Found 59 Abstracts

ABSTRACT FINAL ID: PL-01;

TITLE: IS ROUX-EN-Y GASTRIC BYPASS (RYGB) FOR TYPE 2 DIABETES MELLITUS (T2DM) REALLY METABOLIC SURGERY? THE IMPORTANCE OF THE BARIATRIC IMPACT OF SURGERY

AUTHORS/INSTITUTIONS: B. Kadera, School of Medicine, Duke University, Durham, NC; J. Grant, A.D. Pryor, D.D. Portenier, E.J. DeMaria, , Department of Surgery, Duke University Medical Center, Durham, NC;

ABSTRACT BODY:

Background: Physiologic studies in rodents and preliminary human studies have suggested that RYGB improves T2DM via metabolic changes, long before the bariatric or weight loss effects, leading to the concept of “metabolic surgery.” To test this hypothesis, we studied insulin-dependent T2 diabetics undergoing RYGB to determine if T2DM remission in this treatment-resistant subgroup occurred independent of weight loss.

Methods: Of all patients undergoing RYGB from 2000-2006 (n=1546) with ≥ 12 months follow-up, 318 were diabetic (21%) and 73 of these (23%) were insulin-dependent. 4 type I diabetics (7.4%) were excluded leaving a study population of 69 patients. Statistical significance was set at $P<0.05$ using the student t-test, ANOVA, and logistic regression as appropriate.

Results: After RYGB, all 69 insulin-dependent diabetics achieved a reduction in dose and/or number of medications at 28.7 ± 16.0 months. 33 (48%) demonstrated remission of T2DM defined as cessation of diabetic medications with an HbA1C ≤ 7%. Pre-operative BMI, age, number of medications, years of diabetes diagnosis, years on insulin therapy, and HbA1C did not differentiate between those who attained remission versus those still on medications. From the multivariant analysis, the only significant predictor of remission was % excess weight loss (odds ratio 6.25, P=0.01). %EWL was greater in remission patients as early as 3 months post-op (P=0.03) and also at 6, 12, and 24 months.

Conclusion: RYGB was found to uniformly improve the medication requirements of patients with insulin-dependent T2DM. %EWL was a significant factor predicting remission of T2DM in this insulin-dependent population. Although early physiologic mechanisms may contribute, the data support that weight loss (bariatric effect) following RYGB is either a causative factor in the remission of T2DM or a result of such mechanisms.

ABSTRACT FINAL ID: PL-02;

TITLE: Effect of sleeve gastrectomy on morbidly obese patients with diabetes mellitus

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

ABSTRACT BODY:

Background: There is limited data evaluating the impact of Sleeve Gastrectomy on the control of diabetes mellitus (DM). The objective of this study was to evaluate the effectiveness of sleeve gastrectomy (SG) on improving glycemic control of morbidly obese patients with DM.

Methods: A retrospective review of a prospectively maintained database collected between January 2005 and January 2007 was conducted. Thirty morbidly obese patients with DM underwent during this time period. At 2 and 6 months follow-up visits, we analyzed the variation of glycosylated hemoglobin (HbA1C), fasting blood glucose (FG), and body mass index (BMI).

Results: Of the 30 patients with at least 6 months postoperative follow-up, 22 (73%) were taking medications for type 2 DM preoperatively. Complete remission of DM was observed in 28% at 2 months and 63% at 6 months follow-up. HbA1c dropped from 6.36+0.82 (n=14) preoperatively to 6.02+0.57 (n=11) at 2 months, and to 5.92+0.33 (n=12) at 6 months after surgery. BMI dropped from 46.12+10.86 (n=30) preoperatively to 38.27+6.59 (n=30) at 2 months and to 35.78+5.11 (n=29) at 6 months after surgery. Patients with a shorter duration of DM (<5years) and better weight loss after surgery achieved the highest remission rates.

Conclusion: Sleeve gastrectomy appears to have a similar positive impact on remission of DM when compared to other well established bariatric procedures.

ABSTRACT FINAL ID: PL-03;

TITLE: A Randomized Trial Comparing Laparoscopic Sleeve Gastrectomy Versus Gastric Bypass for the Treatment of Type 2 Diabetes Mellitus: Preliminary Report

AUTHORS/INSTITUTIONS: W. Lee, Y. Lee, J. Chen, K. Ser, S. Chen, C. Lin, Surgery, Min-Sheng General Hospital, National Taiwan University, Taiwan, Taoyuan, TAIWAN;

ABSTRACT BODY:

Background: Bariatric Surgery leads to a dramatic improvement in morbid obesity associated type 2 Diabetes Mellitus (T2DM) but the mechanism remains speculative. This study was to compare the effectiveness of laparoscopic sleeve gastrectomy (LSG) and gastric bypass (LGB) in the treatment of T2DM, and to test the “fore-gut” hypothesis.

Methods: Patients aged 30 to 60 years who had poor controlled T2DM (HbA1C > 8%) and BMI below 35 were included and randomized to the LSG and LGB group. The end point is the effect of T2DM treatment. HbA1C <7.0%, LDL <100mg/dl, and triglyceride <150 mg/dl identified successful treatment of T2DM.

Results: Thirty patients with a mean BMI of 29 (24-34), mean age of 45 (34-58) and mean HbA1C of 10.0 (8.0-15) were randomized to either LSG (n=15) or LGBP (n=15). There was no difference in preoperative clinical parameters between the two groups. Median follow-up was 3 month (1 to 6 months). All procedures were successfully carried out with no deaths or major complication in either group. Minor complication occurred in 4 patients (13%). The surgical time was similar between the LGB and LSG groups (117 minutes vs. 127 minutes, p>0.05). There was also no difference in the complication rate and clinical course between the two groups. After surgery, both groups experienced a rapid decrease in body weight as well as fasting plasma glucose and HbA1C without significant difference in the first 3 months.

Conclusion: This study demonstrates that both LSG and LGBP are effective treatments for T2DM with BMI < 35. There was no difference between procedures with or without duodenum exclusion.

ABSTRACT FINAL ID: PL-04;

TITLE: Type 2 Diabetes mellitus in severely obese individuals is caused by insufficient beta cell sensitivity relative to the degree of insulin sensitivity

AUTHORS/INSTITUTIONS: R.A. Perugini, J. Kelly, D. Czerniach, Surgery, University of Massachusetts, Worcester, MA;

ABSTRACT BODY:

Background: The classic paradigm for type 2 diabetes mellitus (T2DM) is that obesity leads to insulin resistance (IR), with compensatory increase in β-cell sensitivity. With β-cell exhaustion, T2DM ensues. It is well known that gastric bypass (GB) cures T2DM. We studied IR and β-cell sensitivity in diabetic patients undergoing GB.

Methods: This is a retrospective review of 201 consecutive patients undergoing laparoscopic GB; 47 (23%) of these had T2DM. Fasting insulin and glucose levels were drawn on days 0, 12, 40, 180, and 365. Homeostasis model of assessment was used to estimate insulin resistance and β-cell sensitivity. Patients were categorized as higher IR if HOMA-IR > 2.3, in accordance with our prior investigations into this field.

Results: Diabetic individuals exhibited a wide variation with regards to degree of insulin resistance. All diabetics had lower β-cell sensitivity per degree of insulin sensitivity than did the non-diabetics. Of all individuals with T2DM, 27 (57%) had higher IR and 20 (43%) had more normal insulin sensitivity; these diabetic groups were similar with regards to age, gender, weight and BMI. β-cell sensitivity improved for all diabetics by 40 days after gastric bypass, such that they became indistinguishable from non-diabetics. Diabetics with more normal insulin sensitivity were more likely to be off of diabetic medications following gastric bypass (75% vs 59% at one year), though this difference did not reach significance ($p = 0.29$).

Conclusion: Individuals with T2DM manifest a wide variation in insulin sensitivity. Low β-cell sensitivity per degree of insulin sensitivity is the sine qua non for T2DM. This is corrected soon after gastric bypass. Rather than β-cell exhaustion, diabetics have reversible down-regulation of insulin secretion. These findings call into question the accepted paradigm of T2DM.

ABSTRACT FINAL ID: PL-05;

TITLE: IMPACT OF LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS ON HGA1C CONCENTRATIONS IN PATIENTS WITH DIABETES: A MATCHED COHORT ANALYSIS

AUTHORS/INSTITUTIONS: D.E. Mumme, M.A. Mathiason, K.J. Kallies, S.N. Kothari, , Gundersen Lutheran Health System, La Crosse, WI;

ABSTRACT BODY:

Background: Elevated HgA1c concentrations are known to increase risk of diabetic retinopathy, nephropathy, and peripheral neuropathy. Guidelines recommend maintaining HgA1c below 7%. We compared HgA1c concentrations in laparoscopic gastric bypass (LGB) patients who had diabetes with those of a medically managed cohort of morbidly obese diabetes patients.

Methods: Through retrospective review of a prospective database, we identified a cohort of patients with diabetes who underwent LGB from 2001 to 2006. For comparison, a cohort of medically managed diabetes patients was matched by age and sex. Only patients with a preoperative/initial and at least two postoperative/follow-up HgA1c tests were included. Statistical analysis was performed using paired t tests.

Results: Each cohort had 42 women (79%) and 11 men (21%). Mean age was 48±9 years for both cohorts. Mean body mass index was 47.3±5.9 kg/m2 at surgery and 30.9±4.8 kg/m2 at postoperative year 1 for the LGB cohort, and 44.9±5.6 initially for the medically managed cohort.

Conclusion: Patients who underwent LGB had significant and sustained improvement in HgA1c concentrations compared with morbidly obese medically managed patients with diabetes.

ABSTRACT FINAL ID: PL-06;

TITLE: 24-week followup of an open label, prospective, randomized controlled trial of endoscopic duodenal-jejunal bypass sleeve (DJBS) versus low-calorie diet for weight loss

AUTHORS/INSTITUTIONS: L. Rodriguez, , Centro de Cirugía de la Obesidad, Hospital DIPRECA, , Santiago de Chile, CHILE; A. Escalona, L. Ibanez, , Hospital Universidad Catolica, Santiago de Chile, CHILE; A. Ramos, G. Manoel, , 3Gastro Obeso Center, Sao Paulo, BRAZIL; M. Tarnoff, , Tufts-New England Medical Center, Boston, MA;

ABSTRACT BODY:

Background: We previously reported the results of a 12-week open label, randomized controlled trial comparing the DJBS versus diet alone. We now report results for 17 DJBS patients with 24-week followup.

Methods: Seventeen of the original 25 DJBS patients (68%) have now been followed for 24 weeks with no dietary counseling. Of the original cohort, 1 patient was explanted at 12 weeks per the original protocol, 2 patients were explanted before the 24 week follow-up and 5 patients were explanted prior to 12 weeks and were previously discussed. The diet control patients concluded the study at 12 weeks and are no longer part of the trial. Ongoing measurements included monthly body weight and plain abdominal radiography

Results: Seventeen of 25 (68%) patients have maintained the DJBS without a significant adverse event for the 24 week duration. At 24 weeks, the mean excess weight loss was 29.2% (+ 13.5%) compared to 22% previously reported at 12 weeks. Two additional devices were endoscopically explanted without incident between 12 and 24 weeks secondary to symptomatic anchor migration at day 116 (n=1) and an asymptomatic, radiographically detected anchor rotation on day 118 (n=1).

Conclusion: This first generation DJBS continues to safely achieve noninvasive duodenal exclusion and short-term weight loss efficacy. Ongoing followup of this and other trials will further establish the role of this device in the treatment of obesity.

ABSTRACT FINAL ID: PL-07;

TITLE: Bariatric Surgery in Medicare Patients (MP): Higher Risks but Substantial Benefits

AUTHORS/INSTITUTIONS: X. Yuan, P. Ojo, L. Wolfe, J. Meador, J.M. Kellum, J.W. Maher, Surgery, Va Commonwealth Univ., Richmond, VA; L.R. Martin Hawver, , University of Cincinnati, Cincinnati, OH;

ABSTRACT BODY:

Background: Recent reports document higher mortality for bariatric surgery in MP.

Methods: We reviewed our database for mortality and outcomes in 280 MP and 3169 non-Medicare patients (NMP).

Results: Twenty-seven MP patients were over 65 years, the remainder on disability. Demographics are in table below. Comorbidities were higher in MP than NMP (Table). Mortality was 2.6% in MP and 0.8% in NMP($p<0.01$). Mortality was absent in MP over 65. Percent excess weight lost was less in MP (MP 60.4; NMP 66.3, $p<0.001$). Hypertension resolution was less in MP (48.6% MP, 65% NMP; $p<0.0001$). Resolution of DM did not differ (65.7%MP, 76.8%NMP, $p>0.05$) MP males had more prevalent comorbidities than NMP males: HTN(78.9%), DM(36.6%), OSA(78.9%) and OHS(26.8%). Operative mortality was 5.6% in male MP, 1.5% in female MP. Weight loss was similar in MP and NMP males. Male MP had slightly better resolution of both HTN (MP 54.8%, NMP 26.7%, $p=0.0025$) and DM (MP 30%, NMP 22.5%; $p=0.745$). A previously validated risk scale revealed that patients with similar risk factors had similar mortality in both groups.

Conclusion: Disabled MP have higher operative mortality than NMP that appears associated with more prevalent risk factors. The risk is counterbalanced by a substantial improvement in health.

ABSTRACT FINAL ID: PL-08;

TITLE: Laparoscopic Bariatric Surgery and Malignant Diseases

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

ABSTRACT BODY:

Background: Obesity is associated with increased mortality from a variety of malignant diseases. We describe our experience with bariatric surgery and malignant diseases.

Methods: Retrospective analysis of a bariatric database on patients with solid organ or hematological malignancies.

Results: Of the 1470 patients who underwent laparoscopic bariatric surgery between July 1999 and October 2007 in our institution, 22 patients (1.5%) had a diagnosis of solid organ or hematological malignancies. Two patients were diagnosed with rectal cancer during preoperative screening colonoscopy and their surgery was deferred. Twelve patients were diagnosed and treated prior to seeking weight-loss surgery, 2 patients were diagnosed intraoperatively and 8 patients postoperatively. Twenty-one patients underwent LRYGB and one patient lap-band. Preoperative malignancies included: breast (n=4), leukemia/lymphoma (n=3), testicular (n=2), rectal (n=1), prostate (n=1), and lung (n=1). The mean patient age was 52.3 years (range: 30.6-68.5 years) and the median time interval between malignancy and surgery was 5 years (range 0.5-27 years). At a median follow-up time of 30.5 months all patients are alive and their %EWL is 66%.The two malignancies diagnosed during laparoscopy included a renal cancer and a lymphoma presenting as mesenteric panniculitis. Postoperative malignancies included colorectal (n=2), leukemia/lymphoma (n=2), renal (n=1), bladder (n=1), pancreatic (n=1), and duodenal GIST (n=1). These patients were diagnosed at a median time of 2.5 years postoperatively (range 0.5-5 years) and 2 patients have died secondary to their malignancy. Four patients underwent resection of their malignancy that was not limited by the previous bariatric operation.

Conclusion: Prior history of treated malignancy is not a contraindication for bariatric surgery in carefully selected patients.

ABSTRACT FINAL ID: PL-09;

TITLE: Bariatric Surgery Improves/Prevents Cancer in Morbidly Obese Patients

AUTHORS/INSTITUTIONS: N.V. Christou, Surgery, McGill University, Montreal, Quebec, CANADA; J.S. Sampalis, , JSS Research, Montreal, Quebec, CANADA;

ABSTRACT BODY:

Background: There is mounting evidence of an association between obesity and cancer.

Aim: In this study we examine the impact of bariatric surgery on cancer related comorbidity.

Methods: Observational two-cohort study. The treatment cohort (n=1035) included patients having undergone bariatric surgery between 1986 and 2002. The control group (n=5746) included age and gender matched morbidly obese patients who had not undergone weight-reduction surgery identified from a single payer administrative database. Subjects with physician/hospital visits for cancer related diagnosis/treatment for the previous 6 months at cohort-inception into the study were excluded. The cohorts were followed for a maximum of five years from inception.

Results: Bariatric surgery resulted in significant reduction in mean percent excess weight loss (67.1%, $p<0.001$). Surgery patients made significantly reduced physician/hospital visits for all cancer diagnoses. Common cancers such as breast were significantly reduced in the surgery group. All other cancers showed reduced clinical trends which were not statistically significant due to low frequencies

Conclusion: The data suggests that bariatric surgery improves and/or prevents development of cancer in morbidly obese patients.

ABSTRACT FINAL ID: PL-10;

TITLE: GI Symptom Improvement Post-Roux-en-Y Gastric Bypass: Long-Term Analysis

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

ABSTRACT BODY:

Background: Obese patients suffer from a multitude of gastrointestinal symptoms that differ from their nonobese couterparts. The literature remains scant on changes in gastrointestinal symptoms amongst this cohort pre- & post-Roux-en-Y gastric bypass(RNYGB). The aim of this study is to quantify these symptoms and understand the changes witnessed with bariatric surgery.

Methods: 1,910 GI symptom surveys were prospectively administered to 902 consecutive patients that underwent laparoscopic RNYGB. Patients rated each symptom on a 0 to 100-mm Liekert scale; 0=absence of symptoms,33=occasional occurence, 67=frequent occurrence,100=continuous. The surveys were administered preoperatively and then yearly there after. Data presented as mean±SEM.

Results: Demographics:Race(137 African Americans,585 Caucasians,2 Hispanics,1 other),Sex(83%women,17%men),Age(40.9±0.34),BMI(48.72±0.27),ASA(2=31%,3=68%,4=1%),Short Vs Long-limb bypass(63% vs 37%).Preoperative symptom rating:Abdominal pain(24.3±0.8),Heartburn(41.0±0.9),Acid Regurgitation(30.9±0.9),Gnawing epigastric sensation(26.5±0.9), Nausea&vomiting(18.8±0.7),Borborygmy(26.2±0.8),Abdominal distension(30.3±0.9),Eructation(27.9±0.8),Increased Flatus(38.9±0.8),Decreased passage of stools(14.8±0.8),Increased passage of stools(16.4±0.7),Loose stools (22.1±0.8)Hard stools(20.5±0.9),Urgent need for defecation(23.2±0.8), Incomplete evacuation(22.2±0.8),Difficulty falling asleep(42±1.1),Insomnia(38.3±1),Feeling rested(60.1±1),Difficulty swallowing(13.5±0.67).1yr post-RNYGB 99.5% of these symptoms were statistically improved, at 2 yrs(84.2%),3yrs(68.4%),4yrs(57.9%),5yrs(47.4%);$p<0.05$.

Conclusion: Laparoscopic RNYGB significantly improves gastrointestinal symptoms experienced by morbidly obese patients without adversely affecting any of the measured parameters. This improvement in symptoms proved durable long term.

ABSTRACT FINAL ID: PL-11;

TITLE: Long-term results after gastric banding :12 years follow up

AUTHORS/INSTITUTIONS: K.E. Arapis, D. Chosidow, P. Mognol, J. Marmuse, , hopital BICHAT, Paris, PARIS, FRANCE;

ABSTRACT BODY:

Background: Laparoscopic gastric banding (LGB) has been considered by many as the treatment of choice for morbid obesity because of its encouraging early results.

Methods: We present our results after up to 10 years of follow-up. Major late complications are defined as those requiring band removal (major reoperation), with or without conversion to another procedure. Failure is defined as an excess weight loss (EWL) of <25%, or major reoperation.

Results: Between Septembre 1995 and Decembre 2006 LGB was performed in 874 patients. Mean age was 39.7 years (16-69), mean weight was 124.7 kg (78-206), and mean BMI was 45.8 kg/m2(30-74). Overall, 243 (27.8%) of the patients developed late complications, including band erosion in 2.3%, pouch dilatation/slippage in 15.4%, and catheter- or port-related problems in 8.9%. Major reoperation was required in 29.8% of the patients. The mean EWL at 5 years was 43.23% and at 8 years was 45.83% in patients with the band still in place. The failure rate increased from 15.1% after 2 years to 29.2% at 4 years, to 49% at 8 years and to 65% at 10 years. The worst results was observed in the men with BMI > 50 : after 8 years the mean EWL was 24,4% and major reoperation was required in 44,7%.

Conclusion: Laparoscopic gastric banding is a simple and safe bariatric operation. unfortunately about 40% of the patients without major complication maintain an acceptable EWL (> 50%) after 4 years and 26% after 8 years.LGB should no longer be considered as the procedure of choice for obesity.

ABSTRACT FINAL ID: PL-12;

TITLE: LAPAROSCOPIC ADJUSTABLE GASTRIC BANDING (LB) WITH TRUNCAL VAGOTOMY (TV) VS LAPAROSCOPIC ADJUSTABLE GASTRIC BANDING ALONE (LB): INTERIM RESULTS OF A PROSPECTIVE RANDOMIZED TRIAL

AUTHORS/INSTITUTIONS: L. Angrisani, M. Lorenzo, P. Cutolo, F. Persico, G. Vitolo, general and laparoscopic unit , S.Giovanni Bosco Hospital, Naples, ITALY;

ABSTRACT BODY:

Background: The role of the Vagus Nerve and its implication for the treatment of obesity is under current evaluation.

Methods: Patients were recruited from December 2005 to November 2006. Inclusion criteria were BMI >35<45 and age 20-45yo. Patients with peptic ulcer and hiatus hernia were excluded. Patients were randomly allocated into two groups: LB+TV(LBTV-group) or LB alone(LB-group). TV was performed in the thorax after encircling the esophagus at diaphragmatic crus. Segmental nerve resection was performed for histology. LB was performed with 11cm Lap-Band System® via pars-flaccida. Patients were followed up by a physician blind to randomisation. Mortality, complications, BMI, and diarrhoea were evaluated in both groups. Data were expressed as mean±standard deviation, except as otherwise indicated. Statistical analysis was done by means of Student t-test and Fisher's test, $p<0.05$ was considered significant.

Results: Fifty patients entered the study: LBTV group (n=25; 2M/23F; mean age: 36.3±9.1, range: 21-42; mean BMI: 38.9±5.9, range: 35.1-43.2) and LB group (n=25; 2M/23F; mean age: 35.9±8.7, range 22-43, mean BMI: 39.1±5.1, range 37-42.9) were without significant difference at baseline. Complications were absent in both groups. One(4%) LBTV patient was lost at FU. At 9-months-FU mean BMI was 33.4±4.9 and 34.8±5.3 LBTV (24/25 pts) and LB (25/25) groups respectively (p=ns). At 12-months-FU mean BMI was 32.7±5.1 and 35.3±5.3 in LBTV (14/15 pts) and LB (14/14) groups respectively (p=ns). After 18-months-FU mean BMI was 35.5±5.4 and 33.6±5.8 in LBTV (4/5 pts) and LB (6/6) groups respectively (p=ns). Diarrhoea was observed during the first month in 5/25 LBTV patients and absent in LB ($p<0.01$).

Conclusion: Although TV can be performed safely at time of LB with minimal side effects, weight loss results were similar and need longer period of observation.

ABSTRACT FINAL ID: PL-13;

TITLE: Comparative Excess Body Weight Loss from Laparoscopic Adjustable Gastric Band and Laparoscopic Roux-en-Y Gastric Bypass in a U.S. Center Over Three Years

AUTHORS/INSTITUTIONS: D.B. Lautz, R.S. Flint, T.K. Nguyen, K.A. Clancy, A.H. Vernon, A. Tavakkolizadeh, M.K. Robinson, E.C. Mun, T.D. Neal, Surgery, Brigham and Women's Hospital, Boston, MA;

ABSTRACT BODY:

Background: Some studies have shown that the excess body weight loss (EBWL) results achieved with laparoscopic adjustable gastric band (LAGB) placement approaches that of the laparoscopic Roux-en-Y gastric bypass (LRYGB) over time.

Methods: Our prospective database was queried for all LAGB or LRYGB as a primary bariatric procedure between 4/1/2004 (when we started our LAGB program) and 11/1/2007.

Results: In this study 1280 consecutive patients were included (576 LAGB and 704 LRYGB). Mean BMI for the LAGB group was 45.6 ± 6.3 kg/m2, and 47.6 ± 7.5 kg/m2 in the LRYGB group. There was no statistically significant difference in EBWL between the two groups at three years of follow-up. In our series to date, 5 patients have had the LAGB removed and 4 converted to another procedure. To account for these cases the last measured patient weight prior to LAGB removal was then carried forward in the remaining time points. In this analysis, there remains a statistically significant difference in EBWL at three years.

Conclusion: This study suggests that LAGB failure data is important to consider in analyzing EBWL results. Bias may be introduced by including clinic follow-up data that excludes LAGB treatment failures. Alternatively, including them for further time points as data is accumulating may bias in the opposite direction, depending upon level of patient follow-up.

ABSTRACT FINAL ID: PL-14;

TITLE: Routine Fluoroscopic Imaging during Laparoscopic Adjustable Gastric Band Adjustment Results in Significant Alterations in Clinical Care

AUTHORS/INSTITUTIONS: M. Kroh, N.E. Duelley, S.A. Brethauer, T. Rogula, P.R. Schauer, B. Chand, Bariatric and Metabolic Institute, Cleveland Clinic, Cleveland, OH;

ABSTRACT BODY:

Background: Little data exists regarding filling regimens for laparoscopic adjustable gastric bands (LAGB). In addition to patient symptoms and weight changes, we have instituted fluoroscopic evaluation in our clinical decision making. Our hypothesis is that routine fluoroscopic imaging during LAGB adjustment results in significant deviations in clinical care.

Methods: 51 consecutive patients who underwent LAGB and presented for adjustment were given a questionnaire evaluating obstructive symptoms. The patient's weight loss history was also reviewed. Each patient underwent real-time fluoroscopy. Data were recorded and compared to final decision to fill, make no adjustment, or remove fluid.

Results: Patients were on average at post-operative visit 5.6. 63% of patients received a fill, 31% had no change, and 6% had fluid removed. On the questionnaire, 15% of patients noted reflux, 10% had dysphagia, and 7.7% had regurgitation. 80% of patients requested a fill. Sensitivity and specificity for symptoms documented on the questionnaire resulting in either removal of fluid or no change was 26% and 66%, respectively. 31% had an abnormality noted on fluoroscopy. 15% of patients demonstrated esophageal dilation, 15% had a delay of >5 seconds, 19% had reflux of contrast. 3 patients had slips on imaging. Sensitivity and specificity for fluoroscopic findings resulting in either removal or no change in fluid volume were 63% and 81%, respectively. Additionally, 6 patients (12%), were not filled based on fluoroscopic findings alone, not predicted by either the survey or historical weight loss.

Conclusion: Fluoroscopic evaluation during LAGB adjustment is more sensitive and specific than patient's obstructive symptoms. Routine fluoroscopic imaging altered the course of management in 12% of patients and identified 3 slipped bands.

ABSTRACT FINAL ID: PL-15;

TITLE: Does Stitching Band Increase Slipping ?

AUTHORS/INSTITUTIONS: V. Frering, E. Fontaumard, , CD2F, IYON, FRANCE;

ABSTRACT BODY:

Background: Among different procedures carried out in bariatric surgery, gastric banding is useful in Europe. Slipping is a usual complication. Opinions on etiology remain divided. Are quoted the procedure perigastric or pars flaccida, the type of the band. Stitching the band remains a commonly allowed attitude as a prevention of the slippage. Redo surgery or switching to gastric by pass remain more difficult with a band stitched. Aim of this work was to evaluate the interest of stitching the band.

Methods: From 1997 to 2006, 5838 patients had gastric banding provided by the same team. Historically were set up lapband (868), SAGB (1386) and Midband (3584). In this historical prospective cohort were study only Midband to isolate the studied variable as much as possible and of not interfering with the type of band and the way initially. Bands were placed with pars flaccida technique and were inflated under radiological control only 2 months after. Follow-up comprises band adjustment on patient request and every six months consultation. The statistical study on two qualitative variables was carried out with a test Khi 2.

Results: There were no post operative death.

Table 1

Traitement was : removal (46), gastric By pass (15) or replacement (21). In 8 patients replacement was done before switching to GBP. Three patients had acure slippage within 3 days after surgery.

Mean time for slippage was 29±10 Months.

Conclusion: The results of this study have shown that stitching can be factor for slippage.

ABSTRACT FINAL ID: PL-16;

TITLE: Disappointing mid-term results after laparoscopic gastric banding in young patients

AUTHORS/INSTITUTIONS: H. Nehoda, M. Lanthaler, H. Weiss, M. Sieb, F. Aigner, , Innsbruck Medical University Hospital, Department of General and Transplant Surgery, Innsbruck, AUSTRIA;

ABSTRACT BODY:

Background: When about 10 years ago, gastric banding was introduced as a bariatric operation its early results were promising with a low complication rate. Only few long-term studies have been published. In this study we assessed our results of laparoscopic gastric banding in young patients after up to 10 years.

Methods: Between January 1996 and December 2000, a total of 41 patients (83% female, 17% male) aged younger than 25 years underwent laparoscopic gastric banding at our institution.

Patients' data were derived from the electronic patient data system, paper charts and by means of a telephone questionnaire. The psychosocial changes were analyzed by using Moorehead-Ardelt/BAROS questionnaire.

Results: Mean preoperative BMI was 44.26 ± 6.53 kg/m^2 , with a mean EW of 65.22 ± 20.48 kg. BMI after 1, 5 and 7 years was 31.50 ± 7.38 kg/m^2, 31.12 ± 7.10 kg/m^2 and 32.88 ± 5.68 kg/m^2. Mean EWL after 1 year was 60.07 ± 25.33% and after 5, 7 years EWL was 64.84 ± 27.45%, 57.48 ± 28.07%. An improvement in obesity-related co-morbidities was observed in nearly all patients.Out of our patients 52% had complications requiring reoperation.(27% pouch dilations,10% band leakages, 5% intragastral band migrations, 5% perforation of the esophagus and 5% port disconnections).

According to BAROS, the long-term outcome was regarded as failure in 40%,fair in 4%,good in 28%,very good in 20% and excellent in 8%.

Conclusion: Our mid-term results show disappointing results with a high complication rate and many dissatisfied patients.

ABSTRACT FINAL ID: PL-17;

TITLE: How Much EWL is Enough? A Bayesian Analysis to Determine Minimal EWL to Deliver Improvement/Resolution OF Comorbidities after Laparoscopic Adjustable Gastric Banding in Patients with BMI 30–40.

AUTHORS/INSTITUTIONS: S. Sultan, M. Parikh , H. Youn , M. Kurian, G. Fielding , C. Ren , , New York University School of Medicine, New York, NY;

ABSTRACT BODY:

Background: Many mild-to-moderately obese individuals (BMI<40) suffer from serious diseases related to their obesity. Surgery has proven effective in this population, but little is known about the quantitative relationship between the percent excess weight loss (%EWL) and the resolution of co-morbidities.

Methods: Between 2004 and 2006, 50 patients with BMI 30-40 underwent laparoscopic adjustable gastric banding (LAGB). Data on all patients were collected prospectively and entered into an electronic registry. Dynamic Bayesian Analysis was performed (using the software at http://www.minituba.org), to yield a conditional probability table for %EWL and co-morbidity status (which was recorded as a binary, either 'improved/resolved' or 'unchanged/aggravated').

Results: Mean preop age was 46.1 years (23-66) and mean preop BMI was 35.2 kg/m2 (32.6-37.7). All of the patients suffered from at least one obesity-related comorbidity. Mean %EWL was 41.4±16.0, 59.1±19.4, and 61.4±25.2, at 0.5, 1, and 2 years, respectively. Our defined end-point for the Bayesian Analysis was the minimum %EWL (as an interval of 5 units) required to achieve the maximum probability of resolving or improving the comorbidity. As such, for diabetes, a %EWL of 20-25 yielded the maximum of 83.3% resolution-or-improvement rate. For dyslipidemia, a %EWL of 30-35 yielded the maximum of 70% resolution rate. For HTN, a %EWL of 25-30 yielded the maximum of 75%, and for obstructive sleep apnea, a %EWL of 30-35 yielded the maximum of 75%.

Conclusion: %EWL < 50 (and as little as 20%) is sufficient to deliver substantial improvement or even resolution of obesity-related comorbidities.

ABSTRACT FINAL ID: PL-18;

TITLE: Predictive Factors of Success after Gastric Banding: A Nationwide Survey on the Role of Patients' Behavior and Center Activity.

AUTHORS/INSTITUTIONS: J. Chevallier, Surgery, Hôpital Européen Georges Pompidou, Paris, FRANCE; M. Païta, M. Marty, , Caisse Nationale d'Assurance Maladie, CNAM-TS, Paris, FRANCE; A. Basdevant, , AP-HP Pitié-Salpétrière, Service de Nutrition, Hôtel-Dieu , Paris, Université Paris 6. Inserm , Nutriomique u755, Paris, FRANCE; K. Slim, , Service de chirurgie viscérale, CHU , Clermont-Ferrand, FRANCE;

ABSTRACT BODY:

Background: Data on clinical trials generally reflect the experience of skilled obesity centers. Little is known about the current practice at a nationwide level. The present study analyses the outcome of all gastric banding (GB) procedures consecutively performed in two months, as registered by the French National Medical Insurance Service (CNAM) and focuses on predictive factors of success with follow-up at one and two years.

Methods: Data of all consecutive 1080 GB performed in France in December 2002 and January 2003 were collected independently by consultants of the CNAM. EWL > 50 % was considered a "success " and compared to 15 parameters with Chi2 tests and a backstep logistic regression .

Results: : for gastric banding significant differences in EWL were found with five data: age < 40 ys ($p<0.01$), initial BMI < 50 kg / m2 ($p< 0.001$); experience of the team > 2 procedures per week ($p< 0.01$), recovery of physical activity ($p<0.001$) and change in eating habits ($p< 0.001$). Being operated by a team with a surgical activity over 15 bariatric procedures / 2 months doubles the chance of success as compared to patients operated by teams having performed 1 or 2 procedures and decreases the one- and two-year's complication rate.

Conclusion: This nationwide survey shows the best profile for a success after gastric banding . It emphasizes that obesity surgery requires experience of the surgical team and a multi-disciplinary approach to improve behavioral changes and choose the optimal procedure at first in order to prevent challenging reoperations.

ABSTRACT FINAL ID: PL-19;

TITLE: Management of Megaesophagus after Gastric Banding for Morbid Obesity

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

ABSTRACT BODY:

Background: Laparoscopic adjustable gastric banding (LAGB) can impair esophageal peristalsis and cause relaxation of the lower esophageal sphincter (LES), possibly leading to esophageal dilatation. The aim of this study was to determine the incidence, management, and use of preoperative manometry in megaesophagus as a late complication after LAGB.

Methods: We performed a retrospective review of a prospectively collected database; 257 patients underwent LAGB between January 2002 and December 2006. The incidence of megaesophagus, preoperative esophageal manometry results, the use of upper gastrointestinal (UGI) series, and patient management were analyzed.

Results: Five patients (1.9%) presented with megaesophagus after LAGB. All 5 patients presented with symptoms of gastroesophageal reflux disease and subsequently underwent diagnostic UGI. The mean age was 54.5 (range: 30-76) years and the male:female ratio was 2:3. The mean preoperative weight was 127.1 (range: 112.7-145.9) Kg, while the BMI was 43.2 (range 41-49) kg/m2.The mean time of postoperative megaesophagus development was 32 (range: 24-36) months. Preoperative esophageal manometry was normal in 4 patients while one patient showed a nonspecific motility disorder. Complete resolution of the megaesophagus was achieved in all patients after gastric band removal.

Conclusion: Megaesophagus may be a late complication after LAGB. Normal preoperative manometry is not predictive of outcome. The treatment of megaesophagus caused by LAGB is initial observation followed by gastric band removal if there is no radiographic resolution. Band removal affords complete resolution of this abnormality.

ABSTRACT FINAL ID: PL-20;

TITLE: Laparoscopic Adjustable Gastric Banding Does Not Cause Esophageal Dysmotility

AUTHORS/INSTITUTIONS: V. Gorodner, C. Galvani, A.S. Gallo, , University of Illinois at Chicago, Chicago, IL; S. Horgan, , University of California San Diego, San Diego, CA;

ABSTRACT BODY:

Background: Esophageal dilatation and dysmotility have been proposed as a potential complication of laparoscopic gastric banding (LAGB). The effect of the operation on the esophageal motility remains still uncertain. We hypothesized that: a) esophageal dysmotility after LAGB does not occur; b) esophageal manometry (EM) and barium esophagogram (BE) are both required pre and postoperatively to rule out dismotility; and c) fluoroscopic guidance is mandatory during band adjustment.

Methods: Between 1/01 and 10/06, 829 patients underwent LAGB. Preoperatively EM and BE were performed. Forty patients underwent repeat EM at 1 year. BE was consistently performed during adjustments.

Results: 829 pts underwent EM before LAGB: LESP was 16±7 mmHg; 56% had normal peristalsis, 37% NSEMD, 4% HP and 3% IEM; DEA was 83±38 mmHg. Of the 40 pts who had EM at 1 year, 85% were women, age 41±42 years, preoperative BMI was 47±47 kg/m2. At 17±14 months the % excess body weight loss (% EBWL) was 40±39. Postoperatively, 4 pts (18%) showed esophageal dilatation on esophagram. The results of the manometry were as follows:

Conclusion: Our study suggested that, a) LAGB does not adversely affect esophageal motility; b) esophageal manometry is required to rule out esophageal motility disorders after LAGB; and c) in spite of using fluoroscopic guidance during band adjustments, esophageal dilatation still can occur

ABSTRACT FINAL ID: PL-21;

TITLE: Pre-Laparoscopic Banding Group Education in Medicaid Population;
Does it Really Make a Difference?

AUTHORS/INSTITUTIONS: E.M. McCarthy, S. Bonomo, , Mercy Hospital and Medical Center, Chicago, IL; J.A. Talarico, R.E. Lutfi, , University of Illinois at Chicago, Chicago, IL; A. Torquati, , Duke University, Durham, NC;

ABSTRACT BODY:

Background: The impact of group education classes before Laparoscopic Banding (LB) procedure is not well defined. We hypothesized that in Medicaid population, completion of a Standardized 12-week Multidisciplinary Preoperative Program (SMPP) would significantly improve preoperative and early postoperative weight loss.

Methods: Prospectively collected database of 157 patients who underwent LB was retrospectively reviewed. All surgeries were performed at a University affiliated Community Hospital between 2006 and 2007. Patients were encouraged to participate in the SMPP, which includes medical, psychological, and nutritional interventions. Patients were divided into two groups based on attendance of at least 50% of SMPP classes; compliant group (n=78) attending >6 classes and noncompliant (n=79) attending ≤6 classes. These two groups were then compared using t-test in SPSS.

Results: There was no significant difference in mean baseline excess body weight (75.7 +/- 20.6 vs. 78.5 +/- 21 kg) or mean baseline BMI (48.5 +/- 7.6 vs. 49.2 +/- 7.2 kg/m2) between the two groups. Preoperative excess weight loss (EWL) was significantly higher in SMPP compliant group than in the noncompliant group (9.1+/- 5.7 vs. 5.8 +/- 4.5%; p=0.001). At 6-month follow-up the EWL was significantly higher in the SMPP compliant group than in the SMPP noncompliant (32.9 +/- 15.5 vs. 26.3 +/- 10.2%; p=0.03).

Conclusion: In a Medicaid population, implementation of an intensive preoperative SMPP results in a significant improvement in preoperative and early postoperative weight loss.

ABSTRACT FINAL ID: PL-22;

TITLE: ELEVATED PARATHYROID HORMONE IS NOT A MARKER FOR PREOPERATIVE BONE LOSS IN MORBIDLY OBESE WOMEN PRESENTING FOR GASTRIC BYPASS

AUTHORS/INSTITUTIONS: S.J. Graewin, D.A. Andris, P.R. Nuttleman, J.R. Wallace, Surgery, Medical College of Wisconsin, Milwaukee, WI;

ABSTRACT BODY:

Background: Parathyroid hormone (Pth) maintains calcium homeostasis in hypovitaminosis D by resorption of calcium from bone. 30.2% of patients (pts) presenting for gastric bypass have secondary hyperparathyroidism, and are at risk of osteopenia after surgery due to malabsorption of vitamin D (Vit D) and calcium (Ca). Because hyperparathyroidism has deleterious effects on bone, we evaluated patients with elevated preoperative Pth levels for preoperative bone loss.

Methods: 112 obese women presenting for laparoscopic gastric bypass from 4/05-4/07 were placed into 2 groups- elevated Pth (>72 pg/mL; n=23) and normal Pth (<72 pg/mL; n=89). Pts had preoperative BMI, Vit D, and Ca evaluations. Bone mineral density (BMD) and t scores of the spine, hip, femur, and trochanter were found by dual-energy x-ray absorptiometry (DEXA). Due to DEXA limits, pts over 325 lbs could not be evaluated. Student's t and multiple linear regression tests were performed.

Results: Age, race, and BMI were similar in each subset. While the elevated Pth group had lower BMD and t scores overall, there were no statistically significant differences between groups for the BMD of the spine (1.25 vs 1.30, p=0.12), hip (1.13 vs 1.16, p=0.23), femur (1.04 vs 1.09, p=0.08) nor trochanter (0.92 vs 0.93, p=0.85), nor for the respective t scores. Multivariate linear regression of the spine, hip, femur, and trochanter BMD and t scores with preoperative Pth, Vit D, and Ca levels demonstrated a correlation of elevated Pth with decreased trochanteric t scores (coefficient=-0.02, p=0.002).

Conclusion: These data suggest that 1) Obese women with elevated preoperative Pth do not have measurable preoperative bone loss relative to pts with normal Pth levels. 2) Elevated Pth decreases trochanteric bone density and identifies patients at risk for bone loss.

ABSTRACT FINAL ID: PL-23;

TITLE: Analysis of Iron Levels in Male Bariatric Patients

AUTHORS/INSTITUTIONS: P.T. Hallowell, J.J. Jasper, K.N. Graf, Surgery, University Hospitals Case Medical Center, Cleveland, OH; T.A. Stellato, M.M. Schuster, A.A. Robinson, , Case Western Reserve University/ University Hospitals Case Medical Center, Cleveland, OH;

ABSTRACT BODY:

Background: Limited data exists concerning iron status in male patients undergoing RNY gastric bypass(RNY). The need for supplementation in males is undefined. Consequently we reviewed our experience to evaluate adequacy of iron levels pre and post RNY.

Methods: A retrospective review was performed from 1998 - 2007 encompassing over 1000 patients. 140 male patients were identified. Of these, 83 patients had data adequate to analyze iron levels. Patients with BMI < 50 had a short limb gastric bypass (SL): for BMI 50 or greater a long limb bypass (LL) was performed. Iron data for pre and at defined intervals extending out to five years following RNY, were analyzed.

Results: There were 41 male patients with a SL RNY and 42 with a LL RNY. Mean BMI in the SL group was 44.9 and in the LL group 57.6.table 1.

Conclusion: Iron abnormalities are common in male RNY patients both pre and postop. These abnormalities are aggravated in patients with LL RNY. Ferritin, which is a reflection of iron storage, is in the normal range pre and postoperatively. However, average ferritin values decrease over the postop period. Hct appears to be unaffected by these changes. Iron abnormalities are well known in to occur in female bariatric patients. Our data shows iron abnormalities are similarly common in male bariatric patients mandating evaluation, surveillance, and appropriate supplementation in all patients undergoing RNY gastric bypass.

ABSTRACT FINAL ID: PL-24;

TITLE: Detailed Description of Early Resolution of Metabolic Syndrome following Laparoscopic Roux-en-Y Gastric Bypass (LRYGB)

AUTHORS/INSTITUTIONS: W.D. Fuller, J.J. Rasmussen, M.R. Ali, Gastrointestinal Surgery, University of California Davis Medical Center, Sacramento, CA;

ABSTRACT BODY:

Background: Previous outcome research in bariatric surgery has been unable to document quantitative changes in co-morbidities associated with obesity due to a lack of a standardized instrument to grade severity. We report a detailed description of the early resolution of metabolic syndrome using our novel scheme for assessing co-morbidities.

Methods: Co-morbidity data were prospectively collected on 827 patients who underwent LRYGB over a four year period utilizing the Assessment of Obesity-Related Co-morbidities (AORC) scale. This scale assigns a score (0 to 5) for the major medical conditions associated with obesity. Co-morbid conditions of obesity and biochemical markers of metabolic syndrome were examined pre-operatively and at follow-up appointments.

Results: Seventy-two (8.7%) of the 827 LRYGB patients met AORC criteria for metabolic syndrome (AORC score > 2 in diabetes mellitus (DM), hypertension (HTN), and dyslipidemia (DYS)). Overall, 75% of patients with DM, 69.4% of patients with HTN, and 76.4% of patients with DYS showed improvement in these co-morbidities (decrease from pre-operative AORC score) within two months after surgery. Within this time period, DM, HTN, and DYS resolved in 65.3%, 51.4%, and 73.6% of patients, respectively. Concurrent decreases in hemoglobin A1C, serum lipids, and blood pressure were observed ($p<0.05$). Patients exhibited a modest excess body weight loss of 27.7% over this time period. However, mean AORC score for the whole group decreased significantly for DM, DYS, and HTN ($p<0.001$) before significant weight loss occurred (Figure).

Conclusion: We have demonstrated a new and novel approach to categorize and more accurately define the magnitude of improvement in co-morbidities following LRYGB. This improvement precedes the weight loss effects on metabolic syndrome.

ABSTRACT FINAL ID: PL-25;

TITLE: Physical Activity and Physical Function Changes in Obese Individuals Following Gastric Bypass Surgery.

AUTHORS/INSTITUTIONS: D. Josbeno, J.M. Jakicic, A.L. Hergenroeder, , University of Pittsburgh, Pittsburgh, PA; G.M. Eid, , Veterans Affair Pittsburgh Healthcare System, Pittsburgh, PA;

ABSTRACT BODY:

Background: Little is known about the change in physical activity (PA) and physical function (PF) following gastric bypass surgery (GBS). This study examines PA, PF and health related quality of life in patients pre and post GBS.

Methods: 20 successive patients were assessed prior to and 3 months post GBS. PA evaluations included 7-day physical activity recall (PAR) and a 7-day pedometer diary. PF was assessed using the 6 minute walk test (6MWT), Short Physical Performance Battery (SPPB) and SF-36 physical function subscale. The numeric pain rating scale (NPRS) and SF-36 questionnaire were also administered. No additional PA interventions were provided.

Results: No significant differences were found for the PAR (191.1±22.8 min/wk to 231.7±238 min/wk) (n=18). There was a significant increase in average daily steps (4621±3701 steps/day to 7370± 4240 steps/day) (n=11). Significant improvements were observed for the 6MWT (1286±203.7 ft to 1465±135.8 ft) (n=17), SF-36 physical function subscale (65± 18.5 to 84.1±19.9), and the total SF-36 (38.7±23.6 to 89.7±15.5). NPRS was significantly reduced for the low back (3.5±1.8 to 1.7±2.6), knee (2.4±2.5 to 1.0±1.4), and foot/ankle (2.3±2.8 to .9±2.1). There was no significant change in SPPB.

Conclusion: At 3 months post GBS; there was a trend towards increase levels of PA and PF along with significant reduction of back and joint pain. Thus, improved mobility and health-related quality of life constitute additional benefits of surgical weight loss. Long-term follow-up would further enhance our understanding of the effect of GBS on post-operative mobility and PF.

ABSTRACT FINAL ID: PL-26;

TITLE: Improvement and Stabilization of Chronic Renal Disease Following Gastric Bypass

AUTHORS/INSTITUTIONS: J.W. Alexander, H.R. Goodman, L.R. Martin Hawver, , Center for Surgical Weight Loss, University of Cincinnati College of Medicine, and The Christ Hospital, Cincinnati, OH; M.A. Cardi, , The Christ Hospital, Cincinnati, OH;

ABSTRACT BODY:

Background: Morbid obesity can be associated with deterioration of renal function. However, it has not been established whether massive weight loss could alter the course of established renal disease.

Methods: In a series of 42 patients with established renal disease who had a gastric bypass, 9 had resolution, improvement or stabilization of their renal disease. Two of these patients were already on dialysis, and the remaining 7 patients had a gastric bypass in anticipation of the need for a kidney transplant. Their average age at the time of gastric bypass was 43.0 ± 4.3, and their mean BMI was 48.9 ± 1.9. Length of stay in the hospital was 3.8 ± 0.6 days. Five of the 9 patients had a primary diagnosis of focal segmental glomerulosclerosis (FSGS), 2 had membranous glomerulonephritis and 2 had diabetes.

Results: There were no leaks, splenic injury or transfusions, no infections starting in the deep parts of the wound, and no patient had a death or serious complication. One patient had biopsy-proven membranous glomerulonephritis that completely resolved and is now 8 years postoperative. Both dialysis patients were able to discontinue dialysis for 27 months and 7 months respectively. The remaining patients have stable renal function 2-5 years postoperatively.

Conclusion: In some patients with chronic renal disease, gastric bypass results in stabilization or improvement of their kidney function. Massive weight loss seems to be most effective in patients with FSGS.

ABSTRACT FINAL ID: PL-27;

TITLE: The Effect of Laparoscopic Roux-en-Y Gastric Bypass on Urinary Incontinence in Morbidly Obese Women

AUTHORS/INSTITUTIONS: A.M. Carlin, N. Seleno, T. Hoffman, Department of Surgery, Henry Ford Hospital, Detroit, MI; R. Laungani , , Vattikuti Urology Institute, Henry Ford Hospital, Detroit, MI;

ABSTRACT BODY:

Background: Morbid obesity is an independent risk factor for urinary incontinence (UI) which tends to be underreported due to its embarrassing nature. A validated, reliable, self-administered, easy-to-use questionnaire was utilized to determine the effect of laparoscopic Roux-en-Y gastric bypass (GBP) surgery on the prevalence of UI in morbidly obese women.

Methods: We prospectively evaluated 470 morbidly obese women seeking bariatric surgery with the International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF). The ICIQ-SF was given to female patients at their initial bariatric surgical consultation and at 3 and 12 months after laparoscopic GBP to assess both UI symptoms and quality of life (QOL). Data are expressed as mean ± standard deviation.

Results: The preoperative prevalence of UI was 66% (309) which included 33% stress, 21% urge, and 46% mixed. Of the 309 patients with UI the ICIQ-SF total symptom score was 7.9 ± 5 and QOL score was 3.0 ± 3. Of the 58 patients who underwent laparoscopic GBP and completed a follow-up ICIQ-SF there was a postoperative reduction in total symptom score from 7.6 ± 4 to 2.5 ± 4 ($p < 0.001$) and improvement in QOL score from 3.2 ± 3 to 0.8 ± 2 ($p < 0.001$). UI resolved in 54% and 73% of patients at 3 and 12 months respectively after laparoscopic GBP. Improvement in UI was found within 3 months after GBP with as little as 30 pounds of weight loss. Overall UI improved in 88% of patients.

Conclusion: Urinary incontinence is a very common comorbidity in preoperative bariatric surgery patients prevalent in two-thirds of morbidly obese females. Laparoscopic GBP significantly improves UI symptoms and QOL.

ABSTRACT FINAL ID: PL-28;

TITLE: Use of the 25-mm OrVil Device Significantly Reduces Gastrojejunostomy Stricture Rates for Laparoscopic Roux-en-Y Gastric Bypass

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: When a circular stapler is used, strictures of the gastro-jejunostomy (GJ) anastomosis after laparoscopic Roux-en-Y gastric bypass (LRYGB) remain the most common complication. The objective of this study is to evaluate the rate of strictures with the use of a 25mm OrVil™ device.

Methods: All patients who underwent a LRYGB from May 2006 to October 2007 at a newly formed high volume bariatric surgery program were retrospectively reviewed. Data was collected prospectively and reviewed retrospectively. Patient demographics and peri-operative outcomes were recorded.

Results: Three hundred twenty five consecutive laparoscopic gastric bypasses were reviewed. Two separate techniques were used: 1) trans-gastric 25mm PPCEEA™ (n=245) or 2) 25mm OrVil™ Device and DST Series™ EEA™ (n=80). Patient sub-sets were similar in age, BMI and over-all co-morbidities.

There were no leaks at the GJ. Overall re-operative rate was 0.6% with no re-operations related to the GJ. No patients required a blood transfusion secondary to the GJ. Stricture rates were significantly lower using the 25mm OrVil™ device (1/80, 1.25%) compared to the trans-gastric 25mm (29/245, 11.7% ($p < 0.003$)).

Conclusion: The 25mm OrVil™ device significantly reduces stricture rates following LRYGB without increasing other morbidities related to the GJ during LRYGB.

ABSTRACT FINAL ID: PL-29;

TITLE: Size Really Does Matter - Results of a Gastrojejeunal Anastomotic Technique Designed to Reduce Stricture Bypass

AUTHORS/INSTITUTIONS: J.P. Sczepaniak, M.L. Owens, , Coastal Obesity, San Pedro, CA;

ABSTRACT BODY:

Background: Differences in stricture rates following differently sized gastrojejeunostomies are well documented in the literature. To our knowledge the differences after gastric bypass have not been clearly related to post-operative weight loss.

Methods: 124 anastomoses were accomplished with the circular stapler (CSA) followed by 100 anastomoses with the linear stapler technique (LSA): Age, gender and weights were not significantly different. Because the opening in the pouch and small bowel was sutured closed, the precise size of the anastomosis made with the linear stapler could not be determined, but with one exception, it always readily admitted a 32-Fr lavage tube which was used to test for leaks. Both weight loss trends were fit with a one-phase exponential non-linear regression analysis. The resulting curves were compared using an f-test.

Results: The weight loss trend for the LSA showed a significant difference compared to the CSA trend $p<0.001$. The BMI values were compared at 6, 12, and 17 months: Table 1.

Conclusion: This study shows that the size of the anastomotic opening has a clear correlation with post-operative weight loss. A larger opening results in significantly less weight loss.

ABSTRACT FINAL ID: PL-30;

TITLE: Lengths of Roux and Common Channel Limbs Do Not Correlate with Weight Loss in Patients Undergoing Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: T.S. Helling, Surgery, Memorial Medical Center, Johnstown, PA;

ABSTRACT BODY:

Background: Roux-en-Y gastric bypass (RYGB) produces weight loss in the morbidly obese. The length of the Roux limb (RL) or common channel (CC) may influence weight loss

Methods: We adjusted RL and CC based on total length of intestine in a series of open RYGB (RL = ⅓ or ½ total length). Bilio-pancreatic limbs remained constant at 50-70 cm. Patients were assessed at 12 and 24 months for total weight loss (WL), %WL, %excess WL. We sought to determine if length of RL or CC correlated with WL parameters

Results: Sixty-two patients were followed for at least 12 months and 26 for 24 months. Preoperative BMI was 61 + 13 kg/m2. Lengths of RL ranged from 94 – 300 cm and CC 190 – 590 cm. Overall %WL at 12 and 24 months was 34 + 9 and 41 + 10. Overall %excess WL at 12 and 24 months was 56 + 16 and 65 + 16. For RL length, the correlation coefficients for total WL, %WL, and %excess WL were 0.23982, 0.09181, 0.03168 (12 months) and 0.06247, -0.08574, -0.18390 (24 months) (p = NS). For CC length the correlation coefficients for like measures were 0.04223, 0.06535, 0.15149 (12 months) and 0.09632, 0.19972, 0.06604 (24 months) (p = NS).

Conclusion: From these data we conclude that RLs of 94 to 300 cm and CCs of 190 –590 cm had no effect on subsequent weight loss measured up to 24 months. RYGB with RLs of at least 100cm are adequate to produce desired weight loss in bariatric patients.

ABSTRACT FINAL ID: PL-31;

TITLE: Five-Year Outcome with Gastric Bypass: Roux Limb-Length Makes a Difference

AUTHORS/INSTITUTIONS: J.J. Gleysteen, Surgery, University of Alabama at Birmingham, Birmingham, AL;

ABSTRACT BODY:

Background: Surgical reports indicate that longer Roux limbs (150 cm) have greater or no effect on long-term weight loss in super-obese patients (≥50 BMI), and little effect in less obese patients.

Methods: Weight loss outcome through 5 years was compared in three sequential groups of patients operated by one surgeon in which Roux limb-lengths changed from 41-61 cm, to 130-160 cm, then to one-third of measured small bowel length (115-250 cm). Comparison between groups (1-3) and body sizes (BMI) were made using two way analysis of variance (ANOVA); all interaction terms were NS. The operations were alike in all other respects; patients were followed through clinics or telephone contacts for at least 5 years.

Results: Expressed in Table below.

Conclusion: 1) BMI loss and Kilogram weight loss results were similar. 2) The larger BMI group always lost more weight than lower BMI. 3) Patients with short Roux's lost less weight than with longer Roux's, regardless of BMI. 4) No difference in weight loss was seen between Groups 2 and 3, but there was no difference in mean Roux lengths between these groups.

ABSTRACT FINAL ID: PL-32;

TITLE: Laparoscopic Biliopancreatic Diversion (LBPD) Without Gastrectomy - Five-Year Follow-up

AUTHORS/INSTITUTIONS: C.E. Domene, P. Volpe, Surgery, CIMA NUTRO, Sao Paulo, Sao Paulo, BRAZIL;

ABSTRACT BODY:

Background: BPD has been used as one of the options for morbid obesity treatment since 70's. We began operating on from 2001 through laparoscopic approach, performing modified standard BPD, preserving distal gastric pouch and avoiding cholecystectomy, in order to decrease surgical morbidity.

Methods: Five throcar technique, by stapling proximal stomach 15 cm distal to esophago-gastric transition, leaving a 300-cc proximal pouch. This pouch is pushed through transverse mesocolon. A 250-cm (alimentary limb) large distal small bowel is anastomosed to the gastric pouch, and excluded jejunum stapled 60 cm from ileocecal valve (common limb). Both mesenteric defects are closed with stitches.

Results: 1045 patients were operated on from 2001 to 2007. There were three deceases. There was a very low short-term morbidity, with only two early reoperations. 11 patients were reoperated to enlarge common limb after 12,3 months (m). There was cure of most comorbidities, 94% of the diabetic patients were cured after 5-year follow-up. There was 4,5% of hypoproteinemy and 8,4% of anemia, treated with clinical measures. BMI decreased from 48,5 to 29,3, maintained after more than 5 years. 19,5% of the patients were operated on for cholelythiasis.

Conclusion: LBPD is a safe and effective procedure to control morbid obesity and most comorbidities after 5 years of follow-up, with good clinical control of metabolic and nutritional problems.

ABSTRACT FINAL ID: PL-33;

TITLE: Sleeve Gastrectomy with Enteral Bypass (SGEBP), New Technique for Morbid Obesity: 3 Years Follow-up

AUTHORS/INSTITUTIONS: M. Alamo, J. Gellona, , Hospital Dipreca, Santiago, CHILE; C. Sepulveda, , Universidad Diego Portales, Santiago, CHILE;

ABSTRACT BODY:

Background: The authors present a new restrictive and malabsorptive operation for treatment of morbid obesity, called Sleeve Gastrectomy with Enteral Bypass (SGEBP)

Methods: From Feb 2004 to July 2007, 91 patients with BMI >40 kg/m2 or >35 kg/m2 with co-morbidities underwent SGEBP via laparoscopy or laparotomy. The technique consisted in creation of gastric tube preserving pylorus (Sleeve Gastrectomy), and a Roux-en-Y limb of 300 cm of the proximal small bowel starting 30 or 40 cm from the ligament of Treitz (enteral bypass). Excess weight loss (EWL), BMI, complications and co-morbidities were assessed.

Results: BMI and average preoperative weight were 40,6 kg/m2 and 108,4 kg, respectively. At 36 months postoperatively, BMI and average weight were 26,6 kg/m2 and 73,2 kg, respectively, with EWL 71.5%. None of the patients presented dumping. Improvement in co-morbidities was >90%. No mayor complication was reported, diferent than those described in others bariatric techniques (hemoperitoneum, cholelytiasis, gastric tube leak, etc.). None of the patients present hepatic insuficiency or malnutrition. There was no mortality.

Conclusion: SGEBP has thus far been safe and effective, with at least the same results as other bariatric operations, but with many advantages, such as lack of Dumping. Because a duodenal bypass is not performed, it allows physiologic absorption of iron and diagnostic and/or therapeutic access to the ampulla of Vater.
However the main advantage is the better results compared to Sleeve Gastrectomy alone.

ABSTRACT FINAL ID: PL-34;

TITLE: Two-Year Follow-up of Sleeve Gastrectomy as a Final Approach for Morbid Obesity

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

ABSTRACT BODY:

Background: In previous publications we demonstrated the safety and short-term efficacy of laparoscopic sleeve gastrectomy (LSG) for the treatment of morbid obesity (MO). This study aimed to assess the long-term efficacy of this technique.

Methods: We performed a retrospective review of a prospectively collected database. Between November 2004 and January 2007, 130 patients underwent LSG as a final approach for MO. Data included patient demographics, complications, and weight loss at 6, 12, 18, and 24 months after the procedure. All the surgeries were completed laparoscopically.

Results: The mean age was 45.6 (range: 12-79) years while the mean body mass index (BMI) was 43.2 (range: 30.2-75.4) kg/m2. Postoperatively, one patient (0.7%) had a leak, four (2.8%) developed a trocar site infection, three (2.1%) complained of gastroesophageal reflux symptoms, three (2.1 %) developed symptomatic gallstones and one (0.7%) presented with a trocar site hernia. The mean weight loss was 31.2, 37.4, 9.5 and 41.7 Kg at 6, 12, 18 and 24 months, respectively, while the mean BMI decreased to 32.8, 29.5, 28 and 27.1 kg/m2 at 6, 12 18 and 24 months, respectively. %EWL was 50.8, 62.2, 64.4 and 67.9 at the same evaluation times, respectively; no mortality was registered.

Conclusion: LSG is a safe and effective treatment for morbid obesity with a low incidence of long-term complications and acceptable excess body weight loss at 2 years postoperatively.

ABSTRACT FINAL ID: PL-35;

TITLE: Treatment of Vitamin D Depletion Following Roux-en-Y Gastric Bypass Surgery: A Randimized Prospective Clinical Trial

AUTHORS/INSTITUTIONS: A.M. Carlin, D.S. Rao, K.M. Yager, N.J. Parikh, A. Kapke, Surgery, Henry Ford Hospital, Detroit, MI;

ABSTRACT BODY:

Background: High prevalence (60%) of vitamin D (VitD) depletion, defined as serum 25-hydroxyvitamin D (25-OHD) level ≤ 20 ng/ml, exists in preoperative morbidly obese patients. Despite daily supplementation with 800 IU VitD and 1500 mg calcium after gastric bypass (GBP), VitD depletion persists in almost half (44%). The optimal management of VitD depletion after GBP and potential benefits of treatment are currently unknown.

Methods: Sixty VitD depleted morbidly obese patients were randomly assigned to receive either 50,000 IU of VitD weekly (Group I; n = 30) or no additional VitD (Group II; n = 30) after GBP. All patients received 800 IU VitD and 1500 mg calcium daily. Serum calcium, parathyroid hormone (PTH), 25-OHD, bone specific alkaline phosphatase (BSAP), urinary N-telopeptide (NTX) and bone mineral density (BMD) were measured preoperatively and 1 year after GBP.

Results: One year after GBP VitD depletion and mean 25-OHD improved in Group I (19%, 37.6 ng/ml) versus Group II (84%, 15.2 ng/ml) ($p < 0.001$). A 33% lower bone loss was seen at the proximal hip in Group I ($p = 0.043$). No other differences in BMD, calcium or PTH were observed. NTX and BSAP increased significantly in both groups. Resolution of hypertension was greater among patients in Group I (75% vs. 32%; $p = 0.029$). No serious adverse effects occurred from weekly high dose VitD therapy.

Conclusion: Weekly high doses of VitD after GBP are safe and correct VitD depletion in most patients. There was significant attenuation of cortical bone loss in the hip and resolution of hypertension following Vit D therapy.

ABSTRACT FINAL ID: PL-36;

TITLE: The Status of Venous Thromboembolism (VTE) Prophylaxis Among Bariatric Surgeons: Have We Changed Our Practice During The Last Decade?

AUTHORS/INSTITUTIONS: C.A. Barba, , Connecticut Surgeons, West Hartford, CT; C. Harrington, , Hospital of Central Connecticut, New Britain, CT; M. Loewen, , Saint Fracis Hospital, Hartford, CT;

ABSTRACT BODY:

Background: VTE is considered one of the principal causes of morbidity and mortality in patients requiring bariatric surgery. A survey to all members of the ASBS was conducted in 1998 and published in 2000 Obesity Surgery.

Methods: A survey was repeated to all physicians, members of ASBS to determine current practices for VTE prophylaxis. Results were compared to previous study.

Results: Thirty-five% of the members (332) completed the survey. The number of cases/year per surgeon was almost twice those in 1998 (145 vs. 85). Laparoscopic Gastric-bypass (GBP) has replaced Open GBP as the most common procedure performed. Lapband is now the second. Majority of surgeons (95%) use chemical prophylaxis to prevent VTE, but almost 60% preferred low molecular weight heparin as compared to 13 % in 1998. Over 60% of bariatric surgeons discharged their patients with chemical prophylaxis as opposed to 12% in 1998. IVC filters for prophylaxis are considered by 55% compared to only 7% in1998. The incidence of DVT was reported significantly lower in 2007 (2.635 vs. 0.93) as well as PE (0.95 vs. .75%). Almost 50% of surgeons still report at least one fatality due to VTE complications.

Conclusion: Chemical prophylaxis for VTE with some type of heparin is the standard of care for patients undergoing bariatric surgery. Low molecular heparin is now used by 2/3 of ASMBS members. The majority of surgeons discharge patients home with heparin and many considered the use of IVC filters for VTE prophylaxis. The latter could be a principal reason for the reduction in the reported incidence of DVT and PE. Our findings support the ASMBS position statement regarding this problem. Research is necessary to find adequate dosage and duration of prophylaxis.

ABSTRACT FINAL ID: PL-37;

TITLE: Prophylactic Measures to Reduce the Risk of Venous Thromboembolism in Bariatric Surgery: Chemoprophylaxis Added to Sequential Compression May Not Reduce This Risk When Compared to Sequential Compression Alone.

AUTHORS/INSTITUTIONS: M. Gagner, F. Selzer, G. Strain, M. Bessler, A.P. Courcoulas, G. Dakin, D.R. Flum, J.A. Hunter, W.B. Inabnet, J. Mitchell, A. Pomp, , LABS Consortium, Washington, DC;

ABSTRACT BODY:

Background: The use of sequential compression devices on lower extremities perioperatively and early ambulation reduce venous thromboembolism (VTE) postoperatively. Anti-coagulation medication is recommended by ASMBS to reduce VTE risk. This study examines 30 day post-op VTE or death among bariatric surgery patients who had sequential compression alone (SEQUEN) or with anticoagulation (ANTICOAG).

Methods: LABS participants from 10 centers in the US who underwent their first bariatric surgery between 3/2005 and 10/2007 comprise the study group. We examined 30-day incidence of VTE, defined as DVT or PE, and mortality.

Results: Of 3,539 patients, 370 (10%) received sequential compression alone, while the others also received anticoagulation therapy. The two groups were similar in age, race, ethnicity, and BMI. There was a significantly higher percentage of males (30% vs. 20%, $p<0.0001$) and smokers (7% vs. 3%, $p=0.003$) in the SEQUEN group. The prevalence of hypertension, diabetes, congestive heart failure, history of VTE , vena cava filter, ischemic heart disease, and pulmonary hypertension at baseline, were not significantly different. The SEQUEN group had longer operative times (207 vs. 169 min, p= <.0001). The two groups were similar in % of re-hospitalization and re-operation. Open surgery was associated with 1.8% of VTE, and laparoscopic surgery with 0.4%. After adjusting for sex, current smoking, length of operation, and history of VTE, there was not a significant difference between groups in the combined incidence of DVT/PE/mortality (1.0% in ANTICOAG versus 0.4% in SEQUEN, $p=0.25$).

Conclusion: The overall incidence of VTE or death was small (1%). The addition of anticoagulation to the use of sequential compression devices may not lower the rate of VTE following bariatric surgery. Further study of this topic is warranted (sample size).

ABSTRACT FINAL ID: PL-38;

TITLE: Low Surgical Volumes in Hospitals That Meet Surgical Review Corporation (SRC) Bariatric Surgery Center of Excellence (BSCOE) Minimum Standards Do Not Demonstrate an Adverse Impact on Surgical Outcomes

AUTHORS/INSTITUTIONS: C.A. Learn, G.D. Hughes, G.M. Pratt, Research Division, Surgical Review Corporation, Raleigh, NC; E.J. DeMaria, , Department of Surgery, Duke University Medical Center, Durham, NC; H.J. Sugerman, , Emeritus Professor, Virginia Commonwealth University, Richmond, VA; B.L. Clark, , Clark & Associates Statistical Consulting, 201 Gillespie Drive, Suite 8205, Franklin, TN; W. Pories, , Department of Surgery, Brody School of Medicine, East Carolina University, Greenville, NC;

ABSTRACT BODY:

Background: Currently, there are conflicting reports regarding the relationship between surgical volume and outcomes for bariatric surgery. To further investigate this issue, we evaluated outcomes based on total self-reported surgical volumes for SRC BSCOE Hospitals receiving Full Approval status from August 2005 to May 2007.

Methods: We divided the 235 fully approved ASMBS BSCOE hospitals into three equally sized groups and analyzed the types of procedures, demographics and 90-day outcomes.

Results: There were 81,100 patients treated at these hospitals and included 8 types of procedures, with laparoscopic gastric bypass (60.5%), open gastric bypass (21.4%) and adjustable bands (12.5%) being the most common. Females represented 85%, most over 40 with private insurance (77%).The ratio of preference for procedure (laparoscopic over open, open over adjustable band, etc.) was relatively constant, regardless of group. Furthermore, there were no significant differences in re-admission, re-operation, or overall 90-day mortality rates between groups (Table).

Conclusion: Our data suggest that surgical outcomes of BSCOE hospitals meeting SRC credentialing standards are not stratifiable based upon center volume. The issue of outcomes from centers with fewer than 125 cases/year will require data from the ASMBS Fellows program.

ABSTRACT FINAL ID: PL-39;

TITLE: Reproductive Health Characteristics of Women Undergoing Bariatric Surgery

AUTHORS/INSTITUTIONS: G.G. Gosman, H.N. Simhan, , Department of Obstetrics, Gynecology and Reproductive Sciences, University of Pittsburgh School of Medicine, Pittsburgh, PA; W.C. King, , Department of Epidemiology, University of Pittsburgh Graduate School of Public Health, Pittsburgh, PA; A.P. Courcoulas, , Department of Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA; J.A. Hunter, , Department of General Surgery, Virginia Mason Medical Center, Seattle, WA; J.R. Pender, , Department of Surgery, East Carolina University Brody School of Medicine, Greenville, NC; B. Schrope, , Department of Surgery, Columbia University School of Medicine, New York, NY; G. Witt Strain, , Department of Surgery, Weill/Cornell College of Medicine of Cornell University, New York, NY; K.J. Steffen, , Neuropsychiatric Research Institute, Fargo, ND; D.R. Flum, , Department of Surgery, University of Washington School of Medicine, Seattle, WA;

ABSTRACT BODY:

Background: Obesity places women at increased risk for reproductive disorders, including polycystic ovary syndrome, abnormal bleeding, infertility, and pregnancy complications. However, the prevalence of reproductive problems in the pre-surgical bariatric population has not been well described.

Methods: Pre-surgery and annually thereafter, female participants in the Longitudinal Assessment of Bariatric Surgery (LABS)-2 Study complete the Reproductive Health Survey, a 20-item self-administered instrument. We report the baseline results as of October 1, 2007 (N=663).

Results: Median age was 44 years (range:19-76); median BMI was 46 kg/m2 (range:34-77); 87.3% of women were white; 66.4% of women were premenopausal. Oligomenorrhea since adolescence was reported by 30.8%. Polycystic ovary syndrome had been diagnosed in 13.5%. A history of pregnancy was reported by 77.8%; livebirth by 72.9%; more than 1 livebirth by 56%; stillbirth by 2.1%; miscarriage by 24.8%. Eighty-eight point nine percent of women who had tried to become pregnant had at least one livebirth. However, 38.3% reported infertility at some point before age 35. Future pregnancy was very important to 55.4% of 18-29 year olds and 18% of 30-44 year olds. Nine point two percent of women age 18-44 years planned to try to become pregnant within 12-24 months of surgery; while 58.0% did not want future pregnancies. Among women using contraception in the last 12 months while having sex with a man, 54.1% used high reliability methods. Among menopausal women, more than a third had moderately to extremely bothersome menopausal symptoms.

Conclusion: A considerable proportion of women seeking bariatric surgery have reproductive health concerns. Thus, bariatric surgeons and obstetrician-gynecologists are essential collaborators in the care of these patients before and after surgery.

ABSTRACT FINAL ID: PL-40;

TITLE: Does Liver Appearance Correlate with Histopathology?: A Prospective Analysis of Routine Liver Biopsies During Bariatric Surgery

AUTHORS/INSTITUTIONS: C.J. Dolce, W.L. Newcomb, J.E. Keller, K.C. Walters, J. Buckingham, H.J. Norton, B.T. Heniford, K.S. Gersin, T.S. Kuwada, Dept. of Surgery, Carolinas Medical Center, Charlotte, NC;

ABSTRACT BODY:

Background: Morbid obesity is a risk factor for nonalcoholic fatty liver disease (NAFLD). Our objective was to determine if intraoperative visual scoring of the liver correlated with liver disease seen on intraoperative liver biopsy during laparoscopic bariatric surgery.

Methods: Data was prospectively collected on 108 consecutive patients by a single surgeon undergoing laparoscopic bariatric surgery with routine liver biopsy. Intra-operatively, the liver was visually scored based on size, tan-speckling, and liver edge blunting. Videos were recorded and reviewed at a later date to determine intra- and interobserver agreement. Biopsies were graded according to the NAFLD Activity Score (NAS) and categorized into 3 groups: A) normal results, B) steatosis only, and C) advanced disease (inflammation, fibrosis, ballooning, and/or cirrhosis). Intraoperative visual scores were analyzed against liver biopsy pathology. A p-value<0.05 was considered statistically significant.

Results: 41 patients had normal results, 40 had steatosis only and 27 had advanced disease. 44 patients had mild or significant blunting of the left liver lobe. No differences in liver edge blunting were observed between the three groups (p=0.50). 31 patients had mild or significant tan-speckling on visual inspection. There was a difference in tan-speckling between groups (p=0.005). When comparing patients with advanced liver disease to patients with normal results or steatosis only, there was no difference in tan-speckling (p=0.90). 20 patients had a large-appearing liver on visual inspection. Overall, there were no differences in liver size on visual inspection between groups (p=0.43). Intraobserver agreement ranged from fair to almost perfect (size $\kappa = 0.30$, blunted $\kappa = 0.81$, tan-speckling $\kappa = 0.69$). Interobserver agreement ranged from fair to almost perfect (0.28, 0.84, 0.28).

Conclusion: Visual inspection of the liver is reproducible but does not reliably predict advanced liver disease. NAFLD is common in the bariatric population. We therefore recommend the use of a routine liver biopsy during bariatric surgery to diagnose liver disease.

ABSTRACT FINAL ID: PL-41;

TITLE: Longitudinal Mixed Models Improve The Analysis of Weight Loss Outcomes After Bariatric Surgery

AUTHORS/INSTITUTIONS: R.M. Dallal, L.E. Braitman, L.H. Hunt, Surgery, Albert Einstein Healthcare Network, Philadelphia, PA; B.B. Quebbemann, , The N.E.W. Program, Newport Beach, CA;

ABSTRACT BODY:

Background: The standard analysis of bariatric surgery weight outcomes data (using t-tests) is well known. However, these uncontrolled comparisons may yield misleading results and limit the range of research questions. Our objective was to develop a valid approach to the longitudinal analysis of weight loss outcomes after bariatric surgery using multivariable mixed models

Methods: We developed a mixed-effects model to examine weight after gastric bypass surgery while controlling for several independent variables: gender, anastomotic technique, age, race, initial weight, height and institution. We contrasted this approach with traditional uncontrolled analyses using percent excess weight loss (%EWL).

Results: 1168 gastric bypass procedures were performed between 2000 and 2006.

The average %EWL at 1, 2 and 3 years was 71%, 79%, 76%, respectively. We developed a remarkably accurate mixed model (adjusted R2= 0.99) using weight as the outcome variable and found that initial weight and gender were the only independent predictors of outcome ($p<0.001$). %EWL was substantially less accurate than weight as an outcome measure in multivariable modeling. Including initial weight and height as separate independent variables yielded a more accurate model than using initial BMI. In a traditional uncontrolled analysis, average %EWL was higher in females than males. However, average weight loss was lower, not higher, in females ($p<0.001$) in our multivariable mixed model. Height, surgical technique, race and age did not independently predict weight loss.

Conclusion: Multivariable mixed models provide more accurate analyses of weight loss than traditional methods and should be used in studies that examine repeated measurements.

ABSTRACT FINAL ID: PL-42;

TITLE: Vagal Blocking for Obesity Control (VBLOCTM): Ongoing Comparison of Weight Loss With Two Generations of an Active, Implantable Medical Device

AUTHORS/INSTITUTIONS: J. Toouli, L. Kow, , Flinders University, Adelaide, South Australia, AUSTRALIA; B. Kulseng, R. Marvik, G. Johnsen, , St. Olav's University Hospital, Trondheim, NORWAY; U. Keller, D.M. Frey, , University Hospital, Basel, SWITZERLAND; K.S. Tweden, R.R. Wilson, , EnteroMedics Inc, St. Paul, MN; C.J. Billington, , University of Minnesota, Minneapolis, MN; F.G. Moody, , University of Texas Medical School at Houston, Houston, TX;

ABSTRACT BODY:

Background: A 1st generation medical device that intermittently blocks both vagi near the esophagogastric junction has achieved excess weight loss (EWL) using laparoscopically implanted electrodes delivering high-frequency algorithms.

AIM: To compare the safety and EWL of a 2nd generation VBLOC device to that achieved with a 1st generation device

Methods: Obese subjects were implanted with the 2nd generation device at 3 centers. Two weeks later, VBLOC was initiated using optimized therapy algorithms (OTAs) based on data from an earlier trial with the 1st generation device. Subjects were followed to 6 mo for EWL, physical and lab exams and adverse events (AEs).

Results: Thirty-four subjects (mean BMI: 40.2±0.8) were implanted. EWL with the 2nd generation system at 6 mo following implant was 21.0±3.5% (n=18 subjects to date) compared with the 1st generation device, 14.2±2.2% (n=29). As programmed, the 2nd generation device delivered a greater number of OTAs as compared to the 1st generation device (78.2±7.1 vs 8.8±0.8 OTAs/day, respectively, $p<0.001$). For each generation device, a higher number of OTAs per day was associated with greater EWL ($p=0.02$). There were no deaths or unanticipated adverse device effects. There were no medically serious AEs associated with the 2nd generation device, although one subject was hospitalized overnight for a reversible, localized seroma with pain at the subcutaneous device implant site.

Conclusion: This comparison of a 2nd generation with a 1st generation vagal blocking system supports improved efficacy as measured by EWL, as well as a good safety profile. Furthermore, enhanced delivery of OTAs with this device was associated with even greater weight loss. Subjects will continue in a long-term follow-up protocol.

ABSTRACT FINAL ID: PL-43;

TITLE: Effect of Immunosuppression on Patients Undergoing Weight Loss Surgery

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

ABSTRACT BODY:

Background: Immunosuppression is considered by some surgeons to be a relative contraindication for weight loss surgery. We describe our experience with immunosuppressed patients undergoing weight loss surgery.

Methods: Retrospective review of prospectively collected data. All patients on long-term immunosuppressive medications or with a diagnosis of an immunosuppressive disease were included in the study. Data on weight loss, complications and postoperative immunosuppression were collected.

Results: From July 1999 to October 2007, 1435 patients underwent weight loss surgery at our institution. Forty patients (2.8%) were on immunosuppressive medications or/and had an immunosuppressive disease. Weight loss operations included LRYGB (n=37), laparoscopic conversion of VBG to RYGB (n=2), and laparoscopic gastric sleeve (n=1). Of these 40 patients, 26 were on immunosuppressive medications: steroids (n=12), multiple sclerosis medications (n=6), other (n=8). Immunosuppressive diseases included: rheumatoid arthritis (n=9), sarcoidosis (n=6), multiple sclerosis (n=6), psoriasis (n=5), myasthenia gravis (n=3), systemic lupus erythematosus (n=2), HIV (n=1), Sjogren's syndrome (n=1). There were no mortalities. Seven patients developed complications, four of which required surgical intervention. At a median follow-up time of 12.1 months the mean %EWL was 73%. Postoperatively, 11 of 26 patients (42%) were off immunosuppressive medications due to improvement of their underlying disease.

Conclusion: Patients on immunosuppressive medications or with a diagnosis of immunosuppressive disease can safely undergo weight loss surgery with good weight loss results. A large percentage of patients are able to discontinue immunosuppressive medications postoperatively.

ABSTRACT FINAL ID: PL-44;

TITLE: Endoluminal Procedures for Bariatric Patients: Expectations Among Bariatric Surgeons

AUTHORS/INSTITUTIONS: S.A. Brethauer, B. Chand, P.R. Schauer, General Surgery, Cleveland Clinic, Cleveland, OH; M. Bessler, , NewYork-Presbyterian Hospital/Columbia, New York, NY; A.D. Pryor, , Duke University, Durham, NC; R. Rosenthal, , Cleveland Clinic, Weston, FL; W.O. Richards, , Vanderbilt University, Nashville, TN;

ABSTRACT BODY:

Background: Primary and revisional bariatric endoluminal procedures are currently being developed. Acceptable levels of risk and weight loss for these procedures are not yet established. The aim of this study is to evaluate expectations and concerns among bariatric surgeons regarding these procedures.

Methods: The ASMBS Emerging Technologies Committee developed a questionnaire that was distributed to the ASMBS membership. Risk tolerance was assessed with comparison to commonly performed procedures (polypectomy, ERCP, laparoscopic adjustable banding (LAGB), laparoscopic gastric bypass (LRYGB)). %EWL ranges were provided to assess expectations for results one year after the procedure.

Results: 118 responses were returned. 68% of respondents have endoscopic privileges and 52% perform at least 1-2 endoscopies/week. The acceptable level of risk to achieve 10-20% EWL after primary and revisional procedures was equivalent to a therapeutic endoscopic procedure for 82% and 77% of respondents, respectively. The acceptable level of risk to achieve 30-40% EWL after primary and revisional procedures was equivalent to LAGB for 47% and 35% of respondents, respectively, and equivalent to LRYGB for 7% and 22%, respectively. 60% would find 10-30% EWL acceptable for revisional procedures. 35% would find 10-30% EWL acceptable after a primary procedure. The primary concern is unproven efficacy followed by durability, poor weight loss, availability of equipment, and procedural risk. 62% would not be willing to recommend an endoluminal procedure until efficacy is established, regardless of risk.

Conclusion: Risk tolerance and weight loss expectations among bariatric surgeons are different for primary and revisional endoscopic procedures. The majority of surgeons were unwilling to consider endoluminal procedures for their patients until efficacy is proven.

ABSTRACT FINAL ID: PL-45;

TITLE: Transoral Revision of Dilated Gastro-Jejunostomy Anastomosis After Gastric Bypass Surgery

AUTHORS/INSTITUTIONS: A. Torquati, Surgery, Duke University, Durham, NC; S.S. Kernodle, J.L. Kaiser, A.R. Attwell, , Vanderbilt University, Nashville, TN;

ABSTRACT BODY:

Background: Dilation of the gastro-jejunostomy (G-J) anastomosis has been reported in a significant proportion of patients regaining weight after RYGB. Our objective is to assess, in the first human clinical trial, the feasibility and durability of a novel Endoscopic Suturing System (ESS) in the plication of dilated G-J anastomosis post-RYGB.

Design: An open prospective feasibility single-center trial.

Setting: A medical school tertiary-care university hospital.

Methods: 20 subjects (21-55 y/o) who underwent RYGBP with > 50% EWL and were at least 20 pounds above their post-operative weight nadir underwent a screening upper-GI endoscopy. Subjects with a gastrojejunostomy anastomosis larger than 15 mm in diameter were enrolled in the study. Intervention: The ESS (Ethicon Endo-Surgery, Cincinnati OH) is a 510(k) cleared, disposable suturing system for use in gastrointestinal procedures. Under general anesthesia, the ESS was utilized via a gastroscope to plicate the GJ stoma. Durability of the ESS tissue plication was assessed via endoscopy at 1, 3, and 6 months post-procedure

Main Outcomes: Weight loss and gastrojejunostomy greater diameter at 1, 3, and 6 months post-procedure.

Results: Nine subjects were treated. The median operative time was 22 minutes. At completion of the cohort's 1-month follow-up, the average body weight significantly reduced from the preoperative value of 242 ± 47 pounds to 235 ± 45 pounds($p=0.01$). The postoperative gastrojejunostomy diameter significantly decreased from the preoperative mean of 19.2 ± 2.5 mm to 14.5 ± 3.2 mm($p=0.002$). Plication knotting elements have been visible in all but one subject at the follow-up visits.

Conclusion: The EES appears to offer a minimally-invasive approach to G-J anastomosis revision in subjects who initially respond to RYGBP but whose later weight gain may be related to stoma enlargement.

ABSTRACT FINAL ID: PL-46;

TITLE: A Rodent Model of Metabolic Surgery for the Study of Type 2 Diabetes and PET Scanning of Beta Cell Mass

AUTHORS/INSTITUTIONS: W.B. Inabnet, L. Milone, E. Durak, L. Ahmed, J. Korner, M. Bessler, P.E. HARRIS, , Columbia University, New York, NY;

ABSTRACT BODY:

Background: Type 2 diabetes is a worldwide healthcare problem with major socioeconomic implications. Operations such as surgical bypass of the foregut and ileal interposition have been shown to improve diabetes, but the mechanism of action is poorly understood. The Goto-Kakizaki (G-K) rodent is a type 2 diabetic animal model that is ideally situated to study the impact of surgery on diabetes; however, the operative mortality is high. The aim of this study is to describe operative technique, improvements in peri-operative management and the technique of micro PET scanning of beta-cell mass in G-K rodents.

Methods: Thirty G-K rats were divided into 1 of 3 operative groups: sham, sleeve gastrectomy (SG) and duodenal-jejunal bypass (DJB). A subset of animals underwent micro PET scanning with [11C]-DTBZ to determine the VMAT2 binding index, an indicator of beta-cell mass.

Results: Mortality in the sham and SG rodents was zero, however, 2 SG rodents developed enterocutaneous fistula and 1 developed an abscess. In the DJB group, the initial mortality was 90%; however, refinements in surgical technique and peri-operative management (fluids, antibiotics, pain control) lowered the mortality to approximately 50%. Surgical technique will be discussed in detail. [11C]-DTBZ uptake in the pancreas was demonstrated on micro PET scanning in all groups.

Conclusion: Intensive medical management in the peri-operative period and attention to operative technique lowers mortality. [11C]-DTBZ micro PET scanning is a feasible method for assessing beta-cell mass in G-K rodents and may prove to be an important modality for evaluating beta-cell performance in type 2 diabetes.

ABSTRACT FINAL ID: PL-47;

TITLE: Bariatric Surgery May Enhance Energy-Efficient Aerobic Metabolism

AUTHORS/INSTITUTIONS: H.J. Menchaca, V.N. Michalek, T.D. Rohde, H. Buchwald, Surgery, University of Minnesota, Minneapolis, MN;

ABSTRACT BODY:

Background: The favorable outcomes of bariatric surgery are associated with changes in metabolic indicators. Interpretation of these changes, and measurement of the oxygen transport rate (OTR), may help explain mechanisms for the resolution of obesity comorbidities.

Methods: We studied 16 morbidly obese individuals (14 women, 2 men) pre- and 1 year post-bariatric surgery (vertical banded gastroplasty=8, gastric bypass=5, duodenal switch=3). Patients on anti-hypertensive or cholesterol lowering drugs were excluded. We measured leptin, lactate, pyruvate, 2,3-diphosphoglycerate (2,3-DPG), pH, and the OTR by dynamic oximetry. OTR methodology initiated in our laboratory and consists of the evaluation of the rate of hemoglobin desaturation in vitro as the blood O2 saturation goes from 100% to 60%. The endpoint of anaerobic glycolysis is lactate, of aerobic it is pyruvate. The lactate-pyruvate ratio decreases with increasing aerobic glycolysis. 2,3-DPG, an intermediate in glycolysis, modulates the hemoglobin/oxygen dissociation curve; when 2,3-DPG decreases, the curve shifts to the left, reducing the OTR. Statistical analysis by t-test.

Results: The 1 year average %EBWL was 55.6% (37.7 kg). All calculated indicators decreased: leptin -34.8% (p=.04), lactate/pyruvate ratio -16% (p=.12), 2,3-DPG -38.8% (p<.001), and pH -.7% (p=.05). The OTR decreased -18.3% (p=.03 at 5 minutes.

Conclusion: Bariatric surgery is associated with changes in metabolic parameter indicative of a shift from anaerobic to more energy efficient aerobic metabolism.

ABSTRACT FINAL ID: PL-48;

TITLE: Gastric Electrical Stimulation with TANTALUS® Improves Glycemic Control in Overweight Subjects with Type 2 Diabetes

AUTHORS/INSTITUTIONS: A. Bohdjalian, B. Ludvik, G. Prager, Surgery, Medical University of Vienna, Vienna, AUSTRIA; D. Nocca, E. Renard, , Hôpital Lapeyronie, Montpellier, FRANCE; B. Guerci, L. Bressler, , Hôpital Jeanne D'Arc, Toulouse, FRANCE; A. Assalia, E. Karnieli, , Ramban Medical Center, Haifa, ISRAEL; R. Prager, , Hietzing Hospital, Vienna, AUSTRIA;

ABSTRACT BODY:

Background: Treatment goals are hardly achieved in obese type 2 diabetic (Ob-DM2) patients. Since gut and brain participate in overall glucose homeostasis, we examined the possibility that gastric electrical stimulation, by Tantalus system (MetaCure Ltd.) will be beneficial in treating uncontrolled Ob-DM2 patients.

Methods: In this on-going European multi-center, open label study, 14 Ob-DM2 subjects (7/7, M/F; BMI: 37.1±1.0 kg/m2) on oral anti-diabetic medications (OAD), but with poor glycemic control (HbA1c 7.0-9.5%) were implanted laparoscopically with TANTALUS System. The system is a minimally invasive implantable gastric electrical stimulator that applies GCM (Gastric Contractility Modulation) signals to the antrum of the stomach. The signals are delivered in synchronization to the native electrical activity of the stomach during meals.

Results: To date, 11 subjects have completed 3 months of treatment. Compared to baseline HbA1c and fasting blood glucose levels were significantly reduced from 8.0±0.2% to 6.9±0.1% ($p<0.01$) and from 155±10 to 128±9 mg/dL, ($p<0.01$), respectively. The improvement in glycemic control was accompanied by reductions in body weight (from 107.5±4.9 to 102.7±5.0 Kg, $p<0.01$), and in waist circumference from 123.8±3.2 to 118.7±3 cm ($p<0.01$). There was no correlation between the weight loss and decrease in HbA1c observed following the 3 months of therapy, ($r2=0.01$, $p=0.7$).

Conclusion: Interim results with the TANTALUS System suggest that this stimulation regime can potentially improve glucose levels and induce weight loss in obese type 2 diabetic subjects on OAD. The lack of correlation between weight loss and HbA1c decline suggests a weight-independent glucose improvement mechanism(s).

ABSTRACT FINAL ID: PL-49;

TITLE: Alterations in Central Brain Dopamine Receptors Before and After Laparoscopic Roux-en-Y Gastric Bypss

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

ABSTRACT BODY:

Background: While bariatric surgery has proved highly successful at producing sustained weight loss, variability in treatment response persists. A better understanding of the pathophysiology of appetite and obesity may improve patient selection and management. Research into feeding behavior and satiety has focused on the role of dopamine in reward-based behaviors. Specifically, positron-emission computed tomography(PET) has demonstrated reduced brain dopamine receptor availability in obese subjects compared to controls. This may be due to a primary deficiency in dopamine receptors or to secondary dopamine receptor down regulation. We performed a preliminary study to investigate dopamine D2 receptor activity in obese patients before and after laparoscopic Roux-en Y gastric bypass(LGBP).

Methods: 5 female patients ages 20 to 38 years old with a mean BMI of 45 underwent PET with C11 raclopride injection. Five regions of interest were studied: ventral striatum, anterior and posterior putamen, and caudate. Repeat PET was performed at six weeks following LGBP. D2 receptor binding was compared within subjects pre and post surgery. Baseline D2 binding was also compared to historical nonobese controls.

Results: No significant difference in D2 binding was seen between the obese subjects and non-obese controls. D2 receptor availability appeared to increase 6 weeks after gastric bypass surgery. The increase in receptor availability appeared roughly proportional to the amount of weight lost.

Conclusion: Brain dopamine D2 binding appears to increase following LGBP. These preliminary findings need to be replicated in a larger population, but suggests that diminished D2 binding in the obese may be due to D2 receptor downregulation. Changes in dopamine receptor binding may play an important role in centrally mediated appetite suppression and resultant weight loss after LGBP.

ABSTRACT FINAL ID: PL-50;

TITLE: Patterns of Short-Term Readmission-Reoperation Following Roux-en-Y Gastric Bypass (RYGB)

AUTHORS/INSTITUTIONS: T.A. Kellogg, D.B. Leslie, T. Swan, S. Ikramuddin, Surgery, University of Minnesota, Minneapolis, MN;

ABSTRACT BODY:

Background: Health insurance payors harbor concerns over the cost of bariatric procedures that are chiefly related to early readmissions and reoperations. We attempt to identify avoidable causes of readmission.

Methods: We retrospectively reviewed the indications for short-term (<30 day) readmission during a 6-year period for patients undergoing RYGB for morbid obesity at a tertiary care teaching hospital.

Results: Of a total of 1870 primary RYGB procedures, 1384 were laparoscopic. Mean BMI was 49 kg/m2 in the laparoscopic and 51 kg/m2 in the open group. The average hospital length-of-stay (LOS) was 3.96 days. The readmission and reoperation rates were 7.01% (n=131) and 2.57% (n=48), respectively. The most common reasons for readmission (and overall frequency) were nausea/vomiting (2.03%, n=38), dehydration (1.12%, n=21), abdominal pain (0.70%, n=13), and wound infection (0.64%, n=12). Considering only the patients who were readmitted, the admitting diagnosis was nausea/vomiting in 29.0%, dehydration in 16.0%, abdominal pain in 9.9%, and wound infection in 9.2%. On average, readmissions occurred 12.28 days (3-30) postoperatively and mean hospital LOS for readmitted patients was 3.38 days (0-21). Compared to laparoscopic RYGB, patients with open operation had a higher incidence of readmission for wound infection (1.65%, n=8 vs. 0.29%, n=4) (p=.043) and pancreatitis (0.82%, n=4 vs. 0.12%, n=2) (p=.0038).

Conclusion: A considerable number of patients are affected by nausea/vomiting and dehydration within 30 days postoperatively. By ensuring that the appropriate outpatient mechanisms for management of these problems are available, early readmission rates should significantly decrease. The laparoscopic approach may decrease readmissions attributable to wound infection and pancreatitis.

ABSTRACT FINAL ID: PL-51;

TITLE: Can a Short Course of Prophylactic Low-Dose Proton Pump Inhibitor Therapy Prevent Stomal Ulceration After Laparoscopic Roux-en-Y Gastric Bypass?

AUTHORS/INSTITUTIONS: M. D'Hondt, D.D. Devriendt, F. Van Rooy, F. Vansteenkiste, , Department of Digestive Surgery, AZ Groeninge Hospital, Kortrijk, BELGIUM; H. Pottel, , Interdisciplinary Research Center, Catholic University Leuven, Campus Kortrijk, Kortrijk, BELGIUM; M. Steverlynck, L. Desplentere, E. Simoens, , Catholic University Leuven, Leuven, BELGIUM;

ABSTRACT BODY:

Background: The purpose of this retrospective analysis was to determine if a short course of prophylactic low dose proton pump inhibitors (PPI) can prevent stomal ulceration (SU) after laparoscopic Roux-en-Y gastric bypass (LRYGBP).

Methods: 449 consecutive patients who underwent LRYGBP and had a minimum of 6 months follow up were analysed. Patients were categorised in two groups: patients with Helicobacter pylori (HP) at pre-operative endoscopy (HP-group) and patients without HP (non-HP-group). All patients in the HP-group were medically treated prior to surgery. In both groups almost half of the patients received low dose PPI (omeprazole 20mg/day) for one month following LRYGBP. Fisher-Exact-test was used for statistical analysis.

Results: Mean age was 39 (16-68) years, 70% were female and mean body mass index (BMI) was 43 (28-63) kg/m2. The incidence of SU in the HP-group was not statistically different from the incidence of SU in the non-HP-group (7/86, 8.14% vs. 41/363,11.29% p=0.559).

When comparing the patients who did receive PPI with the patients who did not receive PPI within the non-HP-group, there was no significant reduction in developement of SU (18/169, 10.65% vs. 23/194, 11.86% p=0.743).

When comparing the patients wo did receive PPI with the patients who did not receive PPI within the HP-group, there was a significant reduction in developement of SU (0/41, 0% vs. 7/45, 15.56% p=0.0123).

Conclusion: Development of stomal ulceration in patients tested positive for HP prior to LRYGBP can be prevented by prophylactic low dose PPI following surgery. Therefore, HP status must be determined prior to LRYGBP.

ABSTRACT FINAL ID: PL-52;

TITLE: Marginal Ulcer After 1,792 Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) Procedures: Incidence, Medical and Surgical Treatment and Complications.

AUTHORS/INSTITUTIONS: J.A. Hata, E.J. DeMaria, D.D. Portenier, J. Grant, A.D. Pryor, , Duke University Medical Center, Durham, NC;

ABSTRACT BODY:

Background: Marginal ulcers (MU) at the gastrojejunostomy (GJ) are a complication of LRYGB and are often treated medically. Acutely perforating or refractory ulcers requiring surgical intervention represent a smaller yet significant source of morbidity.

Methods: A retrospective analysis was performed of 1,792 consecutive LRYGB procedures from 2001-2007 at a single institution. All patients underwent linear stapled GJ. Mean follow-up was 47±6.7 months.

Results: 186 patients (10.4%) were medically treated for suspected MU. Mean interval to treatment was 15±1 months post-operatively. After diagnosis, all patients received twice-daily PPI, plus carafate (130 patients) or misoprostol (27). 115 patients underwent EGD, confirming diagnosis of MU in 82 (4.6% of total LRYGB). There was one mortality from a bleeding MU after failed endoscopic and angiographic management. 15 patients required surgery at 27±3.7 months post-LRYGB. Risk factors in this group included tobacco abuse (3), gastrogastric fistula (2), and NSAID use (1). Acute perforations (7 patients) were managed by Graham patch (5), revision of GJ (1), and esophagojejunostomy (1). Persistent MU after failed medical therapy (8 patients) were managed by elective revision of GJ (6), or thoracic vagotomy (2). There were no postoperative deaths; morbidity included wound infection (3) and enterocutaneous fistula (1). Three patients (20%) developed recurrent ulcers following surgical intervention; one required GJ revision after Graham patch.

Conclusion: Patients undergoing LRYGB are at significant risk of developing MU. In most cases, medical therapy is successful. Surgery is required in a subset of patients for acute perforation or failure of medical therapy with good outcomes.

ABSTRACT FINAL ID: PL-53;

TITLE: Revisional Operations for Marginal Ulcer After Roux-En-Y Gastric Bypass

AUTHORS/INSTITUTIONS: R.A. Patel, R.E. Brolin, A.D. Gandhi, , University Medical Center at Princeton, Princeton , NJ;

ABSTRACT BODY:

Background: Marginal ulcer is a potentially serious complication of Roux-En-Y gastric bypass (RYGB). This study reviews one surgeon's experience with 39 revisional operations for intractable marginal ulcer after primary RYGB.

Methods: 2282 consecutive patients had RYGB by one surgeon between 1984 and 2006 including 1621 open RYGB and 661 laparoscopic RYGB's. The stomach was transected in laparoscopic RYGB vs undivided in the open group. All revisions included ulcer excision, revision of the gastrojejunostomy with gastric transection prn. 7 Patients had vagotomy.

Results: 122 patients (5.3%) developed marginal ulcers (88 open, 34 laparoscopic). 39 patients (32%) underwent revision for intractability (35 open, 4 laparoscopic). 30 (77%) of these patients had gastrogastric fistulae. Risk factors for ulcer (medications, smoking) were present in 22 (56%) patients. Primary indications of intractability included stomal obstruction (10.2%), gastrointestinal bleeding (20.5 %), perforation (2.5 %), and abdominal pain (66.6%). Early postop complications included: 2 leaks (5.1%) and 2 wound infections (5.1%). 4 smokers (10.2%) developed recurrent ulcers. One patient died of sepsis 5 months post-op. 34 patients maintained resolution of clinical symptoms. The revision rate was significantly less after RYGB (0.6%) vs open RYGB (2.1%)($p \leq 0.0025$).

Conclusion: Operations for intractable marginal ulcer after RYGB are highly successful in nonsmokers. Patients who have laparoscopic RYGB with gastric transection are less likely to require revision than patients who undergo RYGB with an incontinuity gastric partition. The rate of reoperation for marginal ulcer was higher than anticipated.

ABSTRACT FINAL ID: PL-54;

TITLE: Bile Reflux Following Roux-en-Y Gastric Bypass: An Unrecognized Cause of Post-Operative Pain

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

ABSTRACT BODY:

Background: Bile reflux as a cause of pain following laparoscopic Roux-en-Y gastric bypass (LRYGB) has not been previously described. We report a series of patients with chronic pain following LRYGB as a result of bile reflux from an abnormally short alimentary limb.

Methods: A prospective data base of patients that underwent revisional surgery at our center were retrospectively reviewed and those with bile reflux were analyzed for onset of symptoms, time to revision, length of alimentary limb and outcome after revision. All patients with symptomatic bile reflux had the alimentary limb lengthened to 100cm.

Results: Fifteen patients were diagnosed with bile reflux and underwent revisional surgery. Onset of symptoms occurred at 55.9 + 21.3 months following LRYGB and mean time to revision following symptom onset was 12.2 + 15.6 months. All patients complained of pain, while 13 (86.7%) had vomiting, 7 (46.7%) had dysphagia. Endoscopy confirmed the presence of bile in all patients and detected marginal ulceration in 5 (33.3%) and gastritis in 8 (53.3%). At revisional surgery, mean alimentary limb length was 37.1 cm (range 20 - 62). At a mean follow-up of 9.5 months after revision, all patients have reported resolution of symptoms.

Conclusion: Although previously unreported following LRYGB, bile reflux can be an important possible cause of chronic pain. Bile reflux however, responds favorably to alimentary limb lengthening to 100 cm and was not been seen in patients with limbs > 75cm.

ABSTRACT FINAL ID: PL-55;

TITLE: Internal Hernia at Petersen's Space after Laparoscopic Roux-en-Y Gastric Bypass: 4.2% Incidence Without Closure. A single surgeon series of 1300 cases

AUTHORS/INSTITUTIONS: R.W. Bauman, , Carolina Weight Loss Surgery, Concord, NC;

ABSTRACT BODY:

Background: Recent papers describing gastric bypass technique and the need for closure at Petersen's space, using an antecolic anti gastric laparoscopic method (AA-LRYGBP), differ in the incidence of internal hernia. We report a 4.2 % incidence without closure of Petersen's Space in a 1300 case single surgeon practice .

Methods: Data for 1300 patients undergoing AA_LRYGBP between January 2001 and October 2006 was prospectively collected and retrospectively evaluated for internal hernia at Petersen's Space. All cases were performed by a single surgeon using an antecolic antegastric technique without closure of the mesenteric space and with division of 2 inches of small bowel mesentery. Biliopancreatic (BP) limb length varied between 50 and 100 cm.

Results: Fifty-five patients (4.2%) underwent laparoscopic exploration for varying degrees of abdominal pain, unexplained nausea or vomiting, or radiographic evidence of internal hernia. Onset of symptoms varied from 9 months to 3 years post-op. All were treated with reduction and closure of Petersen's Space. There was no relationship between BP limb length and frequency of internal hernia and a high rate of false negative radiographic reports was noted.

Conclusion: Closure of Petersen's Space is important in preventing the morbidity of reoperation and incidence of internal hernia.

ABSTRACT FINAL ID: PL-56;

TITLE: Laparoscopic Conversion of Adjustable Gastric Banding Into Sleeve Gastrectomy

AUTHORS/INSTITUTIONS: G. Dapri, G. Cadière, J. Himpens, Department of Gastrointestinal Surgery, European School of Laparoscopic Surgery, Brussels, BELGIUM;

ABSTRACT BODY:

Background: The purpose of this study was to evaluate the feasibility, safety, and efficacy of the conversion of laparoscopic adjustable gastric banding (LAGB) into laparoscopic sleeve gastrectomy (LSG) for insufficient percentage of excess weight loss (%EWL).

Methods: Inclusion criteria was insufficient %EWL (defined as <30% after 1 year of LAGB) in volume eater patients. Between August 2002 and October 2007, 27 patients (17 females, 10 males) were submitted to removal of LAGB and converted into LSG. Average age was 43,6 years (25-66). Before LAGB the mean weight and BMI were respectively 129,8 kg (95-178) and 45 kg/m2 (35-64). Average time between LAGB and LSG was 51,2 months (22-132). Before the conversion into LSG the mean weight, BMI, and %EWL were respectively 117,9 kg (63-170), 39 kg/m2 (24-61), and 18,1%. Twelve patients suffered of obesity related co-morbidities: hypertension (7), diabetes (2), arthrosis (7), sleep apnea (3).

Results: Mean operative time was 120,6 min (65-195). There was no conversion to open surgery. Postoperative complications included a patient with subphrenic hematoma that required a laparoscopic drainage; no postoperative leaks were registered. Mean hospital stay was 3,2 days (2-8). There was no operative mortality. After a mean follow-up of 18,6 months (1-59) (23 patients), the mean weight, BMI, weight loss, and %EWL were respectively 100,7 kg (61-152), 34,6 kg/m2 (21-50,4), 23 kg (2-55), and 34,8%. Difference in %EWL after LAGB and LSG is statistically significant ($p<0.05$). Five patients resolved their obesity related co-morbidities: hypertension (1), diabetes (1), arthrosis (2), sleep apnea (2).

Conclusion: The study supports the feasibility, safety and efficacy of LSG in case of insufficient %EWL after LAGB in volume eater patients.

ABSTRACT FINAL ID: PL-57;

TITLE: Adjustable Gastric Banding as a Revisional Bariatric Procedure after Failed Gastric Bypass - Intermediate Results

AUTHORS/INSTITUTIONS: M. Bessler, A. Daud, W.B. Inabnet, B. Schrope, D. Davis, , Columbia University, New York, NY;

ABSTRACT BODY:

Background: Although gastric bypass is the most common bariatric procedure in the United States but it is has been associated with a failure rate of 15% (5-40%). The addition of adjustable gastric banding to Roux en Y gastric bypass has been reported to be a useful revision strategy in a small series of patients with inadequate weight loss after proximal gastric bypass.

Methods: We report on 22 patients who presented with inadequate weight loss or significant weight regain after proximal gastric bypass. All patients underwent revision with the placement of an Adjustable Silicone Gastric Band around the proximal gastric pouch. Bands were adjusted at 6 weeks post operatively and beyond as needed. Complications and weight loss at the most recent follow up visit were evaluated.

Results: Mean age and Body Mass Index (BMI) at the time of revision was 41.27 (25-58) years and 44.8 ± 6.34 (kg/m2) respectively. Patients lost an average of 19%, 29% and 43.5%, 51%, 33% and 34% of excess weight at 6, 12 and 24, 36,48 and 60 months respectively from the revisional procedure. There were 2 major complications requiring re operation. There have been no erosions associated with the band.

Conclusion: The results from this larger series of patients also indicate that the addition of the ASGB causes significant weight loss in patients with poor weight loss outcome after gastric bypass. The fact that no anastomosis or change in absorption is required makes this an attractive revisional strategy. Further evaluation in a larger population is warranted.

ABSTRACT FINAL ID: PL-58;

TITLE: Failed Vertical Banded Gastroplasty (VBG) - Adjustable Gastric Banding or Roux-en-Y Gastric Bypass: A Prospective Long-Term Follow-up Study

Miller K, MD, FACS, Hell E, MD, Pump A, MD, Hallein Clinic, Austria

AUTHORS/INSTITUTIONS: K.A. Miller, , Surgical Department Hallein Clinic, Hallein, AUSTRIA;

ABSTRACT BODY:

Background: Vertcal Banded Gastroplasty (VBG) was the standard restrictive procedure over decades. Conversion to a Roux-en-Y Gastric Bypass (RYGB) has been advocated after the failure of VBG.The aim of this study was to assess the effect of laparoscopic treatment of complications linked to VBG.

Methods: In a prospective study laparoscopic reoperations after VBG were analyzed. Patients with an initial weight loss over 40% EWL and a BAROS score over 1 point were considered for an AGB less than one point or less than 40 % considered for a RYGB.

Results: Within 8 years we operated 142 patients after failed open VBG with a BAROS score over 1 and 46 with a score < 1. Indications for reoperations were 56 patients with outlet stenoses (29,8 %) and 132 patients with staple line disruption or insufficient weight loss (70,2 %). 24 Patients were converted to RYGB and 163 to AGB. The mean BMI prior treatment was 46,9. We had no conversion to open surgery. We noted 6 perioperative (3,7 %) non fatal complications (1 pulmonary embolism, 1 esophagogastric and 1 gastric perforation with intraoperative repair, 2 pneumonia, 1 biliary peritonitis with band removal and 1 trocar wound bleeding). No perioperative or postoperative mortality was noted. No anastomotic leak was observed. The mean follow-up was 63 +/- 44,5 months (6 – 76 months) with a current follow up rate of 96%. The mean BMI at follow-up was 30,6 +/- 5,1 (63% EWL from initial weight) for AGB and 29,6 +/- 5,1 (68% EWL from initial weight) for RYGB, respectively.

Conclusion: Failed VBG with an initial good to excellent BAROS score could be considered again for a restrictive procedure, namely the adjustable gastric banding procedure which is less invasive and effective.

ABSTRACT FINAL ID: PL-59;

TITLE: Adjustable Gastric Band Placed Above Gastric Bypass Pouch As a Revision Operation For Failed Gastric Bypass

AUTHORS/INSTITUTIONS: P.L. Chin, M.B. Ali, K. Francis, P.C. Leport, , Smart Dimensions and Lite Dimensions Surgical Weight Loss, Fountain Valley, CA;

ABSTRACT BODY:

Background: The failure rate following gastric bypass operation (GBP) for weight loss has been reported at 10-20%. To date, if mechanical causes of failure of GBP are ruled out, there is no reliably safe and effective salvage operation. This pilot study was conducted to determine if restriction of the GBP pouch using the adjustable gastric band (LAGB) is an effective revision operation.

Methods: A prospectively accrued group of patients underwent revisional operations using LAGB placed above the GBP pouch by our bariatric surgical group starting in 2004. From our prospective database, patients undergoing operation from October 2004 to October 2006 were analyzed.

Results: Of a total of 10 patients accrued during this time period, 2 were lost to follow up leaving 8 patients for analysis. There were 1 male and 7 female patients. Mean starting weight was 310.5 lbs (range 230-362) and BMI 48.81 (range 38.92-55). Mean weight loss at 1 year follow up was 34.75 lbs (range 0.4-92 lbs) with mean %EWL 24.6 (range 0.2-49.2). The mean weight loss of the 2 patients with 2 yrs of follow up was 123.85 lbs (range 119.7-128 lbs) with mean %EWL 83.25 (range 68.4-98.1). There were 3 minor complications: 2 LAGB port related complications requiring port revision and 1 post-op wound hematoma requiring evacuation. There were no band erosions or band slippages and no major complications.

Conclusion: In our study, LAGB placed above GBP pouch is a safe and effective revision operation for failed GBP operation.