). Obese patients had a higher fecal incontinence severity index compared with controls (mean score 21 +/- 11 versus 14 +/- 11), but this was not statistically significant. Obesity remained a risk factor for UI and AI/FI after adjusting for baseline demographic differences between groups with an adjusted odds ratio (OR) of 7.8 (95% confidence interval (CI) 3.0 – 21.6) and 2.9 (95% CI 1 – 9), respectively.

Conclusion: Prevalence of PFD including stress and urge UI and AI/FI and severity of UI is higher in obese women seeking bariatric surgery than in normal weight women.

ABSTRACT FINAL ID: P36;

TITLE: Laparoscopic Adjustable Gastric Banding Prolapse Leading to CHRONIC Gastric Strangulation

AUTHORS/INSTITUTIONS: D.A. Sherwinter, J.M. Macura, H.L. Adler, , Maimonides Medical Center, Brooklyn, NY;

ABSTRACT BODY:

Background: Severe acute anterior prolapse leading to gastric wall strangulation and gangrene has been well documented. The presentation of this entity as described in previous reports, includes acute onset of unremitting epigastric pain and gastric obstruction. We present our experience with three patients who had a Laparoscopic Adjustable Gastric Band (LAGB) and developed a chronic form of gastric strangulation leading to non-acute symptomatology.

Methods: Three patients were identified who presented with vague, episodic abdominal complaints and were found at exploration to have anterior prolapse with gastric wall ischemia.

Results: Three patients had LAGB performed ,two women and one male with an average starting BMI of 45 (38-52) and an average excess weight loss(EWL)of 70% (65-75). Each reported colicky episodic vague abdominal pain and occasional nausea spanning greater than six months. Despite extensive work up, no diagnosis was made and they did not have resolution of their symptoms. They finally presented to our group for evaluation. Our work-up revealed gastric prolapse but widely patent gastric outflow. Despite an unlikely history and unrevealing work up, their non-resolving pain led to a diagnostic laparoscopy (DL). This revealed a distended and mildly ischemic anteriorly prolapsed gastric wall. Their bands were explanted. They had immediate resolution of their symptoms and on post-op follow-up have had no further similar episodes.

Conclusion: This series outlines the fact that gastric strangulation can have a more chronic course leading to a very subtle presentation. Proper diagnosis requires a high index of suspicion and early DL. In patients who have a LAGB and abdominal symptoms the band is the cause until proven otherwise.

ABSTRACT FINAL ID: P37;

TITLE: Gastrojejunal Anastomotic Complications using 45mm versus 60mm Linear Stapler in over 500 Patients Undergoing Laparoscopic RYGB.

AUTHORS/INSTITUTIONS: C.C. Pfeifer, J.D. Gabrielsen, I. Sucandy, T. Buchanan, A.T. Petrick, MIS, Geisinger Medical Center, Danville, PA;

ABSTRACT BODY:

Background: Recent studies have demonstrated that in RYGB, the gastrojejunal anastomotic (GJA) complication rates are higher for smaller diameter EEA-stapled anastomoses (21mm > 25mm). Our technique changed from a 45mm to a 60mm stapled anastomosis after anecdotally noting an increasing number of patients requiring dilation. The purpose of this study was to define 45 mm and 60 mm linear stapled GJA complication rates in RYGB.

Methods: Between August 2002 and June 2007, 523 patients underwent laparoscopic RYGB at a single institution (45mm n=412 cases; 60mm n=111). Only one patient was lost to follow up (mean f/u=22 mo). Data was retrospectively collected from a prospectively maintained database. Statistical analysis was done using Fisher's Exact Test and T-test.

Results: There were 82 total anastomotic complications with the 45 mm (19.9%) and 22 with the 60 mm (19.8%) (p=N.S.). Total complications are listed in Tables #1 & #2. Groups were analyzed for early (<30d) and late (>30d) complications. There was no significant difference for either total complications or any specific complication. There was a trend toward increased weight loss in the 45mm group with a BMI reduction -9.28 vs -8.11(p=0.052).

Conclusion: There was no significant difference in overall anastomotic complications between the 45mm and 60mm linear staplers. However, there was a nonsignificant trend toward better weight loss with the 45mm stapler suggesting a possible advantage to using the 45 mm stapler for GJ anastomosis in RYGB.

ABSTRACT FINAL ID: P38;

TITLE: Outcomes and Complications in Patients Undergoing Laparoscopic Gastric Banding at Hennepin County Medical Center

AUTHORS/INSTITUTIONS: E.J. Saterbak, Hennepin County Medical Center, Minneapolis, MN;

ABSTRACT BODY:

Background: The emergence of laparoscopic gastric banding has given an alternative for patients seeking weight-loss surgery but not wanting roux-en-y gastric bypass surgery. Hennepin County Medical Center's bariatric program began offering laparoscopic gastric banding in 2003.

Methods: A total of 213 patients underwent laparoscopic gastric banding at either Hennepin County Medical Center or Fairview Riverside Hospital in Minneapolis, MN. A database was kept of pre and post operative parameters. Electronic medical records were utilized in a retrospective analysis to assess operative parameters, outcomes and complications.

Results: Average starting BMI in patients undergoing the procedure was 46.7 (n=216, SD=8.26) Percent excess weight loss in patients following up was, respectively: 6 mo. 26.82% (n=149, SD=14.82), 12 mo. 35.08% (n=95, SD=20.07), 18 mo. 34.01% (n= 74, SD=20.94), 24 mo. 36.83% (n=60, SD=21.83), 36 mo. 36.00% (n=19, SD=27.98). A total of 33 complications were reported in 30 patients; the most common were slipped band (n=8), cholelithiasis (n=4), fracture of reservoir tubing (n=4), fracture of band (n=3), and intraoperative splenic injury (n=2). Of patients found to have slipped bands, 88% reported nausea and vomiting as their initial complaint

Conclusion: Percent excess weight loss in this series of patients is lower in this analysis than in that of the previous year. The large standard deviation in percent EWL suggests that patient specific factors (behavior, post operative diet, etc) play large roles in the success of AGB surgery. A strong correlation is demonstrated with slipped bands and use of 10 cm vs. 11 cm band models. The strongest correlation in comorbidity resolution with gastric banding is in GERD. Ongoing study of long-term EWL and comorbidity resolution is warranted.

ABSTRACT FINAL ID: P39;

TITLE: Intussusception after Gastric Bypass: Report of 7 Cases with Recommendations for a New Treatment Modality

AUTHORS/INSTITUTIONS: A.M. Gonzalez, J.R. Rabaza, J. Verdeja, J. Diez, P. Inampudi, , South Miami Hospital, Miami, FL;

ABSTRACT BODY:

Background: Intussusception in adults is rare and accounts for less than 5% of all SBOs. In addition, 70-90% have an identifiable lead point. Intussusception after gastric bypass is a rare event and only a dozen cases have been reported, none after laparoscopic gastric bypass.

Methods: We report 7 cases of intussusception in our experience of 1800 surgeries over 10 years. These occurred in both open (2) and laparoscopic (5) gastric bypasses. The patients were treated via laparotomy (2) due to clinic findings, laparoscopy (4) or observation (1).

Results: Of the 7 cases, 2 patients presented with acute abdominal findings requiring laparotomy and bowel resection due to intussusception at the Roux en Y. 4 patients underwent laparoscopy with either resection of the roux en Y (1) or repair of a mesenteric defect since NO intussusception was found (2) or because the intussusception was easily reduced and no leading point/mass was noted (1). The last patient, had findings of intussusception on CT scan, but was only observed clinically and not operated due to lack of clinical findings. We have performed nonoperative treatment of intussusception in 4 patients (3 had laparoscopy and repair of internal hernia and 1 had observation only) and have not seen a recurrence in a range 5 months to 2 years of follow up.

Conclusion: Conservative management of intussusception in children has a success rate of 90% with reduction. Adult intussusception often has an identifiable lesion and requires surgical intervention. Universal consensus has not been reached on the treatment of intussusception in gastric bypass patients. We have not treated intussusceptions found in 4 of our 7 patients and have not seen any recurrences in up to 2 years. We propose that patients obtain a radiological evaluation for evidence of SBO, clinical examination and possible expectant nonoperative management in select cases.

ABSTRACT FINAL ID: P40;

TITLE: Sleeve Gastrectomy Gives Excellent Short-Term Weight Loss in Patients with Low-Grade Obesity (BMI 30-35).

AUTHORS/INSTITUTIONS: D. Arvidsson, T. Kakoulidis, Å. Karringer, T. Gloaguen, M. Palmquist, , www.cftk.se, stockholm, SWEDEN;

ABSTRACT BODY:

Background: Surgery for low-grade obesity is controversial. A RCT have shown that surgery (with Lap-Band) is more effective than conservative treatment at 2-year follow up. The aim of this prospective non-randomised study is to investigate sleeve gastrectomy, SG, for patients with BMI 30-35.

Methods: 18 patients with a median BMI of 33.5 (range 31-35) were operated with a sleeve gastrectomy from April-November 2007. 6 patients had comorbidities. 1-2 months after surgery all patients were invited to a two-day lifestyle school including lectures by dieticians, physical exercise experts and a psychologist. Patients are prospectively followed at 1,3,6,12,24 and 36 months.

Results: Operating time was in median 95 min (range 60-180) and hospital stay was in median 2 days (range 1-3). One patient developed a postoperative hematoma which was evacuated laparoscopically. Later this patient had a leakage which was treated with percutaneous drainage and stenting. No further major complication have occurred. Weight loss have been on average 70 and 90 %EBMIL at 3 and 6 months. All patients have expressed a good life quality (detailed LQ-measurments ongoing) after surgery.

Conclusion: Although low grade obesity is not a generally accepted indication for surgery some evidence exists that surgery is more effective than conservative treatment also for these patients. SG seems to be a reasonable operation for this type of patients with an excellent short term weight loss.

ABSTRACT FINAL ID: P41;

TITLE: The LAP-BAND® AP System: An Evaluation of Comparative Effectiveness with Earlier Bands.

AUTHORS/INSTITUTIONS: P.E. O'Brien, W. Brown, P. Burton, M.L. Anderson, , Monash University, Melbourne, Victoria, AUSTRALIA;

ABSTRACT BODY:

Background: The LAP-BAND AP system was introduced in 2006. This LAGB is characterized by 100% encircling of the gastric cardia, with a wider “footprint”, a series of low pressure “cushions” (Omniform technology), easy application and reopening and an optimal area profile for correct adjustment. In this study we compare the AP band with the most widely used LAGBs, the LAP-BAND 10cm and VG.

Methods: Patients were treated and followed by a standard protocol and all patient outcome data including perioperative events, late revisional procedures and weight change were collected prospectively on LapBase, a bariatric data management system,.

Results: Between January 2006 and October 2007, 391 patients were managed by two surgeons (POB, WB) using the LAP-BAND® AP system. At 12 mths, 127 patients had a mean of 52 +/- 22 % of excess weight loss (EWL) compared to 50%EWL for the 10 cm and VG bands. At 18 mths there was a 57 %EWL for the AP bands compared to 54% for the earlier bands.

There were no significant perioperative problems in the series, reinforcing the intrinsic safety of LAGB procedures. There have been a total of 11 revisional procedures (2.8%); 2 symmetrical enlargement, 1 anterior prolapse, 2 erosions and 6 access port problems.

Conclusion: The weight loss for the LAP-BAND® AP is at least equal to those of the earlier bands. The improved ease of use and less need for revision makes it the preferred device for LAGB.

ABSTRACT FINAL ID: P42;

TITLE: Endoscopic Treatment of Symptomatic Intraluminal Migrated Marlex Mesh in banded Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: H. Yasrebi, , Memorial Hospital, Jacksonville, FL; B.K. Misra, Gastroenterology, Borland Groover Clinic, Jacksonville, FL;

ABSTRACT BODY:

Background: Polypropylene (Marlex) mesh is one of several prosthetic materials, that has been used to control the gastric pouch outlet in banded Roux-en-Y Gastric Bypass (bRYGBP). This may help to maintain long-term weight loss. Band Erosion (BE) and migration of the mesh into the lumen is a reported complication that may lead to nausea, vomiting, abdominal pain due to lumen obstruction. Most authors have treated BE with endoscopic removal of the mesh or surgical revision. We report an effective treatment by endoscopic division of the mesh without mesh removal.

Methods: Retrospective chart review was conducted for 552 consecutive patients who underwent open bRYGBP at Memorial Hospital to determine the incidence and management of BE. Surgery was performed by a single surgeon, between March 1999 and January 2004. 45 patients (8.2%) had endoscopic documentation of BE. Of these, 10 patients (22%) had symptoms due to partial obstruction caused by the migrated mesh. Symptoms started 15-79 months after the initial surgery (mean 47.1 months).

Results: Esophagogastroduodenoscopy (EGD) was performed by a single gastroenterologist 17 to 82 months after bRYGBP. The 10 patients with symptoms and extruded mesh had successful division of the mesh using endoscopic scissors (Olympus). One EGD was required per patient. Mean follow up was 11 months. All 10 patients had significant relief of symptoms. There were no reported complications from the EGD, including bleeding or perforation. After division of the mesh 3 patients gained weight (mean weight gain 9.4 kg), 4 patients lost weight (mean weight loss 4.3 kg) and 3 patients maintained their weight.

Conclusion: Symptomatic patients with intraluminal migrated Marlex mesh can be safely treated by endoscopic division of the mesh rather than surgical revision. The mesh does not have to be removed for optimal relief of symptoms.

ABSTRACT FINAL ID: P43;

TITLE: Why are Patients Rejected from an Academic Weight Loss Surgery Program?

AUTHORS/INSTITUTIONS: S. Tsuda, L. Barrios, B.E. Schneider, D.B. Jones, Surgery, Beth Israel Deaconess Medical Center, Boston, MA;

ABSTRACT BODY:

Background: Bariatric surgery "Centers of Excellence" often use a multidisciplinary team to screen eligibility for surgery based on insurance, medical history, psychological evaluation, and surgeon assessment. Few studies report the frequency or reasons for patients not being cleared for surgery among high-volume academic bariatric programs.

Methods: From January to August 2007, 352 consecutive patients were accepted for evaluation into an accredited bariatric program and tracked for incidence of rejection for weight loss surgery. Applicants were accepted or rejected following two information sessions, submission of a health history form, and evaluation by a bariatric team consisting of a nurse, internist, psychologist, dietician, and surgeon. Primary reasons for rejection included insurance, medically unfit, psychological or social inappropriateness, and inadequate body mass index (BMI < 35; < 40 without comorbid conditions).

Results: Of 352 screened patients, 103 were not cleared for surgery by the multidisciplinary team. The most frequent reason was lack of insurance coverage (46.5%). Primary care physicians were the most common source of patient referral. All patients excluded because of inadequate body mass index (n=12) were referred by friends, coworkers, or self-referred via the internet or television.

Conclusion: Approximately one-third of screened patients were not cleared for surgery by an academic bariatric program. Self- or social referral appeared to correlate with rejection for body mass indices not meeting criteria for surgery. This suggests inadequate information among social referral networks or in the media. Long-term follow-up will determine the health outcomes of patients not cleared for weight-loss surgery.

ABSTRACT FINAL ID: P44;

TITLE: Safety and Efficacy of Simultaneous Cholecystectomy at the Time of Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: J. Kim, B.D. Schirmer, Department of Surgery, University of Virginia Health Sciences Center, Charlottesville, VA;

ABSTRACT BODY:

Background: To date, reports in the literature have shown an increased length of hospital stay and increased morbidity for patients undergoing simultaneous cholecystectomy at the time of Roux-en-Y gastric bypass (RYGB). We hypothesized that our experience would not show such adverse outcomes.

Methods: The total number of RYGB procedures (n=751) performed by one surgeon at our institution from 1995 to 2006 were reviewed for demographic data, operative data, and postoperative outcomes. A laparoscopic approach (LRYGB) was used for 438 procedures. Data from a prospectively gathered institutional database were retrospectively compared using standard statistical analysis.

Results: Comparing LRYGB with cholecystectomy to LRYGB without cholecystectomy, duration of operative time was significantly longer (198.4 ± 61.9 vs. 177.7 ± 57.7 minutes, $p=0.001$), but mean hospital stay (3.3 ± 5.5 vs. 2.9 ± 6.1 days, $p=0.555$), postoperative complication rates (18.3 vs. 18.5 %, $p=0.100$), and postoperative mortality (0 and 0.6 %, $p=1.000$) were not different between groups. Comparing open RYGB patients with and without simultaneous cholecystectomy, the duration of operative time was similarly longer (223.4 ± 63.9 vs. 203.5 ± 57.3 minutes, $p=0.005$), while mean hospital stay (5.0 ± 3.7 vs. 4.7 ± 5.9 days, $p=0.644$), postoperative complication rates (61.4 vs. 55.2 %, $p=0.293$) and postoperative mortality rates (1.6 vs. 2.4 %, $p=0.685$) were not different between groups.

Conclusion: Although it took on average 20 minutes longer, cholecystectomy can be safely added to RYGB without increasing hospital stay, postoperative morbidity and mortality rate in both laparoscopic and open surgery. We recommend routine simultaneous cholecystectomy be performed for patients with documented gallstones at the time of RYGB.

ABSTRACT FINAL ID: P45;

TITLE: Perceived Barriers to Bariatric Surgery Among Morbidly Obese Patients

AUTHORS/INSTITUTIONS: B.B. Afonso, S. Szomstein, R. Rosenthal, , Cleveland Clinic Florida, Weston, FL;

ABSTRACT BODY:

Background: In 2006, over 200,000 weight loss operations were performed in the United States, out of an estimated 11 million potential candidates. We aimed to identify the potential barriers to obese patients being offered or considering a weight loss procedure.

Methods: A two-page questionnaire was administered to patients who were clinically morbidly obese during routine medical appointments at our institution for what they perceived to be unrelated medical problems. The survey collected data on demographics, co-morbidities, physical activity, dietary habits, and reasons why patients had either not considered or could not undergo bariatric surgery.

Results: A total of 50 patients, 30 females and 20 males, completed the survey. Median age was 51 (range 28-86) years with a mean BMI of 44 (range 35-66) kg/m². Only 26% of patients were aware of being morbidly obese. 58% were not interested in a surgical procedure to correct their weight problems, with Caucasians and older patients less likely to be interested ($P < 0.04$). When asked the reasons they had not considered bariatric surgery, 26% of patients stated that weight loss surgery was not covered by their insurance policy, 18% were unaware of being a surgical candidate, and 26% stated their primary care physician had not recommend a weight loss procedure. Patients with 4 or more co-morbidities were less likely to be referred for bariatric surgery by their primary care physician ($P < 0.002$).

Conclusion: This survey demonstrates that lack of insurance coverage is not the main reason for patients not undergoing bariatric surgery. Perceived barriers and lack of knowledge exist in both the minds of the general public and physicians. Education of both groups is needed regarding the medical implications of obesity as well as the benefits of bariatric surgery.

ABSTRACT FINAL ID: P46;

TITLE: Outcomes of Bariatric Surgery in Patients with BMI less than 35 kg/m²

AUTHORS/INSTITUTIONS: P. Fajnwaks, A. Ramirez, P. Martinez, E. Arias, S. Szomstein, R. Rosenthal, , Cleveland Clinic Florida, Weston, FL;

ABSTRACT BODY:

Background: Obesity with a body mass index (BMI) of between 30 and 35 kg/m² is frequently associated with type 2 diabetes mellitus (DM), arterial hypertension (HTN), and dyslipidemia (DLD), among other comorbidities. The aim of this study was to investigate the improvements of such comorbidities in a class I obese population who have undergone a bariatric procedure for weight loss.

Methods: A retrospective review of a prospectively maintained database was carried out. Nine patients with a BMI of <35kg/m² who underwent a bariatric procedure at our institution between February 2000 to August 2007 were identified. Fasting glucose, glycosylated hemoglobin levels, lipid profile, initial weight, and BMI were measured in the preoperative and postoperative period.

Results: Our patient population consisted of 9 patients (7 females and 2 males) with a preoperative mean BMI of 34.7 kg/m² and a mean follow up of 19.6 (range, 9-28) months. Six (66.6%) patients underwent a laparoscopic sleeve gastrectomy (LSG) and 3(33.3%) had a laparoscopic Roux en-Y gastric bypass (LRYGBP). Our series showed 4(44%) patients with DM, 3(33%) with glucose intolerance, 4(44%) with HTN, and 6 (66%) with DLD. Postoperative findings demonstrated a decreased mean BMI to 29.3 kg/m², and a mean weight loss of 31lb. Of the 4 DM patients, 2 (50%) improved and 2 (50%) had total resolution. All 3(100%) patients resolved their glucose intolerance and of the 3 patients with HTN, 2(50%) showed improvement and 2 (50%) had complete resolution. Of the 6 patients with DLD, 2(33%) had complete resolution and 4(64%) required a lower dose of lipid lowering drugs.

Conclusion: Bariatric surgery in patients with a BMI between 30 and 35 kg/m² appears to be a safe and effective option that is associated with a marked improvement or resolution of comorbid conditions.

ABSTRACT FINAL ID: P47;

TITLE: Continuous Positive Airway Pressure (CPAP) in the Immediate Postoperative Period after Laparoscopic Roux-en-Y Gastric Bypass: Is It Safe?

AUTHORS/INSTITUTIONS: A. Ramirez, P.F. Lalor, S. Szomstein, R. Rosenthal, , Cleveland Clinic Florida, Weston, FL;

ABSTRACT BODY:

Background: Obstructive sleep apnea (OSA) is a common condition in the morbidly obese population. Many patients undergoing bariatric surgery require postoperative Continuous Positive Airway Pressure (CPAP) therapy. There is no literature evaluating gastrointestinal anastomotic morbidity in patients receiving CPAP therapy immediately after laparoscopic Roux-en-Y gastric bypass (LRYGBP). The objective of this study was to examine the short term morbidity of postoperative CPAP in patients after LRYGBP.

Methods: We retrospectively reviewed a prospectively collected database and studied a series of 310 patients who underwent LRYGBP between June 2005 and August 2006. Hospital and office charts and respiratory treatment records were reviewed from the completion of surgery until the first postoperative visit at 2 weeks. Data collected included age, gender, body mass index (BMI), presence of OSA, inpatient CPAP use, and perioperative complications. Patients were divided into 2 groups: those who used immediate postoperative CPAP therapy and those who did not use postoperative CPAP. Revisional surgery and other bariatric procedures were excluded from this series.

Results: Postoperative CPAP was used in 91 patients (29.3%) while 219 did not use CPAP (70.7%). Mean age was 47.2 vs. 43.9 years ($p < 0.01$), respectively, and the average BMI was 52 vs. 46.4 kg/m², respectively ($p < 0.0001$). Overall morbidity unrelated to the integrity of the anastomosis between the two groups was not significant (4.5% vs. 3.6%, respectively; $p > 0.05$).

Conclusion: The use of CPAP after LRYGBP does not result in increased morbidity.

ABSTRACT FINAL ID: P48;

TITLE: Reasons for Tachycardia in the Postoperative Period of Patients Undergoing Laparoscopic Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: I. Sucandy, P. Martinez, S. Szomstein, R. Rosenthal, , Cleveland Clinic Florida, Weston, FL;

ABSTRACT BODY:

Background: Tachycardia after laparoscopic Roux-en-Y gastric bypass (LRYGB) could be a sign of a serious complication requiring prompt intervention. The aim of this study was to identify the most common etiologies for tachycardia after LRYGB.

Methods: The medical records of 153 patients who underwent primary LRYGB for Morbid Obesity (MO) between April and October 2006 were retrospectively reviewed. All patients were admitted to the intermediate care unit as part of our routine protocol. Among other vital signs, heart rate was monitored postoperatively. Tachycardia was defined as a heart rate greater than 100 beats per minute (bpm). Fever was defined as temperature greater than 101.0 F°.

Results: 102 patients (66.6%) experienced tachycardia after LRYGB. The mean age was 43.4 years (range 18 to 70) and the Male:Female ratio was 1:4. Inpatient vital sign records demonstrated tachycardia of 100 -120 bpm (94.1%) and >120 bpm (5.9%). No specific cause was identified in 43 (42.2%) patients. Various variables were documented during the tachycardic episodes: pain (25.5%), hypoxia (9.8%), reactive tachycardia (8.8%), cardiac co-morbidity (4.9%), atelectasis (3.9%), bleeding (3.9%), and fever (0.98%). Four patients had postoperative bleeding, 3 were re-operated and one was managed conservatively. Of 9 patients with reactive tachycardia secondary to hypertensive medication, hydralazine was the most common drug (5.9%) followed by nitropaste (2.9%). Six patients had significant tachycardia >120 bpm: 3 with cardiac dysrhythmia, 2 with significant postoperative bleeding and one had hypoxia; there were no leaks.

Conclusion: Tachycardia is a common abnormal vital sign after RYGB. The most common identifiable cause of tachycardia in this study was pain. Bleeding was the most common reason for tachycardia requiring surgical reintervention.

ABSTRACT FINAL ID: P50;

TITLE: Laparoscopic Bariatric Surgery in Patients on Active Anticoagulation

AUTHORS/INSTITUTIONS: P.K. Papasavas, D.J. Gagné, K.K. Burton, J.E. Urbandt, P.F. Caushaj, Surgery, The Western Pennsylvania Hospital, Clinical Campus of Temple University School of Medicine, Pittsburgh, PA;

ABSTRACT BODY:

Background: Patients undergoing bariatric surgery while on anticoagulation are considered high risk. We describe our experience with bariatric surgery on patients on active anticoagulation.

Methods: Retrospective analysis of a prospective database focusing on laparoscopic bariatric surgery in patients on active anticoagulation therapy. Type, duration and reason for anticoagulation, and perioperative management and complications were recorded.

Results: 1400 patients underwent laparoscopic bariatric surgery between July 1999 and July 2007 in our institution. Thirty patients (2.1%) were on active anticoagulation preoperatively for cardiac and cardiovascular diseases (n=14), venous thromboembolic disease (VTE) (n=12) and both cardiac and VTE (n=4). All 30 patients underwent laparoscopic procedures; RYGB (n= 27), conversion of VBG to RYGB (n=2), sleeve gastrectomy (n=1). Patients were on warfarin (n=23), warfarin and clopidogrel (n=4) and low molecular weight heparin (LMWH) (n=3). Twelve patients (40%) had preoperative consultation with a hematologist. Four patients had an IVC filter prior to surgery. Thirteen of 27 patients on warfarin (48%) were bridged with LMWH. The median time for discontinuing warfarin preoperatively and resuming postoperatively was 5 and 2 days respectively. There were no mortalities. Six patients (20%) developed bleeding complications, one of which required surgical intervention. Five patients presented with gastrointestinal bleeding and one patient with a soft tissue hematoma. Anticoagulation was stopped on all patients with bleeding complications and resumed after the hemoglobin was stabilized.

Conclusion: Laparoscopic bariatric surgery may be safe in patients requiring active anticoagulation. Bleeding complications may be higher in this group of patients.

ABSTRACT FINAL ID: P51;

TITLE: Eating Behavior Patterns and Weight Loss One Year After Laparoscopic Banding Surgery

AUTHORS/INSTITUTIONS: S.F. Franks, K.A. Kaiser, Psychiatry, UNT Health Science Center, Fort Worth, TX; J.F. Carroll, , UNT Health Science Center, Fort Worth, TX; A.B. Smith, , Laparoscopy, Bariatrics, and Surgery, Fort Worth, TX;

ABSTRACT BODY:

Background: Successful weight loss with laparoscopic banding surgery (LBS) depends largely on life-long behavioral changes. The possible re-emergence of habitual eating patterns creates a risk for behavioral non-compliance. We previously reported differences in eating patterns between normal weight (NW) and LBS subjects (LB) prior to LBS (T1), and their normalization 6 months post-LBS. The purpose of this study was to examine the stability of these effects on eating behavior and weight loss one-year post-LBS (T2).

Methods: Subjects included 29 LB and 30 NW. All subjects completed the Eating Inventory to assess Cognitive Restraint (CR), Disinhibition (DI) and Hunger (HN) at T1. LB were retested at T2, and compared using repeated measures ANOVA. Percent excess weight loss (EWL) was calculated for LB based on pounds to achieve a BMI of 25.0. LB was split high ($73.38 \pm 4.62\%$) and low ($25.57 \pm 13.51\%$) EWL at T2. Point-biserial correlations were used to determine the relationships between EWL, EI scores at T1 and T2, and change in EI scores (T2-T1).

Results: Results indicated significant improvement in eating behaviors from T1 to T2 for CR (6.7 ± 3.8 vs. 14.0 ± 4.1 , $p=0.000$), DI (10.7 ± 3.6 vs. 6.2 ± 2.8 , $p=0.000$), and HN (8.2 ± 3.7 vs. 3.3 ± 1.8 , $p=0.000$). T2 values for CR and DI were higher than NW (11.1 ± 5.0 , $p=0.017$ and 4.0 ± 3.0 , $p=0.005$), but not for HN. EWL group membership was significantly correlated with T1 HN ($r=.45$, $p=.03$) and T2-T1 DI ($r=-.45$, $p=.03$).

Conclusion: Improved eating behavior patterns after LBS appear to be maintained at one year. LBS was most effective for LB with higher pre-surgical hunger and with greatest improvement over periodic loss of control of eating. LB who are at-risk for poor weight loss may gain greater benefit from post-surgical behavioral interventions. The mechanisms underlying greater post-surgical outcomes should be further investigated.

ABSTRACT FINAL ID: P52;

TITLE: Laparoscopic Sleeve Gastrectomy Versus Intra-gastric Balloon: A Case-Control Study

AUTHORS/INSTITUTIONS: M. Lorenzo, UOML, ASL NA5 Distretto 84, Torre Annunziata NA, ITALY; M. Cipriano, M. Cipriano, A. Materia, V. Bacci, R. Maselli, L. Musmeci, N. Basso, , Surgery Dept 'Paride Stefanini' La Sapienza University, ROME, ITALY;

ABSTRACT BODY:

Background: Aim of this study is to compare Laparoscopic Sleeve Gastrectomy(LSG) and BioEnterics Intra-gastric Balloon(BIB®).

Methods: From January 2004 to December 2005, 20 patients underwent Laparoscopic Sleeve Gastrectomy (LSG) as a first step in Biliopancreatic Diversion with Duodenal Switch. Controls (n=20) were selected from patients who during the same period underwent BioEnterics Intra-gastric Balloon therapy. In both groups we considered: length of procedure, hospital stay, intraoperative or endoscopic complications, postoperative or postendoscopic complications, co-morbidities, and weight loss parameters (Kg, %EWL, BMI). Results are expressed as mean±standard deviation. Statistical analysis was done by means of Student's t-test or Fisher's exact test (p<0.05 was considered significant).

Results: Mortality, intra- and postoperative complications (in LSG group), intra and postendoscopic complications (in BIB group) were absent. Mean operative time in the LSG group was 120±50 (range: 60-200) minutes. Mean positioning time for BIB was 15±5 (range: 10-25) minutes. At 6-month follow-up mean BMI was 46.2±3.5 and 47.1±6.5 Kg/m² in the BIB and in the LSG patients, respectively (p=ns). After 12 months BIB patients tended to regain weight, even if strictly followed with a diet regimen, while LSG patients continued to lose weight. Significant differences between groups were absent for the co-morbidities considered.

Conclusion: Laparoscopic Sleeve Gastrectomy and BIB® are two valid options for weight loss as a first-step procedure. LSG has all the related risks of general anesthesia, laparoscopic surgery and digestive anastomosis, while BIB presents a very low rate of minor complications, such as psychological intolerance.

ABSTRACT FINAL ID: P53;

TITLE: Hand-Sewn Gastrojejunostomy is Associated with Fewer Anastomotic Complications than Linear-Stapled Anastomosis in RYGB

AUTHORS/INSTITUTIONS: J.D. Gabrielsen, C.C. Pfeifer, I. Sucandy, Y. Akmal, H. El-Arousy, H. King, H. Dancea, P.N. Benotti, W. Strodel, A.T. Petrick, Minimally Invasive Surgery, Geisinger Medical Center, Danville, PA;

ABSTRACT BODY:

Background: Gastrojejunal anastomotic complications are some of the most common after RYGB. The aim of our study was to compare overall and specific anastomotic complication rates between single layer handsewn (SLH), double layer handsewn (DLH), and linear stapled (LS) anastomoses.

Methods: 733 patients who underwent RYGB by 3 different surgeons at one institution from August 2002 to February 2006 were studied. The data was collected retrospectively from a prospectively maintained database. Outcomes data was collected for anastomotic leak, bleeding, marginal ulceration, and stricture. Data was analyzed using Fisher's exact test and Chi-square.

Results: Of the 733 patients, 60 had open RYGB with SLH anastomosis, 335 had open RYGB with DLH anastomosis, and 338 had laparoscopic RYGB with 45mm LS anastomosis. Statistically significant differences were found in overall complications between the LS group and DLH groups (12.1% vs. 3.3%; $p<.001$). Significant differences were also noted between these two groups with regard to total early complications (3.5% vs. 0%; $p<.001$), early anastomotic stricture (2.1% vs. 0%; $p=.015$) and late anastomotic stricture (5.6% vs 0.6%; $p<.001$). In all of these categories there was also a nonsignificant trend toward lower complications in the SLH group when compared to the LS group. There was no significant difference in leaks between any groups.

Conclusion: GJ anastomoses created using linear staplers were associated with significantly increased risk of anastomotic complications. This finding must be considered in light of the lower overall wound complication rates associated with laparoscopic RYGB.

ABSTRACT FINAL ID: P54;

TITLE: Laparoscopic Vertical Sleeve Gastrectomy: Efficacy of Using Bioabsorbable Seamguard

AUTHORS/INSTITUTIONS: P.M. Chiasson, S.E. Burpee, , Southern Arizona Center for Minimally Invasive Surgery, Tucson, AZ;

ABSTRACT BODY:

Background: Minimally invasive bariatric surgery continues to evolve with the introduction of new techniques and technology. This report discusses our experience using bioabsorbable seamguard in the performance of the laparoscopic vertical sleeve gastrectomy (LVSG) procedure for the management of morbid obesity.

Methods: Utilizing data taken from our prospective IRB approved database, the results of 46 consecutive LVSG procedures (Group 1) performed without seamguard followed by 46 consecutive LVSG procedures (Group 2) utilizing seamguard performed between January 1, 2006 and September 1, 2007 were analyzed. Demographic, peri-operative, and post-operative data were compared for each group using chi-square, Fisher exact test and the student t-test were appropriate.

Results: Both groups were similar in age, gender, BMI, and co-morbid illness. Intra-operatively, there were no conversions. Both groups had similar OR times and there were no intra-operative non-bleeding complications in either group. However, in Group 1 we had to oversew the staple line for oozing in 6/46 (13%) of the procedures as compared to 0/46 of the procedures where seamguard was utilized. This difference was significantly different ($p < .05$). Post-operatively, two patients in Group 1 required transfer to the ICU and blood transfusion therapy. One of these patients subsequently required readmission for drainage of an infected hematoma within 30 days of surgery. There were no bleeding related post-operative complications in group 2.

Conclusion: The safety and efficacy of the laparoscopic vertical sleeve gastrectomy is enhanced with the use of bioabsorbable seamguard.

ABSTRACT FINAL ID: P55;

TITLE: Variability of Pouch Area and Gastrojejunostomy Size in Patients Undergoing Hand-Sewn Laparoscopic Roux-en-Y Gastric Bypass (LRYGBP)

AUTHORS/INSTITUTIONS: R. Perez-Johnston, A. Lopez-Ortiz, L.F. Alva-Lopez, K. Cabrera, M. Mosti, M. Sierra, S. Sanchez-Leenheer, D. Velazquez, M. Herrera, , ABC Medical Center, Mexico City, Distrito Federal, MEXICO;

ABSTRACT BODY:

Background: Optimal shape and size of the gastric pouch and the gastrojejunostomy in RYGBP is unknown. The purpose of this study was 1) to analyze the variability of shape and size of the gastric pouch and the gastrojejunostomy diameter in 135 patients undergoing LRYGBP by one surgeon and 2) to evaluate the impact of the pouch area and outlet size on weight loss.

Methods: Upper GI radiological evaluation using gastrographin was performed to all patients the day after surgery. Gastric pouches were characterized according to their shape. Pouch area was calculated and diameter of the gastrojejunostomy was measured. Variability of shape and size was assessed by parametric analysis.

Results: There were 71 women and 64 men with a mean age of 38.4 years. According to the shape, 97 pouches were rectangular (estimated area of 11.4 ± 5.2 cm²), 24 were trapezoidal (estimated area of 11.9 ± 4.7 cm²), and 14 had an irregular shape (estimated area of 14.2 ± 6.3 cm²). Mean transverse diameter of the gastrojejunostomy was 7.4 ± 2.3 mm. There were no statistical differences in the pouch area among the different shapes. Mean EBWL at 18 ± 8 months was $70.4 \pm 28\%$. There was no impact of pouch area or anastomosis diameter on EBWL.

Conclusion: Despite variations in pouch shape in this group of patients, mean pouch area remained similar. Pouch size and gastrojejunostomy diameter measured by contrasted x-rays the day after surgery were not predictors of weight loss.

ABSTRACT FINAL ID: P56;

TITLE: One or Two Stages BPD-DS?

AUTHORS/INSTITUTIONS: D.R. Krawczykowski, , Centre Hospitalier Vitry le Francois, Bignicourt sur marne, FRANCE;

ABSTRACT BODY:

Background: BPD-DS is the most efficient bariatric procedure. A 2 steps surgery has been advocated to lower morbidity and mortality rates in high risk patients but are the 2 approaches similar in terms of weight loss?

Methods: A first series: 23 patients with a primary one step BPDS-DS performed by laparotomy: mean age 40.1 y (23-56), mean IBMI 49.3 (43.2-55.4). Currently our bariatric program includes a 2 steps approach for patients refusing a gastric banding: either a primary or a revision sleeve gastrectomy (SG) followed, on patients request and for consistent medical conditions, by a secondary duodenal switch (DS). This second series consists of 20 patients with an isolated SG (out of 200): mean age 43.6 y (27-62), mean IBMI 47 (40.1-53.9).

Results: We found quite easy to perform almost all cases of secondary DS by laparoscopy; there were less early low albumin. At 2 years mean BMI was $28.9 \pm SD 4.9$ for the first series and $28.9 \pm SD 2.8$ for the second, in terms of %IEWL 86 versus 82.

Conclusion: At short terms, staged BPD-DS provides comparable results to the classical one stage surgery but less complications. By the way, this strategic approach will preserve some patients from a malabsorptive surgery.

ABSTRACT FINAL ID: P57;

TITLE: Impact of Laparoscopic Adjustable Gastric Banding on Caloric Intake, Behavioral and Psychological Changes in Obese Adolescents

AUTHORS/INSTITUTIONS: M. Witt, J.C. Fisher, J. Zitsman, , Center for Adolescent Bariatric Surgery, Morgan Stanley Children's Hospital of New York- Presbyterian, New York, NY; J. Schauben, , Pediatric Gastroenterology, Hepatology and Nutrition, New York, NY; M. Devlin, E.B. Finkelson, , Eating Disorders Research Unit, Columbia University/NYS Psychiatric Institute, New York, NY;

ABSTRACT BODY:

Background: Although early results demonstrate significant weight loss in obese adolescents who have undergone laparoscopic adjustable gastric banding (LAGB), factors predictive of weight loss in adolescents have not been reported.

Methods: We reviewed the records of all patients who underwent LAGB from August to October 2007. Changes in measures of dietary and psychiatric behavior at postoperative weeks 12 and 24 were compared against baseline using Wilcoxon signed rank tests. Select preoperative and postoperative continuous variables were entered into a univariate regression model to identify factors predictive of percent excess weight loss (%EBWL) at 12 and 24 weeks post-LAGB. Statistical significance was assumed at $P < 0.05$.

Results: Twenty seven adolescents (18 females) aged 14-18 (mean 16.4 +/- 1.1 years) underwent LAGB. Mean preoperative weight was 330.8 +/- 12.6 lbs; mean BMI was 52.4 +/- 2.0. Behavioral changes related to diet, exercise, and mood are summarized in the *Table*. Caloric intake, snacks per day, Beck Depression Index (BDI), and quality of life (QOL) at 12 weeks post-LAGB were all significantly improved from baseline. No significant predictors of %EBWL at 12 weeks post-LAGB were identified. Preoperative BMI was the only significant predictor of %EBWL at 24 weeks post-LAGB by univariate regression ($r^2 = 0.47$, $P = 0.007$).

Conclusion: Early results suggest that obese adolescents show significant improvements in caloric intake, between-meal snacking, and psychiatric indices following LAGB. Preoperative BMI may be predictive of %EBWL at 24 weeks post-LAGB.

ABSTRACT FINAL ID: P58;

TITLE: The Effect of Gastric Bypass on Vitamin D

AUTHORS/INSTITUTIONS: C. Signori, K. Zalesin, M.M. Wendy, T.L. Washington, K.R. Krause, D.L. Chengelis, P.A. McCullough, Nutrition and Preventative Medicine, William Beaumont Hospital, Royal Oak, MI;

ABSTRACT BODY:

Background: Vitamin D deficiency is a worldwide concern that is becoming increasingly recognized as a public threat. Obesity is a risk factor for vitamin D deficiency and the malabsorption associated with gastric bypass surgery can exacerbate this condition.

Methods: We performed a retrospective chart review of 123 obese patients who underwent Roux-en-Y Gastric Bypass. Baseline pre-operative Vitamin D levels and one-year post-operative Vitamin D and parathyroid hormone (PTH) levels were collected. We defined Vitamin D deficiency or insufficiency, as a 25-hydroxy-Vitamin D level <32 ng/mL.

Results: The mean patient age was 50 ± 10 years, 79% were female, and 97% were Caucasian. Compared to post-operative measurements, a higher percentage of the cohort had baseline vitamin D deficiency, with 86% versus 70% qualifying for deficiency at baseline and 1-year post-operative, respectively ($p < 0.001$). There was a significant reduction in body mass index (BMI), with mean baseline and post-operative measurements of 50 versus 33 kg/m², respectively ($p < 0.001$). BMI was inversely correlated with vitamin D deficiency at baseline ($r = -0.3$, $p = 0.06$) and at 1-year post-operative ($r = -0.2$, $p = 0.013$). One third (33.3%) of the cohort had post-operative secondary hyperparathyroidism, defined as a serum PTH level of >62 pg/mL, which did not correlate with vitamin D deficiency.

Conclusion: BMI is a powerful indicator of vitamin D levels both before and after surgery. Despite the malabsorption associated with RYGB, a lower percentage of patients had vitamin D deficiency post-operative. This is likely due to supplementation as well as a reduction in adiposity.

ABSTRACT FINAL ID: P59;

TITLE: Fibrin Sealant is Associated with an Increased Inflammatory Response and Abscess Formation after Gastric Bypass

AUTHORS/INSTITUTIONS: N.V. Christou, Surgery, McGill University, Montreal, Quebec, CANADA;

ABSTRACT BODY:

Background: Fibrin sealant use in surgery including laparoscopic bariatric surgery is controversial.

Methods: We used a sequential cohort study design with varying treatment effect. All surgery (retrocolic, antegastric, hand-sewn gastrojejunostomy [GJ], no drains) was performed by the same surgeon. Group 1 includes 158 sequential LRYGP with no fibrin sealant (FS). Group 2 includes 158 sequential LRYGBP with 2 ml FS applied to the GJ anastomosis and the pouch staple line. Group 3 includes 158 sequential LRYGBP reverting back to no FS use. We recorded highest temperature, pulse, and white blood cell count (WBC) till discharge (usually within 48 hrs), and complications within 30 days post surgery.

Results: The results expressed as mean + sd are shown in the table below. The group where fibrin sealant was used showed higher pulse, temperature, and WBC with no impact on anastomotic or staple line leaks. Work-up for fever of unknown origin was required in 6 patients in group 2. Four patients had no evidence of leak on UGI and CT scans and 2 patients were explored and a subphrenic abscess was found with no evidence of leak (pneumatic and methylene blue tests) intra-operatively.

Conclusion: Fibrin sealant is associated with an increased inflammatory response and abscess formation after laparoscopic RY gastric bypass.

ABSTRACT FINAL ID: P60;

TITLE: Bariatric Surgery Experience of 1650 Cases as Part of a General Surgical Practice: Are Outcomes as Good?

AUTHORS/INSTITUTIONS: A.M. Gonzalez, J.R. Rabaza, J. Verdeja, E. Whittwell, , South Miami Hospital, Miami, FL;

ABSTRACT BODY:

Background: Bariatric surgery has grown in the past few years to become a speciality in itself. Bariatric surgery was once a component of the average general surgical practice. With the development of the speciality of Bariatric surgery, more bariatric surgery programs are performed by surgeons practicing bariatric surgery only. We have performed bariatric surgery as a portion of our general surgical practice with excellent outcomes.

Methods: We reviewed the experience of bariatric surgery performed by 4 surgeons in three different hospitals over 9 years(1999-2007). We reported the type of operation,gender, ages, morbidities, mortality, length of stay, and BMIs.

Results: 1650 surgeries were performed from 1999 to 2007 by 4 surgeons. Gastric bypasses were 95% and lap band accounted for 5%. Age range was 17 to 67. Age Distribution is noted in Figure 1. Three quarters were female. Payment type noted in Figure 2. BMI ranged from 36 to 84(mean 48). Length of stay began at 3.6 days and decreased to 2.3 days in the past year. Morbidities were as follows: Respiratory 1.3%,stricture 5.4%,bleeding 0.7%,DVT 0.6%, pulmonary embolism 0.4%,wound infection 2.2%,and leak 1.0%. Mortality 0.6%.

Conclusion: Bariatric surgery has become a specialized field of surgery for the treatment of morbid obesity. Bariatric surgery began as a portion of a general surgical practice, but has transitioned into a field practiced exclusively by many surgeons. We demonstrated in our large experience of 1650 cases over 9 years that our morbidity, length of stay and mortality are comparable to national norms. Bariatric surgery can still be practiced by general surgeons as part of a general surgical practice.

ABSTRACT FINAL ID: P61;

TITLE: Quality of Life Improvement after Roux-en-Y Gastric Bypass: Long-Term SF-36 data

AUTHORS/INSTITUTIONS: N. Ballem, D. Yellumahanthi, M. Wesley, R.H. Clements, Surgery, University of Alabama at Birmingham, Birmingham, AL;

ABSTRACT BODY:

Background: The current literature is scant regarding quality of life amongst obese patients and in particular with regards to long-term implications of bariatric surgery. The aim of this study is to understand quality of life changes that occur post-bariatric surgery.

Methods: 1,255 prospectively collected SF-36 questionnaires were analyzed from 902 consecutive patients undergoing RYGBP. Preop (n=902) & yearly thereafter: 1yr (n=725), 2yrs (244), 3yrs (135), 4yrs (98), 5yrs (48), 6yrs (5). SF-36 responses were normalized to 1998 US norms. Statistics analyzed with SAS: Univariate analysis, Kruskal-Wallis, Turkey's HSD posthoc analysis. All data presented as mean \pm SEM.

Results: Demographics: Race (137 African Americans, 585 Caucasians, 2 Hispanics, 1 other), Sex (83% women, 17% men), Age (40.9 \pm 0.34), BMI (48.72 \pm 0.27), ASA (2=31%, 3=68%, 4=1%), Short Vs Long-limb bypass (63% vs 37%). Preoperative values measured on the following 10 scales (Physical function (PF=30.92), Role physical (RP=36.65), Bodily pain (BP=42.44), General Health (GH=45.26), Vitality (VT=49.31), Social function (SF=35.52), Role emotional (RE=42.29), Mental health (MH=42.93), Physical & Mental Cumulative Score (PCS=36.74 & MCS=46.06), demonstrated significant improvement postoperatively for PF, RP, BP, GH, RE, PCS, MCS (p<0.001). 1yr & 5yr SF-36 data (PF 52.42 & 48.44), (RP 53.3 & 49.92), (BP 26.03 & 29.72), (GH 41.14 & 43.95), (VT 48.11 & 49.31), (SF 34.57 & 34.96), (RE 52.53 & 49.51), (MH 43.01 & 43), (PCS 43.56 & 43.35), (MCS 44.73 & 44.72). Preop SF-36 data for obese patients that did and did not undergo surgery was not statistically different across categories.

Conclusion: Although obese patients score lower on all scales compared to the normal standardized population, health-related quality of life significantly improves post-bariatric surgery. The most significant improvements in quality of life are seen within the first 18 months after RYGBP, which prove durable long term.

ABSTRACT FINAL ID: P62;

TITLE: What Bariatric Procedure Would ASMBS Members Choose For Themselves?

AUTHORS/INSTITUTIONS: K.E. Steele, L. Eaton, J. Lyn-Sue, T. Magnuson, G. Prokopowicz, A. Lidor, M. Schweitzer, General Surgery, John Hopkins University School of Medicine, Baltimore, MD;

ABSTRACT BODY:

Background: Evidence-based guidelines for the selection of bariatric procedures are lacking. There is no general agreement among bariatric specialists as to which procedure is most appropriate for a given bariatric patient. We hypothesized that patients of higher BMI and patients with diabetes(DM) would be more suitable for Roux-en-Y gastric bypass(LGBP) than for adjustable gastric banding(LAGB).

Methods: A 16 item survey was randomly distributed to members of the American Society for Metabolic and Bariatric Surgery(ASMBS). Respondents were asked about their demographics and specific bariatric procedures they would choose for themselves with a given BMI with or without DM. Choices included LGBP, LAGB, Sleeve Gastrectomy(LSG) and Duodenal Switch(LDS).

Results: We randomly sampled 200 members of the ASMBS. The response rate was 54%(108). 60.4% were surgeons and 39.6% allied health members. 56% were men. The mean height, weight, age and BMI were 68.1", 176 lbs, 44.8, 26.6 respectively. For a BMI of 35 to 44.9 with DM, 57.4% chose LGBP. Members chose the LAGB(45.4%) most frequently for patients without DM, followed by LGBP(27.8%) and LSG (25.9%). For a BMI of 45 to 54.9 with DM, 71.3% LGBP, 14.8% LAGB, 9.3% LSG and 4.6% LDS. For BMI of 45 to 54.9 without DM, LGBP was still most popular (60.2%) followed by LGB (26.9%), LSG (10.2%) and LDS (2.8%). In the superobese BMI >55 with or without DM the response remained similar: LGBP (68.5%) with DM and (65%) without DM. The next most popular choice was LDS at 16.7% if DM were present and 13.5% if not. Other bariatric procedures were not as popular options for this weight category (LGB 8.3% and LSG 6.5%).

Conclusion: LGBP was preferred for patients with DM and/or a high BMI. As more research becomes available, ASMBS members need to create guidelines for selecting the most effective surgery for the bariatric patient.

ABSTRACT FINAL ID: P63;

TITLE: The Presence of Parietal Cells in Small Pouches May Contribute to Marginal Ulceration after Gastric Bypass Surgery

AUTHORS/INSTITUTIONS: G.M. Wynn, I. Irgau, , St. Francis Hospital, Wilmington, DE; M. Peters, , Christiana Hospital, Newark, DE;

ABSTRACT BODY:

Background: Marginal ulcers develop in 3% following gastric bypass surgery and is thought to be caused by the creation of large pouches or ischemia.

Methods: We retrospectively reviewed the charts of 17 patients who underwent revision surgery for resection of nonhealing marginal ulcers and reviewed their pathology to see if parietal cells were present in the resected specimens. We also reviewed their prerevision endoscopy to evaluate pouch size.

Results: Between 2001 and 2006, 1272 patients underwent Roux en Y gastric bypass between two institutions. Seventeen developed intractable marginal ulcers despite medical therapy. Review of the pathology of the resected segments demonstrated the presence of parietal cells in all the patients who underwent revision. Review of their pre-revision endoscopy revealed a small pouch measuring 3-6 cm in length.

Conclusion: Despite the small pouch size, parietal cells were present on all resected specimens after revision surgery, suggesting that Roux en Y gastric bypass surgery is a potentially ulcerogenic procedure.

ABSTRACT FINAL ID: P65;

TITLE: Comparison Between Laparoscopic Adjustable Gastric Banding (LAGB) and Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) in Post-Menopausal Females > 55 Years Old

AUTHORS/INSTITUTIONS: M.S. Roslin, P.C. Shah, M. Walen, C. Diefenbach, Surgery, Lenox Hill Hospital, New York, NY;

ABSTRACT BODY:

Background: LAGB is increasingly popular because of its' low mortality and rapid recovery. Excess weight loss figures of greater than 60% have been reported. With aging, muscle mass decreases and is replaced by soft tissue, leading to lower metabolic rates. These changes are most pronounced in post menopausal females. As a result, we decided to compare results between LAGB and LRYGB in post menopausal females >55 years old.

Methods: In the calendar year 2006, 450 pts were treated with primary bariatric procedures in our program. This included 43 post menopausal women. 20 pts had LAGB (Mean Age 59 avg BMI 43, 23 pts had LRYGB (Mean Age 60 avg BMI 49)

19 LAGB patients were available for one year study. A single patient required band extraction for chronic emesis. All 23 RYGB patients had one year follow up. Average weight loss, %excess BMI loss were measured for each group.

Results: In LAGB patients avg.% excess BMI loss at one year was 35.5%. Avg wt loss was 38lbs. Only 3 of the LAGB pts lost >60% of their excess BMI. 13 pts lost <40% of excess BMI.

For LRYGB %excess BMI loss was 67.2 with avg wt loss 84.2 lbs. 10 pts lost> 60%, 10 pts between 40-60%, and three pts (all with BMI>55) lost less than 40%excess BMI.

Conclusion: Our data suggests that only a minority of female patients > 55 achieve a good bariatric result with LAGB at one year. In comparison, pts with LRYGB perform much closer to the quoted figures of 70% of excess weight loss. Despite the attractiveness of offering LAGB to our older and potentially more frail patients, our data suggests that this may not be an effective strategy. Furthermore, our data highlights the need for tools to stratify patients so that we can choose the best procedure for their needs and provide them with realistic expectations .

ABSTRACT FINAL ID: P66;

TITLE: Laparoscopic Adjustable Gastric Banding (LAGB) in Morbid Obese Adolescent Patients is Associated with Improvement of Self- and Parent-Proxy Assessment of Quality of Life

AUTHORS/INSTITUTIONS: A.S. Gallo, L. Tussing-Humphreys, M.J. Holterman, A. Holterman, N. Browne, A. Browne, General Surgery, University of Illinois at Chicago, Chicago, IL;

ABSTRACT BODY:

Background: The objectives of surgical therapy for morbid obesity are weight reduction, improvement of obesity-related comorbidities and improvement in quality of life (QOL). The aim of this study was to report QOL outcomes in morbidly obese adolescents (ages 14-17) and compare their self-report to the parent-proxy report before and after treatment in a weight management program following LAGB.

Methods: Between March 2005 and May 2007, 26 patients underwent LAGB. Body Mass Index (BMI), % Excess Body Weight Loss (%EWL) and QOL were analyzed using the Pediatric Quality of Life Inventory and parent proxy-report at baseline, 3,6,12 and 18 months post-LAGB. Descriptive and comparative statistics were utilized.

Results: Preoperative mean age and BMI were 16 ± 1 years and 51 ± 11 kg/m² (38-81) respectively. %EWL at 3,6,12 and 18 months was 16 ± 11 , 27 ± 18 , 26 ± 22 , and 39 ± 28 respectively. In patients and parents with impaired initial QOL scores (defined as <83 points), we observed significant improvement in psychosocial and physical health scores within 3 months post-LAGB (adolescents 69 ± 7 vs 73 ± 13 ; and parents 56 ± 20 vs. 67 ± 15 ; with $p=0.05$). This was sustained at 18 months follow-up (adolescents 89 ± 15 ; and parents 83 ± 13 ; $p=0.05$). Interestingly, parents uniformly had a worse assessment of their child's QOL compared to the adolescent's self-report ($p<0.05$).

Conclusion: Surgical weight loss using LAGB offered significant early and short term improvement in QOL based on self-report and parental report for morbidly obese adolescent. Despite reported improvement in QOL by both adolescences and parents at follow-up, significant discrepancies between parent and adolescent QOL scores and perceived improvement existed.

ABSTRACT FINAL ID: P67;

TITLE: Robotic Bariatric Surgery: Outcomes of Laparoscopic Biliopancreatic Diversion and Gastric Bypass

AUTHORS/INSTITUTIONS: E.B. Wilson, S. Yu, B. Snyder, T. Scarborough, Surgery, University of Texas Health Science Center at Houston, Houston, TX; B. Nazemi, R. Sudan, , Creighton University School of Medicine, Omaha, NE;

ABSTRACT BODY:

Background: Successful bariatric surgery programs require low complication rates and low mortality rates.

Laparoscopic roux-en-Y gastric bypass (LGB) and biliopancreatic diversion with duodenal switch (BPDDS) has substantial risks of complications such as leaks, strictures, embolism, and perioperative death. This study reviews the outcomes of the largest series of advanced laparoscopic bariatric procedures performed with robotic assistance by 3 surgeons from 2 academic institutions.

Methods: From 2000 to 2007, 343 consecutive patients underwent robotic BPDDS (105 patients) and LGB (238 patients) with use of the Da Vinci robot at two academic institutions. All duodenoileal and gastrojejunal anastomoses were fully sewn robotically. Outcomes and complications were collected prospectively in databases and reviewed retrospectively.

Results: There were no mortalities (0%) and no intraoperative complications due to robotic usage during the cases. Robotic BPDDS and LGB mean operative times of 367 and 208 minutes respectively. BPDDS average length of stay was 3.4 days versus 2.3 days for LGB. Postoperatively, there were 0 leaks (0%), 2 embolisms (1%), and 6 strictures (3%) from robotic LGB. There were 5 leaks (5%), 0 embolisms (0%), and 2 pouch strictures (2%) from robotic BPDDS.

Conclusion: Robotic bariatric surgery has not been widely accepted by the surgical community as yet, but though operative times can be long, outcomes using robotic technology are very good. This study documents results of 3 surgeons from separate institutions showing no mortality and very low morbidity from robotic LGB and BPDDS. The precision of the robot has been shown to produce low complication rates in advanced laparoscopic bariatric surgery and has great potential in the future of surgical weight loss.

ABSTRACT FINAL ID: P68;

TITLE: Gastroparesis of the Gastric Pouch after Gastric Bypass

AUTHORS/INSTITUTIONS: T. Kido, R. Ramanathan, Minimally Invasive Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA;

ABSTRACT BODY:

Background: With the growing obesity epidemic in the United States the number of gastric bypass surgeries have steadily increased. These patients are at risk for long term gastrointestinal and nutritional complications. We report a rare long term complication of gastric bypass.

Methods: This is a case report of a 59 year old female who had an open gastric bypass twenty-five years earlier who experienced multiple gastrointestinal complaints including unremitting epigastric pain, heartburn and vomiting following ingestion of any size meal. Upper GI and small bowel contrast studies showed moderate reflux into the esophagus and no evidence of obstruction. Endoscopy was negative for stricture or marginal ulcer. CT scan was normal. Nuclear medicine gastric emptying study revealed severe gastroparesis of her gastric pouch with the T1/2 of gastric emptying being 305 minutes.

Results: The patient then underwent a laparoscopic gastrectomy of the gastric pouch with Roux-en-y esophagojejunostomy. Patient did well and was discharged on the second post operative day. At six month follow-up the patient is tolerating regular diet with complete resolution of her symptoms. Post surgical nuclear medicine emptying study revealed normal emptying times with a T1/2 of 45 minutes.

Conclusion: Gastroparesis of the gastric pouch after gastric bypass has not been reported previously in the literature. The clinician must think outside of mechanical complications in patients with persistent symptoms. More investigation needs to be done in gastric remnant physiology after Roux-en-Y gastric bypass.

ABSTRACT FINAL ID: P70;

TITLE: Gastric Bypass Provides Long-Term Improvement in Cardiac Risk Factors

AUTHORS/INSTITUTIONS: G. Woodard, J. Downey, J. Peraza, J. Morton, Surgery, Stanford University, Stanford, CA;

ABSTRACT BODY:

Background: Biochemical cardiac risk factors (BCRF) have demonstrated strong prediction for cardiovascular events. Improvement in BCRFs after Roux-en-Y gastric bypass surgery (RYGB) has been demonstrated at one year; however longer term results have not been reported. We hypothesize that there is sustained, long-term improvement in BCRF following RYGB.

Methods: At a single academic institution (2004-2007), we measured BCRF in gastric bypass patients preoperatively and at 24 months (n=72) and 36 months (n=18) postoperatively. These risk factors included high-density lipoprotein (HDL) cholesterol, low-density lipoprotein (LDL) cholesterol, triglycerides (Trig), and high-sensitivity C-reactive protein (CRP). Variables were compared by Students T-test analysis. Correlations between weight loss and cardiac risk factor improvement were measured by Spearman coefficients with $P < .05$ as significant.

Results: All BCRFs improved following RYGB surgery at all time points. There was significant improvement in HDL from preoperative to 24 and 36 months (45, 59, 51, $p < .0001$), LDL (111, 95, 79, $p < .0003$), Trig (138, 79, 72, $p < .0001$), and hs-CRP (8.05, 1.0, 1.0, $p < .0001$). Percent excess weight loss did not correlate significantly to improvement of LDL or Trig, but did correlate with improvements in HDL and CRP with Spearman coefficients of .00554 ($p < .0110$) and .20914 ($p < .0076$) respectively.

Conclusion: The improvement in BCRFs seen at one year after RYGB is durable at two and three years. Both HDL and CRP improvements correlated to weight loss which may reflect their link to exercise. These findings may allow for serologic surrogate markers for exercise further refining post-operative care.

ABSTRACT FINAL ID: P71;

TITLE: Is There Consensus for Postoperative Practice Patterns? A Survey of ASMBS Surgeons

AUTHORS/INSTITUTIONS: S. Owens, J. Downey, T. Ramachandra, J. Peraza, G. Woodard, J. Morton, Surgery, Stanford University, Stanford, CA;

ABSTRACT BODY:

Background: The only effective and enduring treatment for morbid obesity is bariatric surgery. However, questions remain regarding optimal postoperative management.

Methods: 1200 surveys were sent to practicing bariatric surgeons as identified by the American Society of Metabolic and Bariatric Surgery with a 40% response rate.

Results: 57% of respondents have been in practice >10 years with 84% dedicating >50% of their practice to bariatric surgery and 60% center of excellence affiliation. Bariatric procedures performed were gastric bypass (68%) and gastric banding (32%). 84% claimed >70% 1 year follow-up with 72% stating they see their patients >5 times post-op. Comorbidity surveillance ranged from 98% for diabetes to 65% for depression. Post-op medical management was mostly by PCP (80%). With persistent depression and dyslipidemia, 60% and 52% of respondents respectively stated they never restarted medications with only 5% monitoring C-reactive protein. Respondents regularly monitor CBC (91%) and Vitamin B12 (85%), whereas about half monitor thiamine. Only 38% give Actigall to patients who still have their gall bladder. 15% of respondents do not recommend contraception to their patients post-operatively. The 85% that do recommend contraception most frequently leave the choice of method to the patient (39%).

Conclusion: Significant practice pattern variation exists for bariatric surgeons. Surprisingly many surgeons do not consistently monitor patients for depression or resume medications when depression persists despite a potential for suicide after surgery. Also, only 5% routinely monitor CRP despite its demonstration as the best cardiac risk predictor. This survey demonstrates the need for standardization of bariatric patient follow-up.

ABSTRACT FINAL ID: P72;

TITLE: CT Scan Reconstruction Demonstrates No Change in Gastric Pouch Size at One Year

AUTHORS/INSTITUTIONS: J. Downey, B. Jeffries, J. Morton, Surgery, Stanford University, Stanford, CA;

ABSTRACT BODY:

Background: Bariatric surgery is the only effective and long-lasting treatment for morbidly obese patients. Gastric pouch size may be an important factor for weight loss. Our study aim is to show the utility of CT scans to estimate gastric pouch size and to correlate initial pouch size and 12 month pouch size with 12 month weight loss.

Methods: A retrospective chart review of 628 patients at a major bariatric surgery center identified 8 gastric bypass patients who had CT scans less than 60 days following surgery and second scan greater than 360 days following surgery. 16 CT scans were reviewed by a board certified radiologist to measure gastric pouch dimensions. Paired student's t-test and multivariate regression analysis were performed with a $p < 0.05$ for significance.

Results: The average cross sectional area for the initial CT scan was 10.7cm². The average cross sectional area of the >12mos CT scans was 8.94cm² with no statistical difference between the two (paired student's t-test of 0.4). A regression analysis of excess weight loss at 12 months as a function of pre-op BMI, initial gastric pouch, and >12 month gastric pouch showed a significant coefficient for pre-op BMI only.

Conclusion: This novel study demonstrates that CT scan is an effective method for estimating 3D gastric pouch size. It also appears that small variation in gastric pouch size does not affect 12 month excess weight loss. Rather, pre-operative BMI is still the biggest predictor of excess weight loss at 12 months.

ABSTRACT FINAL ID: P73;

TITLE: Does Liberal Intra-Operative IV Fluid Administration Decrease Post-Operative CPK Levels? A Randomized Controlled Trial

AUTHORS/INSTITUTIONS: D. Wool, H. Lemmens, H. Soloman, J. Brodsky, J. Morton, Surgery, Stanford University, Stanford, CA;

ABSTRACT BODY:

Background: Post-operative rhabdomyolysis represents a serious and vexing problem after bariatric surgery. We hypothesized that liberal administration of IV fluid administration may influence CPK levels, a surrogate marker for rhabdomyolysis.

Methods: 50 patients were recruited from a bariatric surgery clinic in an academic hospital. Patients were randomized to two groups of intra-operative IV fluid administration: Group A received 15ml/kg while Group B received 40ml/kg. Outcomes measured included urine output, creatinine, and CPK levels. Observers were blinded to which IV fluid regimen was employed. Categorical and continuous variables were compared by Chi-Square and T- test respectively with $P < .05$ set as significant.

Results: Both patient groups had comparable age, BMI, OR times and creatinine. Significant differences existed between Group A and B respectively for IV fluid administration (1900 vs 5000 cc), urine output (1168 vs 1800cc), and CPK levels (233 vs 119). No complications were noted for either group.

Conclusion: This prospective, double-blinded randomized trial for intra-operative fluid administration indicates that liberal IV fluid administration decreases CPK levels in a high-risk bariatric surgery population without complication.

ABSTRACT FINAL ID: P74;

TITLE: Proximal Gastric Banding after Failed Vertical Gastroplasty and Gastric Bypass.

Eliezer Avinoah MD, Leonid Landsberg MD. Solly Mizrahi MD, FACS.

Surgery A, Soroka Medical Center, Faculty of Health Sciences, Ben-Gurion University, Beer-Sheva, Israel

AUTHORS/INSTITUTIONS: E. Avinoah, , Soroka Medical Center, faculty of health sciences, Ben Gurion University, BEER SHEVA, ISRAEL;

ABSTRACT BODY:

Background: Most gastric restrictive operations for morbid obesity are based on small gastric pouch and narrow stoma. Gastric bypass failure is attributed to enlargement of the gastric pouch and the gastroenterostomy. While vertical gastroplasty failure is due to stapled line disruption. We describe our clinical experience with revision operations performing proximal gastric banding after failed gastric restrictive surgery.

Methods: Between 1997 to 2007 we performed 4500 laparoscopic gastric banding for morbid obesity. 352 (8%) of the patients were after vertical gastroplasty, and 24 after gastric bypass. Their mean age was 47 ± 10 years, 12 to 24 years after open bariatric surgery. They regained weight to an average BMI of 43 ± 6 (35 to 64) before revision. At operation we used Veress needle and the camera which were inserted at left hypochondrium. Laparoscopic adhesiolysis was performed under the scar and liver and banding performed at the gastroesophageal junction.

Results: There were no leaks and no mortality. Hospital stay was no longer than 24 hours. One patient had unreducible large hiatal hernia and banding was not performed. One patient was converted from gastric bypass to malabsorption procedure. BMI gradually declined depending on band tightness. Long term follow up shows no slippage and no erosions. One patient had esophageal dilatation. Present survey shows that BMI remains stable below 29 even more than eight years after surgery.

Conclusion: Restoring the control of gastric restriction induces effective long-term weight loss. Proximal gastric banding is a safe and effective operation after failed gastric restrictive surgery for morbid obesity.

ABSTRACT FINAL ID: P75;

TITLE: Impact of a Multidisciplinary Perioperative Dexmedetomidine Protocol on the Management of Patients Undergoing Laparoscopic Gastric Bypass

AUTHORS/INSTITUTIONS: B. Benedetto, G. Tillou, W. Dunnican, T. Singh, Surgery, Albany Medical Center, Albany, NY;

ABSTRACT BODY:

Background: Our group has previously demonstrated perioperative dexmedetomidine (DEX) administration to be safe in patients undergoing laparoscopic gastric bypass (LGB). We have since implemented a multidisciplinary perioperative DEX protocol designed to maximize perioperative analgesia while minimizing sedation.

Methods: Prospective analysis of a single surgeon's experience with a perioperative DEX protocol in patients undergoing LGB during a three month period. Patients were evaluated for perioperative pain scores, peri- and postoperative narcotic requirements, time to ambulation (TTA), length of stay (LOS) and respiratory complications. DEX patients were compared to a matched historical control group. Student's t-test and non-parametric analyses were used for statistical evaluation. Narcotic requirements were converted to morphine equivalents (MEQ).

Results: Twenty-three consecutive patients were enrolled in the DEX protocol with a mean age of 44.3 years and a mean BMI of 42. When compared to the matched historical control group (n=21, mean age 43.4 years, mean BMI 43.4), DEX patients had significantly reduced narcotic requirements in the OR (14.6 MEQ vs 28.1 MEQ, p<0.05) and during their hospital stay (106.4 MEQ vs 134.6 MEQ, p<0.05). DEX patients also had shorter PACU times (121.2 mins vs. 191.7 mins, p<0.05), earlier ambulation (121. mins vs 191.7 mins, p<0.05) and a trend towards shorter LOS (3.1 days vs 3.5 days). There were no adverse respiratory events in the DEX group.

Conclusion: The use of a standardized multidisciplinary DEX protocol for perioperative pain management in LGB patients reduces both perioperative and overall narcotic requirements. This allows for less perioperative sedation, shorter PACU times and earlier postoperative ambulation.

ABSTRACT FINAL ID: P76;

TITLE: Changes in Sexual Quality of Life after Gastric Bypass

AUTHORS/INSTITUTIONS: C. Hartman, S.F. Yeager, H. Kirchner, G.S. Gerhard, P.N. Benotti, C.D. Still, , Geisinger Medical Center, Danville, PA;

ABSTRACT BODY:

Background: Improvements in overall quality of life (QOL) after gastric bypass surgery (GBS) have been well studied. However, few studies examine changes in specific subgroups in QOL particularly changes in sexual habits and factors that influence it following weight reduction through GBS. Our retrospective study explores differences in sexual habits in patients who have undergone GBS.

Methods: Impact of Weight Questionnaires (IWQOL-Lite; Duke University Medical Center© 2000) were administered to 79 (19% female; 97.5% Caucasian) patients undergoing GBS at baseline and 8 months following GBS. Change in sexual QOL score was defined as Pre – Post measurement.

Change in sexual QOL score was analyzed using paired t-test. Change between pre and post surgery groups was performed using the 2-sample t-test. The change was summarized for the entire sample and by gender and age. Age was categorized as <50 vs. 50+ years based on the observed distribution.

Results: The average sexual QOL presurgery (50.6) improved significantly ($p < 0.0001$) to post surgery (78.3). The estimated change was 27.7 points with a 95% confidence interval of (20.9, 34.5). Interestingly, no significant differences were noted by gender or age.

Conclusion: These early results suggest significant increases in overall sexual QOL following GBS. Although, IWQOL-Lite was not specifically designed to measure sub-groups of QOL, an overall trend can be noted. This research contradicts current understanding about post surgery intimacy issues related to decreased sexual drive, body images issues and sagging skin.

ABSTRACT FINAL ID: P77;

TITLE: Post-Operative Nausea and Vomiting in High-Risk Bariatric Patients Undergoing Sleeve Gastrectomy

AUTHORS/INSTITUTIONS: R.H. Fouad, P. Gatmaitan, S.A. Brethauer, K. Cooper, P.R. Schauer, B. Chand, , Cleveland Clinic, Cleveland, OH;

ABSTRACT BODY:

Background: Laparoscopic Sleeve Gastrectomy (LSG) has a role as a first stage procedure in high risk bariatric patients. There are currently no studies that evaluate the incidence of post-operative nausea and vomiting (PONV) following LSG. The aim of this study is to determine the incidence of PONV in our LSG patients.

Methods: A retrospective review of our bariatric database was conducted to identify patients who underwent LSG from 7/05 to 9/07. Bougie size ranged from 30-60 Fr and all patients had intraoperative endoscopy. Patient demographics, comorbidities, complications and the incidence of PONV were recorded. Univariate analysis was performed to identify factors associated with PONV after LSG.

Results: 59 patients were included. The mean pre-operative BMI was 66.3 kg/m² (range 42-102). There were no peri-operative mortalities and the major complication rate was 8%. Mean f/u was 8 months. 34 patients (58%) reported some nausea and vomiting during their scheduled post-operative visits. 12 patients (20%) required re-admission for severe PONV and dehydration. These patients were admitted an average of 2 times each (range 1-5). Symptoms resolved within 12 weeks for 75% of these patients. All 12 had an investigation to rule out mechanical obstruction with EGD (7), radiographic study (7) or both. These studies detected one stricture and one obstruction in a patient who had LSG as a revisional procedure. None of the variables examined were predictive of severe PONV.

Conclusion: The incidence of severe PONV in our patient population was relatively high but this was self-limited and rarely associated with a mechanical obstruction. Early prophylactic anti-emetic therapy may be warranted in this group of patients.

ABSTRACT FINAL ID: P78;

TITLE: Early Jejunojejunostomy Obstructions Following Laparoscopic Gastric Bypass: Case Series and Treatment Algorithm

AUTHORS/INSTITUTIONS: C.M. Jensen, T. Tejirian, C. Lewis, A. Mehran, E. Dutson, Surgery, UCLA, Los Angeles, CA;

ABSTRACT BODY:

Background: Early jejunojejunostomy obstruction (JJO) is a known and often over-looked complication of laparoscopic roux-en-Y gastric bypass (LRYGB).

Our objective is to review our institution's experience with JJO after LRYGB and to provide a management algorithm.

Methods: Between 2003 and 2007, 1027 patients underwent LRYGB at our institution. Data including patient demographics, co-morbidities, intraoperative data, peri- and post-operative complications and outcomes were prospectively recorded and retrospectively reviewed.

Results: Early post-LRYGB JJO occurred in 10 (0.01%) patients. Compared with non-obstructed patients, there was no difference in comorbidities or intraoperative procedure.

Average time to presentation of JJO was 14 days (range 5 – 30). Abdominal pain was present in all patients, and all underwent CT to confirm the diagnosis. Three patients (30%) required urgent operative intervention. Decision for operative intervention was based on more severe abdominal pain, persistent nausea and vomiting, and elevated WBC. All operative interventions were performed laparoscopically.

In the nonoperative group, dietary noncompliance was the most common reason for JJO, followed by anastamotic edema. In contrast to the operative group, these patients demonstrated prompt resolution of abdominal pain, nausea and vomiting, and normalization of vital signs and laboratory values within 12 hours.

Conclusion: Early jejunojejunostomy after LRYGB obstruction can be managed non-operatively in a select group of patients. However, bariatric surgeons must maintain a low threshold for surgical re-intervention in cases where rapid recovery is not seen. A treatment algorithm is proposed.

ABSTRACT FINAL ID: P79;

TITLE: Preoperative Consummatory Behavior Assessment Survey Does Not Predict Postoperative Weight Loss Following Laparoscopic Gastric Bypass

AUTHORS/INSTITUTIONS: D.S. Tichansky, A.K. Madan, K.A. Khan, W.S. Orth, , University of Tennessee, Memphis, TN;

ABSTRACT BODY:

Background: Bariatric programs and surgeons continue to use tools to evaluate patients preoperatively in attempts to predict outcomes in terms of weight loss following laparoscopic Roux-en-Y gastric bypass (LRYGB). Many of these tools examine eating behaviors to determine if preoperative eating patterns or cravings will influence patients' compliance and their ability to lose weight. Herein, we study the effectiveness of a preoperative Consummatory Behavior Assessment Survey (CBAS) in predicting weight loss outcome after LRYGB.

Methods: 103 consecutive patients were enrolled by completing the pre-operative CBAS survey. This 8 question survey queries feelings of hunger, cravings, fullness, appetite, portion control, and snacking over multiple weeks. Percent excess body weight loss at a minimum of one year and maximum of three years (EBWL) was analyzed against the score of each section of the questionnaire and the total score of the questionnaire using Pearson's correlation coefficient test.

Results: Complete questionnaire results and weight loss data were available on 99 patients. No single test question score, nor the total test score, had a statistical correlation with EBWL (p greater than 0.05).

Conclusion: Preoperative consummatory behavior does not correlate with EBWL after LRYGB. Eating habits surveys should not be used as a tool to discriminate against patients who desire LRYGB.

ABSTRACT FINAL ID: P80;

TITLE: Resolution of Plantar Fasciitis after Weight Loss Surgery

AUTHORS/INSTITUTIONS: P. Gatmaitan, R.H. Fouad, A. Elhorr, T. Pitt, K. Cooper, S.A. Brethauer, B. Chand, P.R. Schauer, Bariatric and Metabolic Institute, Cleveland Clinic, Cleveland, OH;

ABSTRACT BODY:

Background: Plantar fasciitis (PF), an inflammatory condition of the plantar aponeurosis, is considered to be the most common cause of heel pain. A body mass index of $>30 \text{ kg/m}^2$ is strongly associated with this disorder. There is limited data on the effect of weight loss surgery on this condition.

Methods: Our bariatric database was queried for patients with diagnosis of PF identified from January 2004 to November 2007. Chart review and telephone interviews were conducted with the following data obtained: patient demographics, type and effect of surgery, length of follow-up, PF duration and treatment modalities used.

Results: 886 patients underwent bariatric surgery during the study period. 11 were found to have PF (1.24%). Mean age for this study group was 48.8 years (26-62 yrs) with a mean pre-operative BMI of 48.1 ± 5.9 and all were females. All except one underwent laparoscopic Roux-en-Y gastric bypass.

With a mean follow-up of 17.7 ± 6.7 months, the average BMI was 34.7 (24.4-45.3) with excess weight loss of $51.6\% \pm 19.7$. Prior to bariatric surgery, PF had been present for 4.8 ± 5.9 years. Pre-operatively, 100% took anti-inflammatory agents, 82% used orthotic devices, and 55% employed physical therapy. At the time of follow-up, none of the patients had experienced a postoperative episode of plantar fasciitis and all had discontinued their preoperative treatment.

Conclusion: Plantar fasciitis is an uncommon condition among patients undergoing bariatric surgery. For those patients affected, though, this painful condition resolves after successful surgical weight loss.

ABSTRACT FINAL ID: P81;

TITLE: The Impact of an Institutional Review Panel on Patient Selection. How Do Panel Decisions Affect Patient Selection?

AUTHORS/INSTITUTIONS: K.R. Dumon, S.E. Raper, D. Filter, N.N. Williams, , Bariatric Surgery Program, University of Pennsylvania School of Medicine, Philadelphia, PA;

ABSTRACT BODY:

Background: In order to identify high-risk patients, we developed a five-point graded screening tool to select bariatric surgery candidates for further review at a monthly multi-disciplinary institutional review board. The score is based on BMI, co-morbidities, performance status, pulmonary status and age. Patients with scores higher than 10 were presented to the board for further evaluation.

Methods: We analyzed 40 consecutive patients who were presented to the panel. The panel's team-members include surgeons, endocrinologists, cardiologists, nurse-practitioners, anesthesiologists and psychologists. Data collection included age, sex, BMI, co-morbidities, score results as well as the review board decisions regarding approval for surgery.

Results: The average BMI and weight of the patients presented to the board was 54.8 and 338 lb. The mean age was 57.5 years with 29/40 (72.5%) females. 90% of the patients had impaired pulmonary status, and 50% had limited mobility. The average screening score for patients presented was 12.25. Surgery was approved in 24/40 cases (60%), further workup was requested in 6/40 patients (15%) and in 10/40 (25%) surgery was denied. There were no statistical significant differences between the groups for weight, BMI, total score. Patients that were denied surgery had a statistically significant higher co-morbidity score (6.9 vs. 4.5) and a lower performance status (1.6 vs. 1.0). Also, patients that were denied surgery were statistically significant younger compared to the group approved for surgery (50.4 vs. 59.8).

Conclusion: The data suggest that the use of a graded screening tool allows the identification of high risk patients and that panel decisions seem to be based on underlying medical risks, reflected in a higher co-morbidity score, more than overall risk factors such as absolute weight, age and BMI.

ABSTRACT FINAL ID: P82;

TITLE: Single-Stage Gastric Bypass is Safe and Effective in the Super-Obese

AUTHORS/INSTITUTIONS: W.M. Bowling, F.N. Obeid, K. Kralovich, J.W. Wagner, J.D. Farhan, B. Danan, J.S. Fike, J.A. Durant, Trauma Services, Hurley Medical Center, Flint, MI;

ABSTRACT BODY:

Background: Super-obesity (BMI \geq 60 kg/m²) is recognized as a risk factor for morbidity and mortality in bariatric surgery. Thus, some surgeons recommend a restrictive procedure followed by a bypass after sufficient weight loss. We have reviewed our experience with single-stage bypass in the super-obese to determine its safety and efficacy.

Methods: After obtaining IRB approval, the Hurley Bariatric Database was searched for all patients undergoing gastric bypass, open or laparoscopic, between April 2000 and October 2007. Data were collected on BMI, co-morbidities, complications and weight loss. Categorical data were compared using χ^2 . Weight loss data were compared using Student's t test.

Results: There were 2467 patients who underwent gastric bypass of whom 399 were super-obese. Super-obese patients were more likely to have sleep apnea and asthma. There were no differences in hypertension or diabetes. The mortality rates were 0.75% in the super-obese and 0.34% in the obese (p=0.24). Super-obese patients were more likely to develop wound infections or seroma (24% v. 13% p<0.0001 and 39% v. 24% p<0.0001). There were no significant differences in the rates of re-admission, re-operation, DVT, PE, hernia or dehiscence. Weight loss was slower in the super-obese, but there was no difference by 3 years.

Conclusion: Single-stage gastric bypass is safe and effective in the super-obese. There is an increase in wound complications in the super-obese. This study is underpowered to detect differences in the rarer events. Larger studies or a meta-analysis are needed to better answer these questions.

ABSTRACT FINAL ID: P83;

TITLE: Preoperative Multidisciplinary Behavioral Modification Can Lead to Enhanced Weight Loss in Patients Undergoing Gastric Bypass.

AUTHORS/INSTITUTIONS: T. Conlee, B. Benedetto, W. Dunnican, C. Rosati, T. Singh, Surgery, Albany Medical Center, Albany, NY;

ABSTRACT BODY:

Background: The optimum amount of preop excess weight loss (EWL) prior to gastric bypass (GB) is unknown. Recent data has suggested that preoperative EWL is associated with higher postop success. We examine the impact of an intensive preop multidisciplinary behavioral modification program on EWL and postop success.

Methods: Retrospective review of patients who underwent GB over a one-year period. Patients underwent intensive multidisciplinary treatment prior to GB. Patients were required to demonstrate 10% EWL, unless contraindicated, prior to consideration for GB. Patients were then encouraged to continue behavioral modification. GB was performed only when further preop EWL was unattainable by non-surgical means. Patients were stratified by preop EWL and evaluated for OR times, length of stay (LOS), follow-up rates, complications and postop EWL.

Results: 105 patients (83% female) with a mean age of 47.3 years (range, 25-66) and mean initial BMI of 52 (range, 37-77) were reviewed. Mean preop EWL was 24.6% (range, 0-38.6%). Fifty-three percent attained 10-20% preop EWL and 20% achieved >20% preop EWL. EWL at 6 and 12 months postop correlated with preop EWL (Table 1). There were no significant differences in OR times, LOS or complications. We achieved 96.5% compliance with follow up.

Conclusion: An aggressive multidisciplinary approach to behavioral modification can lead to greater preop EWL than is generally described in the literature. This increased preop EWL appears to enhance postop EWL at 12 months. Consideration should be given to maximizing non-surgical EWL prior to GB. Further research into the optimal amount of preop EWL is warranted.

ABSTRACT FINAL ID: P84;

TITLE: The Impact of Laparoscopic Bariatric Surgery on Components of Metabolic Syndrome

AUTHORS/INSTITUTIONS: C. Bai, C. Nugent, H. Elariny, M. Afendy, A. Wheeler, A. Afendy, M. Garone, C. Quigley, P. Gopalakrishnan, A. Arsalla, O. Chan, Z.M. Younossi, , Translational Research Institute - Inova Health System, Falls Church, VA;

ABSTRACT BODY:

Background: Metabolic syndrome (MS) and Non-Alcoholic Fatty Liver Disease (NAFLD) are commonly found in morbidly obese patients undergoing bariatric surgery. The aim of this study is to assess the impact of bariatric surgery on the resolution of MS and NAFLD.

Methods: Two hundred and sixty three patients who underwent bariatric surgery and had at least one follow up were included in our study. Clinical and laboratory data were available.

Results: Of this cohort, 27.0% underwent malabsorptive surgery, 57.0% underwent restrictive surgery and 16.0% combination restrictive-malabsorptive surgery. The majority (98.5%) of the surgical procedures were performed laproscopically. Mean weight loss after surgery was 33.7 ± 20.1 kg after restrictive surgery (follow up period 298 ± 271 days), 39.4 ± 22.9 kg after malabsorptive surgery (follow-up period 306 ± 290 days) and 28.3 ± 14.1 kg after combination surgery (follow up period 281 ± 239 days). Regardless of the type of bariatric surgery, significant improvements were noted in DM (p-values from <0.0001 - 0.0005), MS (p-values from <0.0001 - 0.01), waist circumference (p-values <0.0001), BMI (p-values <0.0001), fasting serum triglycerides (p-values <0.0001 to 0.001), and fasting serum glucose (p-values <0.0001). Additionally, a significant improvement in AST/ALT ratio (p-value = 0.0002) was noted only in those with restrictive surgery. Multivariate analysis showed that patients who underwent a malabsorptive bariatric procedure experienced a significantly greater percent weight loss of excess body weight (PWLEBW) than patients who underwent a restrictive procedure (p-value = 0.0451). PWLEBW increased with longer post-operative follow-up (p-value < 0.0001).

Conclusion: Weight loss after bariatric surgery is associated with a significant improvement in MS and factors associated with NAFLD.

ABSTRACT FINAL ID: P86;

TITLE: Proximal Versus Distal Revisional Surgery for Weight Regain Following Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: D.E. Swartz, E. Mobley, E.L. Felix, , Advanced Bariatric Center, Fresno, CA;

ABSTRACT BODY:

Background: While revisional operations for weight regain are increasing, few studies compare outcomes of these secondary procedures. The aim of this study was to compare weight loss after revision of the pouch and gastrojejunostomy (proximal revision) to reduction of common channel length (distal revision).

Methods: We retrospectively reviewed consecutive patients undergoing revisional surgery for weight regain following Roux-en-Y gastric bypass (RYGB). Patients with a dilated pouch or stoma were offered proximal or distal revision while those with normal proximal anatomy were offered only distal revision. Mean BMI and %EWL at 12 mo post-RYGB, at time of revision and at follow-up were compared for each group.

Results: 21 patients underwent revision (distal n=12, proximal n=9). Mean pre-RYGB BMI was similar for each group. Mean follow-up after revision was 10 months. BMI for distal and proximal groups were: 12 mos (37.4 + 8.7 and 37.7 + 8.9, ns); at revision (41.5 + 8.4 and 43.1 + 6.5, ns) and at follow-up (32.8 + 5.6 and 36.2 + 6.9, ns). Mean %EWL for distal and proximal were: 12 mos (52.7 + 13.2 and 58.7 + 19.1, ns); at revision (36.8 + 9.6 and 41.1 + 10.0, ns) and at follow-up (65.2 + 13.4 and 62.7 + 9.0, ns).

Conclusion: Proximal and distal revisions both achieved excellent weight loss. Patients with a dilated pouch or stoma may be offered either procedure while those with normal proximal anatomy should be offered a distal revision. Continued follow-up will determine if the weight loss is maintained.

ABSTRACT FINAL ID: P87;

TITLE: Identification of Hiatal Hernia at Adjustable Gastric Band Placement – Comparison of Two Methods

AUTHORS/INSTITUTIONS: M.L. Brengman, G.L. Schroder, D. Elliott, , Richmond Surgical Group, Richmond, VA;

ABSTRACT BODY:

Background: Identification of hiatal hernias at placement of laparoscopic adjustable gastric band (LAGB) placement has become increasingly important. Failure to identify even small sliding hiatal hernias, can lead to inappropriately low band placement, increased incidence of slip, and intractable gastroesophageal reflux (GERD) symptoms despite appropriate adjustment. Various strategies have been employed to identify hiatal hernias. The goal of this study is to compare the visual appearance of the esophageal hiatus to the use of the intragastric balloon technique for identification of hiatal hernias at LAGB placement.

Methods: Consecutive patients from March 2007 to October 2007 were prospectively evaluated. At (LAGB) placement, the hiatus was assessed visually prior to beginning the dissection. The hiatus was either normal, “dimpled” (concavity with prominence of the crural edges, or frank hiatal hernia (presence of true intrathoracic extension). A Lap-Band sizing balloon was then used to assess the gastroesophageal junction. Relation to pre-operative GERD symptoms was also assessed.

Results: 205 consecutive patients were prospectively studied. 13 (6.0%) patients had true hiatal hernias. 108 (52.4%) patients had a “dimple” and 112 (54.6%) either had no resistance to balloon withdrawal (43) or resistance above the diaphragmatic opening(69). The sensitivity and specificity of visual inspection as compared to evaluation with the intragastric balloon for identification of hiatal hernia were 75.0% and 70.3% respectively. History of GERD symptoms and male gender did not correlate to findings of hiatal hernia.

Conclusion: Use of the intragastric balloon technique is more accurate in identifying hiatal hernias at LAGB placement.

ABSTRACT FINAL ID: P88;

TITLE: Staged Repair of Slipped Laparoscopic Adjustable Gastric Band

AUTHORS/INSTITUTIONS: C.W. Finnell, D.R. Ewing, H.J. Schmidt, A. Trivedi, Bariatric and Laparoscopic Surgery, Hackensack University Medical Center, Hackensack, NJ;

ABSTRACT BODY:

Background: Gastric slippage is a common complication that requires reoperation following the Lap-band procedure. Inflammation and adhesions distort the normal anatomy and can make Lap-band revision or replacement extremely difficult or impossible. The surgeon is left with the choice of removing the band, revising the band with less than ideal anatomy, or converting to an alternative bariatric operation.

Methods: We propose a fourth alternative that salvages the Lap-band and allows for the inflammatory process to subside. The technique involves unbuckling the lap band and reducing the herniated gastric wall. At second operation, around 8 weeks later, the band can be revised or replaced without the edema and inflammation found initially. The unbuckled band left in place preserves the posterior tract.

Results: We have opted for this technique in 2 patients thus far. The first one recently had the second operation, and we found very favorable anatomy. We opted to place a completely new band that easily passed through a well preserved posterior tract. The original port was used, further simplifying the procedure.

Conclusion: We think this technique can be a valuable option in patients who have band slippage with significantly inflamed gastric and perigastric tissues. The technique is especially useful in patients who refuse any bariatric procedure other than the Lap-Band.

ABSTRACT FINAL ID: P89;

TITLE: Lessons Learned After 100 Consecutive Laparoscopic Roux-en Y Gastric Bypasses Using the 25-mm OrVil Device and DST Series EEA

AUTHORS/INSTITUTIONS: J.J. Gonzalez, P.P. Lopez, K. Van Sickle, N.A. Patel, , University of Texas Health Science Center- San Antonio, San Antonio, TX;

ABSTRACT BODY:

Background: A circular stapled gastrojejunostomy (GJ) can be created during a laparoscopic Roux-en-Y gastric bypass (LRYGB) using either a trans-gastric or trans-oral approach. Until the advent of the 25-mm OrVil™, the trans-oral approach was primarily limited to a 21-mm anastomosis. The objective of this study is to define the learning curve of converting from a 25-mm trans-gastric GJ to a 25-mm trans-oral GJ using the OrVil™ Device.

Methods: The 1st 100 consecutive LRYGBs performed using the 25-mm OrVil™ Device were reviewed for major and minor morbidities related to the device itself. Intra-operative and peri-operative data were collected for all patients.

Results: The primary surgeon for all cases was fellowship trained in bariatric surgery with a 700 case experience using the trans-gastric approach. During the first 25 cases, there were a total of 4 major complications (5/25, 20%): 3 pouch disruptions, 1 case where the strings on the device broke, 1 GJ bleed requiring endoscopic hemostasis. During the next 75 cases, there was only one major complication (1/75, 1.3%): 1 case where the strings on the device broke. There were no leaks at the GJ and no re-operations. There were no wound infections noted at the stapler introduction site.

Conclusion: There is a significant learning curve associated with using the 25mm OrVil™ Device. During the 1st 25 procedures the major complication rate was 20% compared to 1.3% in the subsequent 75 cases($p = 0.003$). Intra-operative complications during the learning curve were not associated with post-operative complications. Surgeon experience may be a variable in this finding. The trans-oral approach does not increase the risk of wound infections.

ABSTRACT FINAL ID: P90;

TITLE: Non-Compliance with Prophylactic Post-Operative Ursodiol after Roux-en-Y Gastric Bypass (RYGB) Increases the Incidence of Symptomatic Cholelithiasis.

AUTHORS/INSTITUTIONS: B. Mohan, M. Jamal, D. Heitshusen, J. Liao, I. Samuel, Surgery, University of Iowa Hospitals and Clinics, Iowa City, IA;

ABSTRACT BODY:

Background: Rapid weight loss following gastric bypass surgery increases the incidence of post-operative cholelithiasis. We evaluated the efficacy of Ursodiol in preventing symptomatic cholelithiasis after RYGB.

Methods: We performed a retrospective review of our prospectively maintained database on all 388 patients that underwent a RYGB between March 2000 and December 2006. All patients without ultrasonographic or other evidence of gallstones were prescribed Ursodiol (300 mg TID) for 9 months post-operatively. Patients who did not have the minimum follow-up period of 9 months and those that had cholecystectomy before or during RYGB were excluded from the analysis. We compared the incidence of symptomatic cholelithiasis in patients that were compliant (Group A) or non-compliant (Group B) with Ursodiol prophylaxis. Statistical analysis was performed using Chi-square t-test, ANOVA and logistic regression.

Results: Out of 222 patients that met the inclusion criteria for our study, 198 (89%) fell into Group A while the remaining 24 were in Group B. Basic demographics of patients with symptomatic cholelithiasis were similar in Group A and B. This included mean age of the patients (36 vs 32 years), mean pre-operative BMI (56 vs 57), and BMI one year following surgery (35 in both groups). The incidence of patients that required cholecystectomy for symptomatic cholelithiasis in Group B (21%; 5/24) was almost five times greater than that in Group A (4.5%; 9/198) ($p < 0.002$; RR 4.58; 95% CI 0.055 - 0.6).

Conclusion: Non-compliance with prophylactic Ursodiol treatment after gastric bypass surgery leads to a near 5-fold increase in the incidence of symptomatic cholelithiasis.

ABSTRACT FINAL ID: P91;

TITLE: Reoperative Roux-en-Y Gastric Bypass (RYGBP) for Long-Term Failure after Vertical Banded Gastroplasty (VBG) for Morbid Obesity

AUTHORS/INSTITUTIONS: E.K. Chouillard, A.L. Fingerhut, , centre hospitalier, Poissy, FRANCE; P. Mognol, J. Marmuse, , Hopital BICHAT, PARIS, FRANCE;

ABSTRACT BODY:

Background: For many authors, vertical banded gastroplasty (VBG) has been the restrictive procedure of choice for patients with morbid obesity. However, the major drawback of this procedure is its 5-year failure rate of up to 40 % in some series. We review our experience in reoperative laparoscopic Roux-en-Y gastric bypass (RYGBP) in patients with failed VBG.

Methods: Patients who had reoperative laparoscopic RYGBP for failed VBG between April 2001 and March 2006 were eligible for the study. Failure was defined as (1) weight regain or insufficient weight loss, (2) severe weight loss, or (3) major eating difficulties.

Results: The primary VBG was performed openly in 27 patients and laparoscopically in 19 patients, respectively. All patients were reoperated laparoscopically. Mean BMI before conversion to RYGBP was 43 kg/m² (20-69). Conversion to laparotomy occurred in 6 patients (13 %).

Operative complications occurred in 9 patients (19.6 %), including splenectomy (2.2 %), transfusion (4.5 %), pneumonia (6.5 %), intestinal obstruction (6.5 %) or surgical site infection (6.5 %). Long-term complications were less frequent, and consisted mainly of intestinal obstruction (2.2 %) and incisional hernia (2.2 %). Follow-up was achieved in all patients (100%), with a mean period of 36 +/- 27 months. BMI decreased from 43.0 to 30.4 kg/m². All patients who had outlet stenosis or eating difficulties regained weight with mean BMI of 29.7 kg/m² (27.2-33.1).

Conclusion: Conversion from failed VBG to RYGBP is feasible and safe with a mortality and morbidity rates of 0 % and 19.6 %, respectively. The long-term results after a mean 3-year follow up are satisfactory in terms of effect on body weight and eating difficulties.

ABSTRACT FINAL ID: P93;

TITLE: Preventing Post-Operative Nausea and Vomiting Following Bariatric Surgery

AUTHORS/INSTITUTIONS: J.F. Barletta, D. Hoover, R.B. Mengel, T. Emery, R. Baker, , Spectrum Health, Grand Rapids, MI;

ABSTRACT BODY:

Background: Post-operative nausea and vomiting (PONV) is a troublesome complication following bariatric surgery. The benefit of intra-operative anti-emetic (AE) therapy has been previously reported but the preferred regimen is unknown. This study evaluated intra-operative AE drug use and identified the AE regimen associated with the lowest need for rescue AE therapy.

Methods: Consecutive patients, age ≥ 18 years, who underwent bariatric surgery were retrospectively identified. Patients were excluded if they received no intra-operative AE therapy. Data collected included demographics, intra-operative AE regimen, intra-operative fluids and the need for rescue AE therapy. A p-value $< .05$ determined statistical significance.

Results: There were 172 patients. Seven intra-operative AE regimens were identified. The need for rescue therapy was different between groups [metoclopramide (25%), ondansetron (40%), dexamethasone (17%), metoclopramide/ondansetron (20%), metoclopramide/dexamethasone (30%), ondansetron/dexamethasone (55%), metoclopramide/ondansetron/dexamethasone (10%); $p < .001$]. The need for rescue AE therapy was significantly lower with regimens that included metoclopramide versus those that did not [16% vs. 44%, $p < .001$]. In contrast, rescue therapy was similar with regimens that included ondansetron versus those that did not [22% vs. 25%, $p = .708$]. On univariate analysis, patients who required rescue AE therapy were less likely to receive intra-operative metoclopramide (54% vs. 83%, $p < .001$) and received fewer AE agents (1.9 ± 0.7 vs. 2.3 ± 0.8 , $p = .004$). Logistic regression identified lack of intra-operative metoclopramide as the only independent predictor for rescue AE therapy [OR(95% CI) = 4.1 (1.9 – 8.9); $p < .001$].

Conclusion: Intra-operative anti-emetic regimens that include metoclopramide will reduce the need for rescue AE therapy due to PONV.

ABSTRACT FINAL ID: P94;

TITLE: Sleeve Gastrectomy, Early Results

AUTHORS/INSTITUTIONS: M. Berry, P. Lamoza, P. Burdiles, C. Carvajal, F.L. Mario, L. Urrutia, H. Conoman, ,
Clinica Las Condes, Santiago, RM, CHILE;

ABSTRACT BODY:

Background: The "Sleeve Gastrectomy (SG)", is a restrictive technique for the resolution of the Severe or Morbid Obesity, which arises from a modification of the Biliopancreatic Diversion and Duodenal Switch, becoming a safer technique in high risk patients. Its indications were extended to patients with lesser BMI as a unique procedure. In this report a consecutive series of patients operated with this technique are analyzed from April 2006 until October 2007 in our institution.

Methods: 66 patients are analyzed. Surgical technique: Vertical gastrectomy using a 36 Fr calibration bougie. 4 cm proximal to pylorus and consecutively stapling upwards until the Angle of Hiss. In this way an approximately 90% gastrectomy was performed including gastric fundus. In all cases, manual reinforcement of stapling line was done. Demographics, Preop BMI, EWL%, Operating time, Peri-operative Complications, Morbidity and Mortality are analyzed.

Results: N=65 patients. Ratio M:F=1:2. Mean age 36.5(20-58) years. Preop BMI 39.9.±5. Operating Time 104,3 min. conversions 0%, complications 1.5% (1 leak), Strictures 0%, prolonged vomiting 0%. Mortality 0%. Follow up 6/12 months with EWL 40.7%/74.3%.

Conclusion: The early results of our series showed that the SG procedure is a safe, effective and reproducible operation for morbid and severe obesity. A longer follow up is necessary.

ABSTRACT FINAL ID: P95;

TITLE: Adjustable Gastric Banding (AGB) in Pre-Transplant Patients

AUTHORS/INSTITUTIONS: S. Karmali, J. Sweeney, O.H. Frazier, J.A. Goss, V. Sherman, , Baylor College of Medicine, Houston, TX;

ABSTRACT BODY:

Background: Morbid obesity remains a strong risk factor limiting cardiac and liver transplantation. Furthermore, studies have demonstrated that morbidly obese transplant recipients have nearly twice the 5-year mortality of normal-weight or overweight recipients, thereby preventing morbidly obese patients from undergoing a heart or liver transplant. We compare the use of AGB as a mode of weight loss for patients considering heart and liver transplant surgery.

Methods: This is a retrospective study of 2 heart transplant candidates (BMI 46.6 and 43.7) with severe non-ischemic cardiomyopathy who underwent a Ventricular Assist Device and Adjustable Gastric Band (VAD-BAND) placement concurrently. As well, we describe 2 patients with stable liver Childs A cirrhosis (BMI 52.3, and 44.6) who underwent LAGB in hopes of becoming liver transplant candidates.

Results: At 11 months follow-up one VAD-BAND patient had reduced his BMI from 46.6 to 34.2 and the other had reduced from 43.7 to 34.8 at 4 months post-op. Both patients have improved cardiac function and are now under consideration for cardiac transplantation. In terms of the liver transplant candidates, at 12 months one patient had decreased BMI from 52.3 to 46.5 and the other from 44.6 to 42.9 at 3 months. Neither have deteriorated in their liver function and therefore not altered their candidate status for liver transplant.

Conclusion: Concurrent placement of an AGB with a VAD is a safe and effective option for the morbidly obese patient with end-stage heart disease. As well, AGB can be undertaken in stable cirrhotic patients safely in anticipation of a future transplantation without altering the gastro-intestinal anatomy.

ABSTRACT FINAL ID: P96;

TITLE: Performance of Activities of Daily Living in Persons Seeking Bariatric Surgery

AUTHORS/INSTITUTIONS: A. Nagle, P.N. Smith-Ray, E.S. Hungness, K. Vaziri, J.B. Prystowsky, Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL;

ABSTRACT BODY:

Background: The specific challenges of performing activities of daily living (ADL) associated with morbid obesity are often overlooked. This study examines the relationship among ADL, health status (SF-36), BMI, and medical co-morbidities in patients presenting for bariatric surgery.

Methods: We analyzed demographics, co-morbidities, SF-36 health survey, and an ADL questionnaire of 95 patients from a prospective database. Four different BMI groups: BMI 35-44, BMI 45-54, BMI 55-64 and BMI ≥ 65 were analyzed. Logistic regression and ANOVA was used for analysis.

Results: Table.

Conclusion: This study highlights the unique challenges encountered by morbidly obese people. The inability to perform everyday tasks and the prevalence of poorer health was directly related to increasing BMI. Interestingly, the inability to perform these tasks did not correlate with the prevalence of medical co-morbidities. ADL should not be overlooked when considering patients for bariatric surgery.

ABSTRACT FINAL ID: P97;

TITLE: Laparoscopic Placement of Adjustable Gastric Band with Concomitant Sliding Hiatal Hernia or Giant Paraesophageal Hernia Repair

AUTHORS/INSTITUTIONS: R.S. Flint, A.H. Vernon, T.K. Nguyen, K.A. Clancy, A. Tavakkolizadeh, M.K. Robinson, D.B. Lautz, , Brigham and Women's Hospital: Harvard Medical School, Boston, MA;

ABSTRACT BODY:

Background: Hiatal hernia has been proposed as a possible factor in laparoscopic adjustable gastric band (LAGB) treatment failure. Posterior dissection of the hiatus at the time of band placement, however, raises the concern of an increased risk of perioperative complications or band slippage.

Methods: We reviewed our series of patients who had LAGB with concomitant repair of the hiatus. Patients who had such procedures between 4/1/2004 and 11/1/2007 were identified in our prospective database. Preoperative, and intraoperative variables, as well as postoperative results and complications were assessed.

Results: Of the 527 patients who underwent LAGB placement, 74 underwent repair of the hiatus. Sixty-five patients underwent concomitant sliding hiatal hernia repair (LAGB/HH1): 59 females, mean age 46.9 ± 10.2 years, mean preoperative BMI of 46.1 ± 6.4 . All patients underwent posterior repairs. Nine patients underwent concomitant giant paraesophageal hernia repair (LAGB/PH)(8 type III and 1 type IV): 9 females, mean age of 49.5 ± 8.8 years, with preoperative BMI of 48.0 ± 7.5 . Mean operative time (\pm S.D) was 126 ± 39 minutes (LAGB/HH1) and 166.4 ± 74 minutes (LAGB/PH). There were no reoperations, readmissions, major complications or band slippage noted with mean follow-up of 9.7 ± 7.9 months (LAGB/HH1) and 6 ± 4.5 months (LAGB/PH).

Conclusion: This series suggests that the hiatal dissection necessary for concomitant hiatal hernia repair does not increase the risk of perioperative complications or early postoperative LAGB slippage. Even in cases of giant paraesophageal hernias, concomitant repair and LAGB placement can be performed safely with low early complication rates.

ABSTRACT FINAL ID: P98;

TITLE: Toradol-Associated Post-Operative Hemorrhage Following Laparoscopic Gastric Bypass (LRYGBP)

AUTHORS/INSTITUTIONS: E.R. Valladares, C. Leyva, J.L. Sosa, L.M. Szekely-Dingfelder, N. Rubio, G. Velazquez, J.E. Calero, H. Pallavicini, , Palmetto General Hospital-Bariatric Surgery, Baltimore, MD;

ABSTRACT BODY:

Background: Toradol has been used for postoperative pain control without significant post operative reported bleeding risks. Toradol was instituted at our facility in a bariatric protocol for LRYGBP.

Methods: A retrospective review of all patients receiving toradol identified eight(8)patients, who developed early postoperative hemorrhage after LRYGBP. All patients underwent transected LRYGBP with combination linear staple and hand sewn gastrojejunostomy and linear stapled jejunojunostomy and placement of a Jackson-Pratt (JP) drain. All patients received lovenox for VTE prophylaxis.

Results: From July 5 2006 to March 02 2007 a total of 185 patients underwent LRYGBP included in a toradol protocol. This was compared this to a similar group before and after the protocol. A total of 8(4.3%)patients, in the Toradol group, developed bleeding. Seven(7)of the eight(8) patients received toradol; one patient did not secondary to contraindication of asthmatic co-morbidity. There were no bleeding episodes in the non-toradol groups.

The clinical presentations of hemorrhages one (1) bright red blood per rectum, one (1) melena, and Six (6) hypotension; all (8) patients had tachycardia.

All patient were managed non-operatively. Six(6) of the eight(8) patients required blood transfusion.

The sites of hemorrhage were located intra-abdominally, six (6); either at the staple line or mesenteric bleeding identified by increased bloody output through the JP drain and two (2) were within gastrointestinal (GI)tract.

Conclusion: A statistically significant increase in post-operative bleeding in 185 patients with the exception of one patient who did not receive Toradol. After elimination of toradol we have not experienced any further post operative bleeding in our LRYGBP;this was statistically significant using chi square analysis to a P-value less than .01 .

ABSTRACT FINAL ID: P99;

TITLE: Robotic Roux-en-Y Gastric Bypass: Early Experience

AUTHORS/INSTITUTIONS: J.R. Romanelli, L.A. Mark, J.N. Kuhn, Surgery, Baystate Medical Center, Tufts University School of Medicine, Springfield, MA;

ABSTRACT BODY:

Background: Laparoscopic Roux-en-Y Gastric Bypass has emerged as the predominant weight loss operation over the last decade. Given that robotic surgery can facilitate laparoscopic suturing due to articulated instrumentation, we began using the robot to perform gastric bypass. Data suggests that sutured gastrojejunostomy has a lower stricture rate than stapled anastomoses, and as such we expected to see a difference in outcomes.

Methods: Data were collected prospectively using our bariatric and robotic surgery databases, and were reviewed retrospectively.

Results: 29 patients underwent robotic Roux-en-Y gastric bypass. Mean age was 39 and mean preoperative BMI was 48. Median follow-up was 6 months (range, 1-18). Mean robot docking time was 33 minutes. Mean robotic surgical time was 175 minutes (range 107-344). Median length of stay was 3 days. 3 month, 6 month, and 12 month %EBW were 37.8, 48.3, and 63.6% respectively. All procedures were completed robotically. Two patients suffered complications that required reoperations: one developed a Richter's hernia in one of the robotic port site incisions which required reoperation three weeks postoperatively; the other developed bleeding from the jejunojejunostomy that led to obstruction of the Roux limb and subsequent leak at the jejunostomy, requiring reoperation postoperative day #1. No patients have suffered from strictures of the gastrojejunostomy.

Conclusion: Robotic Roux-en-Y gastric bypass is a safe and effective procedure with comparable weight loss outcomes and complication rates to standard laparoscopic gastric bypass. The advantage of facilitated suturing makes a sutured gastrojejunostomy more feasible and may lower the stricture rate.

ABSTRACT FINAL ID: P100;

TITLE: Single-Center Bariatric Surgery Experience with an Optical Trocar in an Uninsufflated Abdomen: 6-year Experience and Critical Review of the Literature

AUTHORS/INSTITUTIONS: N. Sabeti, General Surgery, Tufts New England Medical Center, Boston, MA; M. Tarnoff, S.A. Shikora, J. Kim, , Tufts New England Medical Center, Boston, MA;

ABSTRACT BODY:

Background: Background: The Visiport is a bladed optical trocar for peritoneal entry. We use this device as our primary method of entry and insufflation in bariatric surgery and provide an overview of our experience and a literature review.

Methods: Clinical methods: From 7/30/01 to 7/4/07, laparoscopic access for all bariatric surgery was gained using the 5-12 mm Visiport without prior insufflation. Three attendings and six fellows used the device for 1942 cases, including 1,466 laparoscopic gastric bypass (LGBP) and 476 laparoscopic adjustable band (LAGB). All LAGB were off-midline insertions while LGBP entailed midline placement. Literature methods: In May 2007, the MEDLINE database from 1950 to 2007 was searched for trials employing optical trocars as primary and secondary means of peritoneal access. The key words used were "optical trocars," "Visiport," "Optiview," "trocar injury," and "uninsufflated abdomen." Relevant bibliographies were also searched.

Results: Clinical results: The average time from incision to entry was under one minute. Three retroperitoneal injuries occurred in our series (0.15%). Two required conversion to laparotomy and vascular repair, one was managed laparoscopically. No postoperative sequela resulted and all injuries occurred with placement of the device off the midline. Literature results: 17 studies analyzing optical trocars as either primary or secondary means of access were found. Vascular and visceral complications occurred in 0.12% , 0.13%, respectively.

Conclusion: Conclusion: Use of the Visiport in the midline provides effective access in the morbidly obese. Our literature review validates that optical trocars can be safely used as either a primary or secondary means of peritoneal entry.

ABSTRACT FINAL ID: P101;

TITLE: Anxiety and Depression Do Not Predict Weight Loss After Laparoscopic Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: K.A. Khan, A.K. Madan, D.S. Tichansky, M. Coday, Surgery, University of Tennessee Health Science Center, Memphis, TN;

ABSTRACT BODY:

Background: Psychological issues are not uncommon in bariatric surgery patients. Whether these issues predict weight loss after bariatric surgery is still being investigated. We hypothesized that anxiety and depression would not predict loss after laparoscopic Roux-en-Y gastric bypass (LRYGB).

Methods: Consecutive LRYGB patients from 12/2002 up to 6/2003 were prospectively evaluated for anxiety and depression using the Beck Anxiety Inventory (BAI) and the Beck Depression Inventory (BDI). Percentage of excess body weight loss (%EBWL) was measured at a minimum of 1 year. Two-tailed Mann Whitney, non-parametric ANOVA, and Pearson's correlations were utilized as appropriate.

Results: There were 104 patients with 97 patients that had at least a one year follow-up. The average %EBWL was 72%. The average BAI score was 16.5. The average BDI score was 19.8. The BAI scores and BDI scores correlated well with each other ($r = 0.58$, $p < 0.0001$). There were 88 (91%) patients that were considered to have "successful" weight loss ($\%EBWL > 50\%$). There was no difference between successful and unsuccessful patients in terms of BAI score ($p = 0.98$) or BDI ($p = 0.85$). Severity of anxiety and depression had no effect on the %EBWL (BAI: $p = 0.86$, BDI: $p = 0.39$). There was no correlation between %EBWL and BDI score ($p = 0.95$) or BAI score ($p = 0.62$).

Conclusion: BAI and BDI do not help in predicting weight loss after LRYGB. Neither BDI nor BAI should be utilized as a screening tool for denial of LRYGB.

ABSTRACT FINAL ID: P102;

TITLE: High Incidence of Bleeding Complications with Preoperative Administration of Enoxaparine for Venous Thromboembolism Prevention in Bariatric Patients

AUTHORS/INSTITUTIONS: A. Keidar, Surgery, Hadassah Medical Center, Jerusalem, ISRAEL;

ABSTRACT BODY:

Background: Venous Thromboembolic (VTE) events remain the most common reason of mortality after bariatric surgery. Prophylaxis regimens include pharmacologic anticoagulation, but optimal timing and dosing are not known, and the major drawback of this treatment is bleeding. We reviewed our experience with two different regimens.

Methods: The data was collected prospectively after the IRB approval was obtained. The data were reviewed and analysed retrospectively. Between January 2006 and October 2007, 118 patients underwent laparoscopic bariatric operations in our department. 103 of them received pharmacologic prophylaxis with Enoxaparine given in a 0.5 mg/kg dose, by two different regimens. All were treated with sequential compression devices and early ambulation. Four patients underwent Duodenal Switch, 78 Gastric Bypass, 10 Sleeve Gastrectomy, and 11 Gastric Banding. History of previous VTE was present in three. The mean BMI was 45 (35-75). The incidence of bleeding was compared between two groups by likelihood ratio

Results: 75 consecutive patients received enoxaparine once daily started 1-3 hours before the operation, in 28 of them the Anti factor X activity was obtained. There were six bleeding events (8%), and this regimen was discontinued. In all the following patients (n=28) the enoxaparine was started 24 hours after the operation, and none bled (0%). There was a statistically significant difference in the incidence of bleeding between two groups ($p < 0.05$). No known VTE events were encountered.

Conclusion: The regimen of VTE prophylaxis with enoxaparine at 0.5 mg/kg started preoperatively carries high risk of bleeding complications. The appropriate regimen for VTE prophylaxis in bariatric patients is still unknown.

ABSTRACT FINAL ID: P103;

TITLE: Endoluminal Tissue Plication with Tissue-Anchors as a Treatment for Dilated Gastrojejunostomy and Gastric Pouch after Gastric Bypass: Early Clinical Experience

AUTHORS/INSTITUTIONS: D.M. Herron, K.M. Miller, A.A. Sabnis, Surgery, Mount Sinai School of Medicine, New York, NY; D.B. Lautz, C.C. Thompson, , Brigham & Women's Hospital, Boston, MA; M. Bessler, P.D. Stevens, , New York Presbyterian Hospital/Columbia, New York, NY; L. Swanstrom, , Legacy Health System, Portland, OR;

ABSTRACT BODY:

Background: Endoluminal tissue apposition techniques have shown promise in the treatment of dilated gastrojejunostomy (GJ) and gastric pouch after Roux-en-Y gastric bypass (RNYGB) surgery. We report our early clinical experience with this approach.

Methods: As part of an IRB-approved multicenter pilot study, 10 RNYGB patients with dilated GJ and/or gastric pouch were identified. All had experienced successful postoperative weight loss (>50% EBW) but subsequently regained $\geq 15\%$ of lost weight. Patients underwent upper endoscopy to document GJ diameter ≥ 20 mm. Under general endotracheal anesthesia, the gastric pouch was accessed using the USGI Transport® device. Expandable anchors were placed circumferentially to plicate tissue around the GJ to reduce diameter. Additional plications were performed in the pouch wall if possible to decrease pouch volume. GJ and pouch sizes were measured before and after the procedure. Contrast swallow was obtained to assess post-procedure anatomy. Post-procedure weight loss was measured at 3 weeks and 3 months. Follow-up endoscopy was performed to assess gastric healing and size.

Results: The gastric pouch was successfully accessed and anchor plication performed in 8 of the 10 patients (80%). In the success group (n=8), a mean of 4 ± 2.3 (SD) anchors were placed. GJ diameter was reduced from a mean of 28 ± 10.7 mm pre-procedure to 13 ± 6.2 mm post-procedure (54% reduction). Mean weight loss in the success group was 5.8 ± 2.8 kg at 3 weeks and 9.7 ± 4.8 kgs at 3 months post-procedure. In the 2 patients with no anchors placed mean weight increased by 3.9 kg at 3 months. No major complications occurred. Minor complications included sore throat.

Conclusion: Endoluminal tissue plication is a feasible treatment method for dilated GJ and gastric pouch. Further refinement of instruments and technique as well as long-term followup will be necessary.

ABSTRACT FINAL ID: P104;

TITLE: Endoscopic Management of Small Bowel Obstruction after Laparoscopic Gastric Bypass: A Case Report

AUTHORS/INSTITUTIONS: R.A. Karras, A.A. Bashir, K. Singh, , St. Agnes Hospital, Baltimore, MD;

ABSTRACT BODY:

Background: Morbid obesity will soon become the most common cause of preventable death in the United States. Laparoscopic gastric bypass has improved quality of life and reduced the morbidity and mortality associated with obesity. Complications of laparoscopic gastric bypass include: anastomotic stenosis, hernia, leaks, infection, bleeding, thromboembolic disorders and marginal ulcer. We present a case of intra-luminal postoperative bleeding from the gastrojejunal anastomosis, resulting in clot and subsequent obstruction.

Methods: An eighteen year old female with a BMI of 42, hypertension and diet controlled diabetes mellitus underwent a laparoscopic Roux-en-Y retrocolic, retrogastric (fifty cm. Roux limb) gastric bypass. Post-operative day one the patient developed nausea, vomiting and increasing abdominal pain.

Results: A CT demonstrated intra-luminal clot at the jejunojejunostomy site with distention of the distal gastric remnant. The patient was taken to the operating room and after an unsuccessful attempt with a 32 Fr. gastroscope, a pediatric colonoscope was utilized. The colonoscope was negotiated into both the biliopancreatic (confirmed by the presence of bile) and distal common channel. Pulse irrigation resulted in resolution of obstructing clot from the Roux limb. Postoperatively bowel function returned, abdominal pain resolved and the patient progressed without complication, and was subsequently discharged.

Conclusion: Small bowel obstruction after Roux en Y gastric bypass can be multifactorial, such as internal hernias and adhesions. Intraluminal obstruction caused by a blood clot from staple line bleeding is rare. Successful intervention requires realization of a bowel obstruction by a possible intraluminal clot. Timely endoscopic intervention and presence of a short limb bypass are a necessary prerequisite for a successful outcome.

ABSTRACT FINAL ID: P105;

TITLE: Silastic Ring Vertical Gastric Bypass. A Cohort Study with 83% Five Years Followup.

AUTHORS/INSTITUTIONS: A. Salinas, E. Santiago, W. Garcia, Q. Ferro, M. Antor, , Hospital de Clinicas Caracas, Caracas, Distrito Capital, VENEZUELA;

ABSTRACT BODY:

Background: Silastic Ring Vertical Gastric Bypass (SRVGB) is our standard operation for the morbid obese patients. We present the results of a five year follow up in a cohort of patients who had SRVGB in 2001. The stomach is divided vertically and a jejunal limb is brought up, interposed between the transected pouch and the bypassed stomach. A silastic ring is placed above the gastrojejunostomy.

Methods: The records of all the 160 consecutive patients who had SRVGBP from January to December 2001 were reviewed. There were 143 virgin open cases, 14 revisions from restrictive procedures and 3 laparoscopic cases. Follow up at five years was at office visits and some patients were contacted by phone or email.

Results: There were 121 females and 39 males with a mean age of 33.15 years, mean % IBW of 195.7, mean BMI of 44.6 Kg/m² and mean hospital stay of 2.3 days. There was 1(0.6%) death from pulmonary embolous. Early complications were 3(1.87%) UGI bleedings, 4 (2.5%) gastric leaks, 2(1.36%) from virgin cases and 2 (14.29%) from revision cases. Late complications included: 32 (20%) with incisional hernias, 20 (12.5%) with anemia, 4 (2.5%) gastrojejunal strictures, 2(1.25%) intestinal obstructions and 2 (1.25%) silastic ring surgical removals. 134 (83%) were available for five years follow up. The mean BMI in this group was 27 kg/m² with 83% EWL.

Conclusion: SRVGB has similar complications as other modifications of the gastric bypass. The five year weight loss maintenance in this study is higher than other Bariatric operation.

ABSTRACT FINAL ID: P106;

TITLE: Laparoscopic Sleeve Gastrectomy in the Super Morbidly Obese is Effective Treatment for Diabetes Mellitus and Obstructive Sleep Apnea

AUTHORS/INSTITUTIONS: A.A. Wheeler, M. Morales, N. Fearing, J.S. Scott, R. de la Torre, A. Ramaswamy, Department of Surgery, University of Missouri-Columbia, Columbia, MO;

ABSTRACT BODY:

Background: Our objective is to describe the use of laparoscopic sleeve gastrectomy in the super morbidly obese as a method of treating diabetes mellitus and obstructive sleep apnea.

Methods: A retrospective analysis was conducted of all patients at a University teaching hospital who had undergone laparoscopic sleeve gastrectomy for super morbid obesity by one of three surgeons between February 2006 and October 2007. Data collected included preoperative and postoperative weight and BMI, operative time, comorbidities present preoperatively and at subsequent follow-up and all complications.

Results: At median follow-up of 102 days, a total of 26 patients were identified who had undergone laparoscopic sleeve gastrectomy. Average preoperative BMI was 65.7 ± 7.8 with a decrease of 15 ± 7.8 . Average operative time was 89.5 ± 28.8 . Median hospital stay was 3 days. Preoperatively, diabetes mellitus, obstructive sleep apnea, hypertension, and hypercholesterolemia were present in 13, 20, 17, and 11 patients, respectively. There was a statistically significant decrease in the incidence of diabetes mellitus (13 versus 5, $p=0.02$) and obstructive sleep apnea (20 versus 12, $p=0.02$), but not hypertension or hypercholesterolemia. 4 patients suffered major complications including two patients with gastric leak, one patient with gastric stricture, and one patient with an intra abdominal abscess.

Conclusion: Laparoscopic sleeve gastrectomy is a reasonable method for surgical treatment of super morbid obesity with associated diabetes mellitus and obstructive sleep apnea. The surgery is not without complications and these patients must be closely monitored as in any other weight reduction surgery.

ABSTRACT FINAL ID: P109;

TITLE: Jejunal Erosion in Laparoscopic Adjustable Gastric Banding

AUTHORS/INSTITUTIONS: Y. Mahtemework, A.C. Geiss, C. Powers, M. Howard, D.M. Hamilton, J. Warman, N.V. Kern, Laparoscopy Surgery Center, Syosset Hospital, North Shore-Long Island Jewish Health System, NY, Syosset, NY;

ABSTRACT BODY:

Background: Obesity has reached epidemic proportion in developed nations. Laparoscopic adjustable gastric banding (LAGB) has become one of the most common surgical procedures. While the overall mortality is low, significant and unique complications following LAGB do occur and most commonly include band slippage, esophageal dilation or pouch enlargement, and gastric erosion of the device.

Case Report: A 57-year-old male with a body mass index of 42 underwent uncomplicated LAGB insertion for treatment of his morbid obesity. Over three years of continuing follow-up, the patient lost 100 lbs. Forty months following his surgical procedure, patient developed an upper gastrointestinal bleed with gastric erosion demonstrated during upper endoscopy.

Laparoscopic removal of the band revealed the presence of a second area of erosion. A segment of connective tubing was found have also entered into a loop of jejunum with a resultant localized phlegmon. Small bowel resection with a primary anastomosis was performed.

Methods: -

Results: -

Conclusion: Erosive complications with adjustable gastric bands are well known, but poorly understood entities. Gastric erosions of the device are uncommon, though widely understood to be a risk of the device and procedure. Additionally, case reports have been published pertaining to erosion of the ends of the connective tubing into hollow viscera in cases where the port has been removed.

This patient represents the first presented instance where a second area of injury or erosion has been found within an intact LAGB system.

While removal of the device laparoscopically in cases of gastric erosion is typically feasible, care must now be taken to fully explore the abdomen and associated viscera. This concept should be emphasized as interest continues to grow in dealing with this pathology via an endoluminal approach.

ABSTRACT FINAL ID: P110;

TITLE: Gastric Bypass Surgery in the Management of Diabetes: Factors Predictive for Complete Resolution

AUTHORS/INSTITUTIONS: J. Lyn-Sue, M. Schweitzer, K.E. Steele, A. Lidor, L. Eaton, T. Magnuson, , Johns Hopkins University School of Medicine, Baltimore, MD;

ABSTRACT BODY:

Background: Gastric bypass (GBP) surgery has a significant impact on patients with type 2 diabetes (DM). It is unclear, however, why some patients achieve full resolution of their DM post-op, while others continue to require anti-diabetic medications.

Few studies are available that address predictive factors for DM resolution or correlate weight loss to medication reduction.

Methods: 649 consecutive patients undergoing gastric bypass surgery were reviewed. Weight loss was calculated as percent excess weight loss (EWL). DM was determined by the use of anti-DM medications pre-op and resolution defined as termination of those medications.

Results: DM was noted in 185 patients undergoing GBP (28%). Complete follow up was available at one year post-op in 165 (89%). Overall, DM patients were significantly older (45yo vs. 42yo), had higher initial BMI's (55.9 vs. 53.1), and had inferior EWL at one year (55% vs. 63%) compared to non-DM patients (all $p < .05$). Complete resolution of DM was achieved by one year post-op in 121 patients (74%). Demographic factors such as race, gender, age, BMI, or other coexistent comorbidities were similar between the DM resolution and non-resolution groups.. The use of insulin pre-op, however, was significantly higher in the non-resolution group (33%) compared to those with complete resolution (17%). Interestingly, excess weight loss at one year was the same for both groups (55%).

Conclusion: Diabetic patients undergoing GBP tend to be older, heavier, and lose less weight compared to those without DM. The use of insulin to treat DM pre-op may be a marker for disease severity and was the only factor identified that predicted nonresolution of DM . The amount of weight loss achieved after GBP does not appear to be a determining factor in the resolution of DM.

ABSTRACT FINAL ID: P111;

TITLE: Laparoscopic Roux-en-Y Gastric Bypass as a Preoperative Intervention for Liver Transplantation.

AUTHORS/INSTITUTIONS: L.R. Martin Hawver, D.R. Fischer, A.M. Erisman, Surgery: GI Endocrine Surgery, University of Cincinnati, Cincinnati, OH;

ABSTRACT BODY:

Background: Laparoscopic Roux-En-Y gastric bypass has become the standard of care for weight loss surgery.

Methods: In this case analysis on the individual level, we explore the techniques and resultant methods of utilizing the laparoscopic approach to gastric bypass in the care of the morbidly obese patient with liver failure. Limitations in the success of laparoscopic weight loss surgery as a preoperative intervention for hepatic transplantation are described with a review of the current literature.

Results: The case being presented is of a 43 yo male with liver cirrhosis, ascites, splenomegaly, sarcoidosis, diabetes, obstructive sleep apnea and anticardiolipin antibody with a history of deep venous thrombosis. (BMI 52.9 preop, current (7 months post-op) 40.65, -94 lbs.) EBW loss of 40%. His pre-transplantation evaluation continues as he loses weight.

Conclusion: Our experiences with weight loss surgery in those with severe medical problems at a large referral hospital will be discussed as well as our laparoscopic technique.

ABSTRACT FINAL ID: P112;

TITLE: NIPPV Immediately Following Extubation Improves Lung Mechanics in Bariatric Surgery Patients.

AUTHORS/INSTITUTIONS: G. Malhotra, P. Neligan, , Department of Anesthesia and Critical Care at the University of Pennsylvania, Philadelphia, PA;

ABSTRACT BODY:

Background: To determine whether immediate post extubation NIPPV (non invasive positive pressure ventilation) improves postoperative pulmonary function 24 hours after surgery compared with NIPPV started in the recovery room in bariatric surgery patients.

Methods: 40 patients undergoing laparoscopic gastric bypass surgery, with known obstructive sleep apnea, were randomly assigned to immediate (IG) or delayed (standard group SG) postoperative NIPPV. Anesthesia and postoperative care was standardized. The IG were placed on NIPPV immediately following extubation and this was continued for 60 minutes. SG received CPAP one hour following arrival in PACU. Both groups received CPAP for 8-12 hours overnight.

Results: All patients had a significant reduction in spirometric variables one hour following surgery. For FEV1 the SG group had a 57% mean reduction in versus -24% in IG ($p<0.0001$); FVC SG -53% versus IG -24.5% ($p<0.0001$); PEFr SG -63% versus IG -36% ($p<0.0001$).

IG patients continued to have superior lung mechanics at 24 hours, although there was some recovery of pulmonary function in the SG; spirometry values in the IG were unchanged ($p<0.5$) from 1 hour post op.

FEV1 day 1 from baseline SG -46% versus IG -26% ($p=0.0004$), FVC day 1 SG -44% versus IG -23% ($p=0.0005$), PEFr day 1 -44% versus -24% ($p<0.002$). Patients in the intervention group had significantly greater SpO₂ both 1 hour post op ($p<0.05$) and 1 day post op ($p<0.05$)

Conclusion: Immediate postextubation NIPPV significantly improves lung mechanics and SpO₂ one hour and one day following surgery versus NIPPV started in the recovery room.

ABSTRACT FINAL ID: P113;

TITLE: Laparoscopic Sleeve Gastrectomy: An Alternative Approach for Failed Laparoscopic Adjustable Gastric Banding in the Treatment of Morbid Obesity

AUTHORS/INSTITUTIONS: E. McBean, S. Szomstein, R. Rosenthal, , Cleveland Clinic Florida, Weston, FL;

ABSTRACT BODY:

Background: Laparoscopic sleeve gastrectomy (LSG) has traditionally been used as the first of a two-stage bariatric procedure. Recently, LSG is being utilized as a primary procedure for morbid obesity with good short-term results. The aim of this study was to investigate the effectiveness of LSG as a revisional procedure for patients with unsatisfactory outcomes after laparoscopic adjustable gastric band (LAGB).

Methods: A retrospective review of a prospectively maintained database was performed. Data was reviewed for all patients undergoing revision from LAGB to LSG between May 2005 and November 2006. Data collected included patient demographics, indication for revision, operative time, length of stay, postoperative complications, and degree of weight reduction.

Results: Eleven patients (two males and nine females) had revisional surgery converting a LAGB to a LSG. The indication was poor weight loss or weight regain in 9 patients (81.8%) while 2 (18.2%) had band slippage and symptoms of gastroesophageal reflux. Mean pre-operative weight and body mass index (BMI) were 216.4 (range, 181-275) lbs and 36.6 (range, 29.7-45.8) kg/m², respectively. Mean weight loss at 2 and 6 months post-operatively was 21.8lbs and 47.8lbs, respectively. Mean % excess weight loss was 25.8% and 56.4% at 2 and 6 months, respectively. Mean % excess BMI loss was 29.6% and 63.1% at 2 and 6 months, respectively. There was one major complication (leak) and no mortality.

Conclusion: LSG can be performed safely and provides acceptable weight loss after previously failed LAGB.

ABSTRACT FINAL ID: P115;

TITLE: The Effect of Gastric Bypass on SSRI Pharmacokinetics and Pharmacodynamics

AUTHORS/INSTITUTIONS: G.G. Hamad, G.M. Kozak, Surgery, University of Pittsburgh, Pittsburgh, PA; K.L. Wisner, J.M. Perel, , Western Psychiatric Institute & Clinic , Pittsburgh, PA;

ABSTRACT BODY:

Background: The morbidly obese are at high risk for major depressive disorder (MDD), which is most commonly treated with serotonin-selective reuptake inhibitors (SSRI). We hypothesized that Roux-en-Y gastric bypass (RYGBP) reduces the absorption of SSRI, leading to exacerbation of depressive symptoms.

Methods: The effect of RYGBP on the pharmacokinetics and pharmacodynamics of SSRI was studied. A 48 year-old female (BMI 46) who was treated with sertraline 100 mg daily for MDD had serial blood samples drawn for sertraline levels for pharmacokinetic and pharmacodynamic studies. The pharmacokinetic parameters determined were: maximum concentration (C_{MAX}) and time to C_{MAX} (T_{MAX}). The pharmacodynamic studies consisted of the platelet membrane serotonin reuptake assay. These measures were repeated at 1 month following RYGBP. The SIGH-ADS (Structured Interview Guide for the Hamilton Depression Rating Scale— Atypical Depression Symptom Version) was used to measure depressive symptom level and to assess clinical response.

Results: The preoperative trough level of sertraline was 17.5 ng/mL. C_{MAX} was 41.6 ng/mL at T_{MAX} 300 min after dose. At 1 month postoperatively, the patient weighed 221.5 lbs (24% EWL). The 1 month trough sertraline level was 11.1 ng/mL. The 1 month C_{MAX} was 14.4 at T_{max} 240 min after dose. The patient also had exacerbation of MDD at 1 month following surgery.

Conclusion: Following RYGBP, sertraline absorption was significantly decreased compared to the pre-operative value, leading to exacerbation of depressive symptoms. Alternate formulations of sertraline may improve bioavailability. Further studies are needed to determine whether optimizing control of MDD with SSRI will improve weight loss outcomes and quality of life, thereby reducing the potential for weight regain.

ABSTRACT FINAL ID: P116;

TITLE: Impact of Insurance Mandated Weight Loss Before Bariatric Surgery

AUTHORS/INSTITUTIONS: B. Williams, W. Melvin, A. Torquati, W.O. Richards, , Vanderbilt University, Nashville, TN;

ABSTRACT BODY:

Background: In April 2006, BlueCross of Tennessee instituted new requirements for bariatric surgery approval. Previously, 6 months of medically supervised weight loss was required, but the new policy mandated a 10% weight loss before surgery. We hypothesized that this change would substantially reduce the percentage of patients obtaining approval for surgery.

Methods: We retrospectively analyzed 311 patients presenting for bariatric surgery between May 2003 and April 2007. Patients were grouped according to their insurance approval requirements: prior to implementation of the weight loss requirement (PRE group) and after (POST group).

Results: A total of 81 of the 311 (26.0%) patients ultimately had bariatric surgery: 42 of the PRE group, and 39 of the POST group. A significantly higher percentage of PRE patients achieved insurance approval and went on to surgery: 38.8 vs 17.9% ($p < 0.001$). The operations performed included 52 laparoscopic Roux-en-Y gastric bypasses (LRGB), 27 laparoscopic adjustable gastric band placements (LAGB), and 2 open Roux-en-Y gastric bypasses. Among the LRGB patients excess weight loss (EWL) at 6 months did not differ significantly (PRE vs POST) 58.5 vs 60.8% ($p = 0.7$). However, among the LAGB patients EWL was significantly higher in the POST group: 22.9 vs 32.6% ($p = 0.04$).

Conclusion: Implementation of a 10% weight loss requirement for insurance authorization significantly reduced the percentage of patients going on to surgery. The new requirement did not significantly affect weight loss following LRBG, but did result in greater weight loss after LAGB.

ABSTRACT FINAL ID: P117;

TITLE: A “Slip” By Any Other Name: A Suggested Classification for Dilation and Herniation of the Esophagus and Stomach in Patients Who Have Undergone Laparoscopic Adjustable Gastric Banding

AUTHORS/INSTITUTIONS: S.R. Casos, J.W. Allen, Surgery, University of Louisville, Louisville, KY;

ABSTRACT BODY:

Background: Laparoscopic adjustable gastric banding (LAGB) is becoming the method of choice in the surgical treatment of morbid obesity worldwide. Postoperative complications describing different pathological states of the esophagus and stomach after LAGB have been reported in the literature. This leads to confusion in the diagnosis, treatment, and reporting of these conditions. We propose a uniform system of classifying the condition of excessive esophagus and stomach after LAGB.

Methods: Over 2,000 LAGB have been performed at our institution since 2001. We reviewed the charts of all patients who suffered from postoperative gastric or esophageal redundancies. We also reviewed the medical literature of those who have reported long-term results after LAGB.

Results: There were multiple differences in the way postoperative complications were reported. Terms such as slip, prolapse, malposition, herniation, pouch dilation, gastric dilation, esophageal dilation, gastro-esophageal dilation, and band displacement were used, sometimes interchangeably. The table below organizes these conditions in a uniform manner.

I. Anterior Gastric Prolapse

II. Posterior Gastric Prolapse

III. Concentric Dilation of the Stomach

IV. Concentric Dilation of the Esophagus

V. Concentric Dilation of the Stomach and Esophagus

VI. Any of the above Immediately Post-Operative

VII. Any of the above with Ischemia and/or Necrosis

Conclusion: Although there is no universally accepted and reliably proven method for treating prolapses and dilations after LAGB, it is important to uniformly describe and report these complications. This proposed classification system seeks to achieve that goal.

ABSTRACT FINAL ID: P118;

TITLE: Skillings' Obesity Depression Scale (SODS): The Development of A Brief Depression Measure for Bariatric Clinics.

AUTHORS/INSTITUTIONS: J.L. Skillings, B. Wolf, E. Foster, P. Dake, Behavioral Medicine, McLaren Regional Medical Center, Flint, MI; N.J. Franklin, , McLaren Bariatric Institute, Flint, MI;

ABSTRACT BODY:

Background: There are many concerns of obese patients that are different from those of a non-obese population (i.e. chronic fatigue, public rejection). Currently, there is no measure of depression designed to account for the concerns of obese patients. The Skillings' Obesity Depression Scale (SODS) may fill this gap. It is a 36-item self-report measure of an obese patient's current symptoms of depression. It uses a 4-point Guttman response scale. The SODS includes three categories of items: (1) DSM-IV-TR symptoms of depression, (2) beliefs/fears/feelings discovered by research to be predictive of depression, and (3) items specific to the obese population, such as body image, interpersonal rejection due to weight, physical pain, guilt regarding weight, and eating patterns. This is the first of two planned studies in the development of the SODS. The purpose of this study was to assess construct validity and internal consistency.

Methods: The SODS was administered to patients from a bariatric and primary care clinic (total N=402) in the Midwest. The sample was diverse with respect to age, gender, ethnicity, and BMI. Patients completed the SODS voluntarily in the waiting room.

Results: Exploratory factor analyses as well as Rasch Rating Scale Analyses (a form of item-response theory) were conducted. These results demonstrated a stable, single-factor structure. There was clear evidence of construct validity and internal consistency ($\alpha=.93$). However, some DSM-IV-TR symptoms (e.g. eating & sleeping patterns) were not predictive of depression in this sample.

Conclusion: The results of this initial study demonstrate the importance of developing a new test of depression for bariatric clinics. The SODS may be a step towards the development of a quick, reliable, and inexpensive instrument to effectively measure depression in obese patients.

ABSTRACT FINAL ID: P119;

TITLE: Surgical Technique Influences Stapled Gastro-Jejunal Anastomosis Stricture Rate in Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: C.R. Gruner, M.A. Burch, D.T. Hess, Surgery, Boston University Medical Center, Boston, MA;

ABSTRACT BODY:

Background: Research regarding stricture rates following laparoscopic Roux-en-Y gastric bypass reveals a range in rates from near 0 to 27%, most likely due to differences in surgical technique. Recent studies cite the use of a 21mm stapler as a risk for stricture formation. This study was to determine whether changes in surgical technique influenced the rate of stricture development using a 21 mm stapler.

Methods: We retrospectively reviewed the incidence of stricture formation in 592 patients undergoing laparoscopic gastric bypass, from July 2002 to June 2007.

Results: During the past 5 years, 592 laparoscopic Roux-en-Y gastric bypass operations were performed by 2 surgeons at a university hospital using a retrocolic, retrogastric technique and a 21mm circular stapler for the gastro-jejunal anastomosis. The anastomosis was reinforced with 2 interrupted 3-0 silk sutures. From May 2002 to October 2004, all laparoscopic operations were performed with the anvil of the stapler exiting the pouch anteriorly above the staple line, and the Roux limb mesentery divided just before closing the open end of the limb. Strictures developed in 3 of 260 patients (1.1%). After October 2004, the anvil exited the gastric pouch caudally through the staple line. In addition, the mesentery of the Roux limb was transected before performing the anastomosis. These changes allowed for more mobility and less tension. 1 out of 332 patients developed a stricture after the change in technique (0.3%).

Conclusion: Gastro-jejunal anastomotic stricture occurred in 4 out of 592 patients (0.67%). Although the use of a 21mm stapler has been linked with higher stricture rates, changes in surgical technique can influence underlying factors leading to lower stricture rates. This underscores the importance of minimizing tension on the gastro-jejunal anastomosis at the time of the operation.

ABSTRACT FINAL ID: P120;

TITLE: Hybrid NOTES Sleeve Gastrectomy in an Animal Model

AUTHORS/INSTITUTIONS: M. Bessler, L. Milone, , Columbia University, New York, NY;

ABSTRACT BODY:

Background: Sleeve gastrectomy is being increasingly used for surgical treatment of severe obesity. Natural Orifice Transluminal Endoscopic Surgery (NOTES) is an emerging minimally invasive technique that holds the promise of scarless, pain free surgery. We report on performance of two cases of hybrid natural orifice sleeve gastrectomy in a canine model.

Methods: IACUC approval was obtained for this non-survival study. Two 40kg dogs underwent combined laparoscopic and transvaginal sleeve gastrectomy. For the first procedure two 5mm laparoscopic ports were used but for the second case only one port was utilized. A transvaginal flexible endoscope and specially designed, long, articulating linear stapler were placed through the posterior fornix of the vagina. A flexible overtube (US Endoscopy) was placed through the vaginal wall through a separate colpotomy and was used for repeated introduction of the stapler. Gastric division was started 6cm proximal to the pylorus after a window was created in the gastrocolic ligament. Green and blue staple loads were used to divide the stomach several cm from the lesser curve. No bougie was used. The greater curve was then mobilized by division of vessels using vascular loads on the stapler. The resected portion of stomach was removed through the colpotomy. Video documentation was obtained and will be presented.

Results: Both procedures were completed with operative time of approximately 150 minutes.

Conclusion: Based on this experience, hybrid NOTES sleeve gastrectomy may be a feasible procedure for severely obese women. Retraction currently requires laparoscopic assistance but instrumentation to retract using flexible instrumentation may allow a totally NOTES approach.

ABSTRACT FINAL ID: P121;

TITLE: Sleeve Gastrectomy As The Primary Procedure For The Treatment Of Non-Morbid (Class II) Obesity: 12-Month Results Of The First 14 Cases

AUTHORS/INSTITUTIONS: O.C. Kutlu, Y. Peker, G. Yagci, S. Cetiner, General Surgery, GATA, Ankara, TURKEY;

ABSTRACT BODY:

Background: Although surgery is the most effective approach to severe obesity, there is no consensus on the treatment options for non-morbidly obese patients. There are a limited number of papers published on the results of surgery of these patients with debates within the surgical and medical communities. We would like to report our 12 month results of sleeve gastrectomy performed as a single stage primary procedure for the treatment of Class II obesity.

Methods: 14 patients all female, mean age of 31 years (23-39) were included in the study. All the patients were class II obese mean BMI 37.5 (35.6-39.4) and mean preoperative weight 104 kgs(98-111). All have failed diet-exercise programs under supervision. Patients rejected any foreign body and Laparoscopic sleeve gastrectomy was performed. The patients have been evaluated monthly by a team of an endocrinologist, clinical dietitian and bariatric surgeon.

Results: There were no mortalities and no conversions to open procedure. No post-operative complications were encountered. The patients have lost 89% of excess body weight at the 12 th month, and mean BMI has decreased to 25.4 from 37.5. The GI quality of life index have not shown significant difference between preoperative and postoperative questionnaire.

Conclusion: Despite all the debates there still is no established practice guideline for the treatment of class II obesity. While diets are inevitably destined to fail, there still is resistance for the surgery of class II obesity. There are limited papers published on sleeve gastrectomy and none about the procedure in non-morbidly obese patients. We have observed excellent results with careful follow up and dietary counselling in our patients. We believe that sleeve gastrectomy would be an excellent alternative as a primary weight loss procedure for the treatment of class II obesity.

ABSTRACT FINAL ID: P122;

TITLE: Laparoscopic Gastric Bypass is as Safe as Laparoscopic Gastric Banding and Provides Superior Weight Loss Outcomes.

AUTHORS/INSTITUTIONS: G.M. Campos, C. Rabl, S.J. Rogers, A. Posselt, J. Cello, Surgery, University of California San Francisco, San Francisco, CA;

ABSTRACT BODY:

Background: Laparoscopic gastric bypass (LGBP) and laparoscopic gastric banding (LGB) are the two most common operations used in the treatment of morbid obesity. LGB is touted as a safer procedure, however long term weight loss outcomes seems superior for LGBP in most studies. The aim of this study was to compare peri-operative and long-term complications rate and weight loss outcomes between LGBP and LGB.

Methods: One hundred morbidly obese patients treated with LGB (median BMI 45.1, BMI range 35-66, 71% females, median age 45) were pair matched by BMI, gender, race, age, and presence of diabetes mellitus with 100 patients who were treated with LGBP (median BMI 45.5, BMI range 35-67, 71% females, median age 45). Peri-operative and long-term complications rate and one year weight loss outcomes [excess weight loss (EWL) and BMI change] were compared among the study groups. Proportions in between the groups were compared using the chi-square or Fisher exact test and numerical data compared using the Mann-Whitney U Test.

Results: All LGB were completed laparoscopically. There was one conversion to open in the LGBP group. Overall, early and late complication rates were similar for both groups (Overall: 15% for LGBP and 13% LGB, $p=0.8$) and there was no difference in the rate of reoperation (2% for LGBP and 3% LGB, $p=0.9$). There was no mortality. One year weight loss was superior in the LGBP group (BMI change 15.7 after LGBP versus 10.5 after the LGB, $p<0.01$ and EWL after LGBP 63% versus 39% after the LGB, $p<0.01$).

Conclusion: LGBP is as safe as LGB and provides superior weight loss outcomes.

ABSTRACT FINAL ID: P123;

TITLE: Effect of Preoperative Weight Loss in Laparoscopic Adjustable Gastric Banding Surgery (LAGB)

AUTHORS/INSTITUTIONS: A.S. Gallo, V. Gorodner, J. Clauson, M. Edison, S. Horgan, C. Galvani, General Surgery, University of Illinois at Chicago, Chicago, IL;

ABSTRACT BODY:

Background: Acute preoperative weight loss before LAGB surgery depletes liver glycogen stores therefore reducing liver size and also prepares patients for the dietary behavioral changes that will be required after surgery. To determine the effect of preoperative weight loss in the perioperative and post-operative period in patients undergoing LAGB.

Methods: Between 3/2001 and 8/2007, 494 patients that completed a preoperative visit and liquid diet 15 days before LAGB surgery were evaluated. Patients were divided into three groups according the amount of pre-operative weight loss: Group A=less than 1 pound (lb); Group B=1 to 9.9 lb; Group C=10 or more lb. Demographics, Body Mass Index (BMI), Preoperative weight loss, Operative Data and % Excess weight loss (%EWL) were analyzed. Statistical analysis was performed by multiple linear regression analysis. $P < 0.05$ was considered significant.

Results: The study population consisted of 415(84 %) females, 79(16%) males. The mean preoperative weight loss was 7 ± 9 lbs.

Conclusion: The results of this study favor preoperative weight loss, since it seems to reduce operative time and intraoperative blood loss. However, this initial weight loss does not anticipate appropriate long-term outcome.