Found 9 Abstracts

ABSTRACT FINAL ID: AH-10;

TITLE: Effect of Laparoscopic Gastric Bypass for Type 2 Diabetes Mellitus with BMI<35 Kg/m2

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: Laparoscopic gastric bypass resulted in significant weight loss and resolution of T2DM. The current indication for bariatric surgery is mainly applied to patients with BMI > 35 Kg/m2 with comorbidity status. However, little is known concerning T2DM patients with BMI < 35 Kg/m2. Recent studies have suggested that T2DM patients with BMI < 35 Kg/m2 might benefit from surgery.

Methods: From Jan 2002 to Dec 2006, 820 patients who underwent LMGB were enrolled in a surgically supervised weight loss program. We identified 201 (24.5%) patients who had T2DM or impaired fasting glucose (IFG). Patients with BMI < 35 Kg/m2 were compared with those of BMI > 35 Kg/m2. Successful treatment of T2DM was identified by HbA1C <7.0%, LDL < 100mg/dl, and triglyceride < 150 mg/dl.

Results: Among the 201 patients, 44 (21.9%) had BMI < 35 Kg/m2 and 114 (56.7%) had BMI between 35 and 45, 43 (21.4%) had BMI > 45 Kg/m2. Patients with BMI < 35 Kg/m2 are significantly older, female predominant, had lower liver enzyme and C-peptide levels than those with BMI > 35 Kg/m2. The mean total weight loss for the population was 32.1,33.4,31.9,and 32.8%(at 1,2,3,5 years after surgery), and percentage to change in BMI was 31.9,34.2,32.2,and 29.5% at 1,2,3,and 5 years. One year after surgery, fasting plasma glucose returned to normal in 89.5% of BMI <35 kg/m2 T2DM and 98.5% of BMI>35 kg/m2 patients (p=0.087). The treatment goal of T2DM (HbA1C<7.0%, LDL<150 mg/dl and triglyceride <150 mg/dl) was met in 76.5%of BMI<35 kg/m2 and 92.4% of BMI>35 kg/m2 (p=0.059).

Conclusion: Laparoscopic gastric bypass resulted in significant and sustained weight loss with successful treatment of T2DM up to 87.1%. Despite a slightly lower response rate of T2DM treatment, patients with BMI<35 still had an acceptable DM resolution, and this treatment option can be offered to this group of patients.

ABSTRACT FINAL ID: AH-07;

TITLE: Physical Activity Levels of Patients Undergoing Bariatric Surgery in the Longitudinal Assessment of Bariatric Surgery (LABS) Study

AUTHORS/INSTITUTIONS: W.C. King, S.H. Belle, , University of Pittsburgh, Graduate School of Public Health, Pittsburgh, PA; A.P. Courcoulas, G.M. Eid, , University of Pittsburgh Medical Center, Pittsburgh, PA; G. Dakin, , Cornell University, New York, NY; D.R. Flum, B. Oelschlager, , University of Washington, Seattle, WA; W.B. Inabnet, , Columbia University, New York, WA; J. Mitchell, , University of North Dakota/Neuropsychiatric Research Institute, Fargo, ND; E.J. Patterson, , Legacy Good Samaritan Hospital, Portland, OR; B.M. Wolfe, , Oregon Health & Science University, Portland, OR; W.H. Chapman, , East Carolina University, Greenville, NC;

ABSTRACT BODY:

Background: Within the context of bariatric surgical intervention patients' physical activity (PA) level may contribute to the variability of weight loss and co-morbidity resolution. PA may also play an important role in weight re-gain after nadir. However, there is no research describing the PA level of patients undergoing bariatric surgery to inform post-surgical PA prescriptions and interventions.

Methods: Pre-operatively and annually thereafter, participants in LABS complete a PA diary and wear an accelerometer accurate at slow walking speeds and unaffected by body mass index (BMI). We report the baseline results for patients with PA data of at least 10 hrs/day for 4-7 days through September, 2007 (accelerometer: N=401, diary: N=557). A test for trend was used to test for an association between BMI groups and PA categories defined in Tudor-Locke C, 2004.

Results: Overall, 19% of participants were sedentary (less than 5000 steps/day), 33% low active (5000-7499 steps/day), 29% somewhat active (7500-9999 steps/day), and 18% active (10000 or more steps/day). The proportion of sedentary patients increased from 11.5% of patients with a BMI of 40-<50 kg/m2 to 26.7% with a BMI of 50-<60 kg/m2 and 50% with a BMI of 60+ kg/m2 ($p<.01$). The most commonly reported activities done specifically for exercise were walking, 44%; gardening, 11%; playing with kids, 10%; stretching, 7%; and swimming, water jogging, weight lifting, biking, and dancing, 3% each.

Conclusion: Patients present for bariatric surgery with a wide range of PA levels, with almost half categorized as somewhat active or active based on cut points determined for the general population. Few patients report a regular pre-operative exercise regimen suggesting that most PA is accumulated from activities of daily living.

ABSTRACT FINAL ID: AH-01;

TITLE: Early U.S. Outcomes 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. Non-surgical therapy is ineffective in the long-term, yet surgery has never been made widely available to this population.

Methods: Between 2004-2006, 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. Study parameters included: preoperative age, gender, BMI, presence of co-morbidities, percent excess weight loss (%EWL) and resolution of co-morbidities.

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 BMI decreased to 29.3±2.9 kg/m2, 26.9±3.0 kg/m2, and 26.5±4.0 kg/m2, and mean %EWL was 41.4±16.0, 59.1±19.4, and 61.4±25.2 at 0.5, 1, and 2 years, respectively. The majority (75%) of co-morbidities improved or completely resolved: obstructive sleep apnea 100%, diabetes 81%, depression 75%, hypertension 74% and dyslipidemia 71%. There were 3 band slips requiring revision, 3 hiatal hernias requiring repair, 3 port-related complications (2 port leaks, 1 port prominence), and 2 cases of band obstruction (from food, requiring an EGD). There was no mortality.

Conclusion: We are very encouraged by this series of low BMI patients operated with the LAGB. Weight loss has been excellent, complications have been acceptable, and co-morbidities have partially or wholly resolved.

ABSTRACT FINAL ID: AH-04;

TITLE: Laparoscopic Adjustable Gastric Banding Complications and Outcomes in a Single U.S. Center with Four-Year Follow-up

AUTHORS/INSTITUTIONS: M.Z. Abdul-Jawad, K.P. Noon, , Bariatric & Laparoscopy Center of Ocala, Inc., Ocala, FL;

ABSTRACT BODY:

Background: Our center has performed 406 Laparoscopic Adjustable Band procedures since December 02, all with the Para Flaccida Technique with port placement in the left upper quadrant. All Adjustable Bands were placed by the same surgeon. All patients received dietary and behavioral instruction regarding the use of the Gastric Band both Pre-op and Post-op.

Methods: A comprehensive chart review was performed on the 406 patients in the series to compile complication data. Percentage of excess weight loss (%EWL) data was obtained during patient encounters and recorded in Exemplo, in those patients who continued follow-up with our practice.

Results: A total of 66 complications developed in this patient group, at an overall rate of 16.25%. 19 bands were removed; 9 due to conversion to gastric bypass and 10 for other reasons. 51 patients had 1 complication, 5 patients had 2 complications, and 1 patient had 3 complications. There were 37 re-operations due to complications at a rate of 9.11%. There were no deaths in this series.

The average weight loss in 6 months was 27.75% of excess body weight in 228 patients, but when we looked at individual weight loss 46.9% did not reach that goal. At 1 year, the average %EWL in 168 patients was 35.73%, but on individual analysis 47.6% did not reach that goal. At 2 years the average %EWL was 46.91% in 71 patients, with 46.4% not reaching that average. At 3 years, the average %EWL was 41.5% in 40 patients, with 50% not reaching that average. At 4 years, the average %EWL in 13 patients was 23.46%, with 46.1% not reaching that average.

Conclusion: Although Lap Adj. Gastric Band is a safe procedure, it carries an overall 16.25% complication rate with a high failure rate and less then optimal weight loss.

ABSTRACT FINAL ID: AH-08;

TITLE: Failure of the Adjustable Gastric Banding: Starting BMI is the Fulcrum of Success and Failure

AUTHORS/INSTITUTIONS: B. Snyder, T. Scarborough, S. Yu, E.B. Wilson, , University of Texas, Houston, TX;

ABSTRACT BODY:

Background: Our patients who successfully lose 50% or more of their excessive weight have a significantly lower BMI then those who fail. In this study, we set out to find the BMI located at the fulcrum of success and failure.

Methods: We prospectively collected the weight loss of 430 patients who had an adjustable gastric band placed. We analyzed the percent excessive weight loss (%EWL) over one year for patients with a BMI between 30 and 50. A line was generated for %EWL over time for BMI in the 30's, 40's, and 50's and compared with the average %EWL over time. The y-intercepts of the resulting four lines were graphed against the average BMI for each group.

Results: The generated y-intercept line had an $R2=0.9237$. Using the equation of this line and the know y-intercept for the average, we solved for x which resulted in a BMI of 46. Patients with a BMI < 46 had 50% EWL at one year, and those with a BMI > 46 had only 33% EWL. The %EWL between groups was significantly different at all measured time intervals ($p<0.0001$).

Conclusion: A BMI of 46 identifies those at high risk of failure after adjustable gastric banding and require closer follow up. Patients who have a BMI greater than 46 should be advised that their weight loss may be suboptimal at one year.

ABSTRACT FINAL ID: AH-02;

TITLE: Preoperative Conventional Weight Loss and Number of Attempts Does Not Predict Postoperative Weight Loss in Patients Undergoing Laparoscopic Gastric Bypass

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

ABSTRACT BODY:

Background: Many insurance companies mandate that bariatric surgery candidates who satisfy National Institutes of Health criteria make a further attempt at medically supervised weight loss. The objective of this study was to determine whether a correlation exists between maximum preoperative weight loss or number of weight loss attempts and pounds lost or % excess weight loss (%EWL) following laparoscopic gastric bypass (LGB).

Methods: Preoperative self-reported conventional weight loss attempts and maximum conventional weight loss achieved were collected via retrospective review of a prospectively collected bariatric database and compared with patients' %EWL at postoperative year one. Only patients with one-year follow-up data were included. Pearson correlation was used for comparison.

Results: From 2001 to 2006, 530 patients underwent LGB, 387 of whom met study criteria; 83% of the 387 were women. At surgery, mean age was 43.4±9.2 years. Mean BMI was 48.6±6.9 kg/m2 at surgery and 30.3±5.0 kg/m2 at postoperative year one. Mean maximum conventional weight loss was 46.6±31.2 lbs at initial evaluation. Mean weight loss attempts was 4.3±1.8. One-year mean %EWL was 72%±15%. Analysis revealed no correlation between number of pounds lost or %EWL with either number of conventional weight loss attempts (r=0.107) or maximum conventional weight loss (r=0.047).

Conclusion: Neither the number of conventional weight loss attempts nor the maximum amount of conventional weight loss correlate with %EWL in patients at one year post-LGB. Our study shows no evidence that the number of weight loss attempts prior to surgery has any effect on postoperative %EWL in patients undergoing LGB.

ABSTRACT FINAL ID: AH-05;

TITLE: Outcomes of Laparoscopic Bariatric Surgery after Renal Transplant

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

ABSTRACT BODY:

Background: Obesity has been associated with poor graft and patient survival after kidney transplantation requiring functional increase of anti-rejection drugs. Weight loss surgery may be a good alternative in this clinical scenario. Our goal was to describe the outcomes of bariatric procedures performed in patients after kidney transplantation at our institution.

Methods: A retrospective chart review of a prospectively collected database was conducted to analyze the outcomes of morbidly obese patients after kidney transplantation who underwent laparoscopic bariatric procedures between November 2004 and October 2007.

Results: Our series included 5 patients who underwent a bariatric procedure following kidney transplantation. The 5 males had a mean age was 40.8 (range, 30-48) years and a mean body mass index (BMI) of 52.2 (range 48-69) kg/m2. Other comorbidities which might affect postoperative renal function included diabetes mellitus (n=2), hypertension (n=5), and congestive heart failure (n=1). Four patients had laparoscopic Roux-en-Y gastric bypass and one had a laparoscopic sleeve gastrectomy. There were no postoperative complications in any patients and no alteration to the doses of the immunosuppressant drugs was recorded after bariatric surgery. The renal function test curve showed the similar results when compared to non-obese kidney transplant patients. Percent of weight loss was more than 50% at 2 years. The procedures were successful in all 5 (100%) patients.

Conclusion: Laparoscopic bariatric techniques may be used safely and effectively to control obesity in kidney transplant patients.

ABSTRACT FINAL ID: AH-09;

TITLE: Early Results of Conversion from Laparoscopic Banding to Laparoscopic Roux-en-Y Gastric Bypass

AUTHORS/INSTITUTIONS: R. Moore, R.A. Perugini, D. Czerniach, R.P. Mason, J. Kelly, Surgery, UMASS Medical Center, Worcester, MA;

ABSTRACT BODY:

Background: As the number of bands placed has climbed, the number of patients requiring removal of the band has also increased. The data from our institution was reviewed to determine the feasibility, patient demographics, and early results converting patients from the band to laparoscopic Roux-en-y gastric bypass (RYGB).

Methods: A retrospective review of data collected on 318 patients from 2001 to 2007 at a single academic institution.

Results: A total of 318 patients underwent band placement at our institution between 2001-2007. Of these, 16 (5%)of the 318 patients have been converted to RYGB for the following primary reasons: 3 slippage, 4 poor weight loss, 7 band intolerance, 1 esophageal dilation, 1 infectious complication. All conversions were completed laparoscopically. The OR time and length of stay were 160 minutes, and 3 days respectively. There were no major short or long term complications. The average time to conversion was 25 months after band placement. The average follow up post conversion was 11 months. Mean excess weight loss (EWL) at time of conversion was 25% (range 2 – 63%). After conversion patients achieved a mean EWL of 63% (range 37-72%) from their pre-band weight.

Conclusion: As more bands are placed, it is likely that the number of people requiring removal will increase. Our early experience shows that converting to lap RYGB is feasible, safe, and can be performed in select patients with substantial additional weight loss and few complications.

ABSTRACT FINAL ID: AH-06;

TITLE: PATIENTS WITH COMBINED MOOD AND EATING DISORDERS WHO HAD LAPAROSCOPIC GASTRIC BYPASS ARE MORE CHALLENGING POSTOPERATIVELY BUT CAN ACHIEVE COMPARABLE WEIGHT LOSS

AUTHORS/INSTITUTIONS: I. Raftopoulos, Surgery, Saint Francis Hospital & Medical Center/University of Connecticut, Hartford, CT; A.A. Gorin, , Department of Psychology, University of Connecticut, Storrs, CT;

ABSTRACT BODY:

Background: Mood and eating disorders are common in bariatric surgery patients, with mixed findings whether these disorders are associated with treatment outcomes. We examined whether patients with history of both mood and eating disorders (MED) had less weight loss and poorer treatment compliance than patients with a history of either mood (MD) or eating disorders (ED), or no history of mood or eating disorders (ND).

Methods: Consecutive bariatric surgery patients (n=196) underwent a psychological evaluation preoperatively and were followed for 6 months post-surgery. At follow-up, body mass index (BMI) and % excess weight loss (%EWL) were prospectively collected, readmissions were recorded, and patients self-reported the number of dietary violations they experienced in a typical week.

Results: 29.1% of patients had no history of mood or eating disorders, 36.2% had ED only, 23.6% had MD only, and 10.1% had MED. These groups did not differ demographically (mean age: 43.6±10.9 years; BMI: 47.2±7.4 kg/m2; 83.2% female, 91.8% Caucasian) but did differ in the number of dietary violations per week (ND: 0.55±0.79 vs. ED: 0.42±0.63 vs. MD: 0.44±0.68 vs. 1.0±1.2, p=.04) and readmission rates (ND: 2% vs. ED: 4% vs. MD: 0% vs. 18%, p=.01). In both cases, patients with both a mood and eating disorder fared significantly worse than all other patient groups. There were, however, no differences in either BMI change (ND: 13.6±3.6 vs. ED: 13.4±3.2 vs. MD: 12.3±3 vs. 12±2.8, p=.22) or %EWL (ND: 59±17.9 vs. ED: 55.2±15 vs. MD: 56.4±14.5 vs. 51.2±13.3, p=.24) between the four groups.

Conclusion: Patients with histories of both mood and eating disorders have poorer treatment compliance following bariatric surgery than patients with either a mood or eating disorder or no history of mood or eating disorders; however, they achieve similar weight losses after 6 months.