

failed laparoscopic adjustable gastric banding, 1 patient had LSG after aborted laparoscopic Roux-en-Y gastric bypass, and 2 patients underwent LSG after failed jejunio-ileal bypass. All cases except one were completed laparoscopically. There were 2 staple line leaks (1.6%) requiring re-operation, 1 case of choledocholithiasis requiring cholecystectomy (0.8%), and no deaths. The major complication rate was 2.5%.

Conclusion: Laparoscopic sleeve gastrectomy is a safe surgical option as a primary procedure and as a revisional surgical option for weight loss. It has a complication rate equivalent to laparoscopic Roux-en-Y gastric bypass.

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34.

REVERSE JEJUNAL INTUSSUSCEPTION, MAY NOT BE SUCH A RARE PROBLEM: A SINGLE GROUP'S EXPERIENCE OF 19 CASES.

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Background: Reverse intussusception of the jejunum is thought to be a rare occurrence, reported approximately 8 times in the literature. A review of our experience found 19 cases treated since 1996. This is the largest single center report to date.

Methods: A search dating back to 1996 revealed 19 patients with reverse intussusception involving the jejunum. All patients with the diagnosis had their charts reviewed. A variety of data were evaluated in order to identify risk factors for developing intussusception as well as the presentation, findings and treatment.

Results: 19 patients with reverse intussusception involving the jejunum were identified. All had prior Roux-en-Y gastric bypass (GBP). One (5%) gastrojejunal and 18 (95%) jejunojejunal intussusceptions were identified. All patients were female. At the time of GBP average age was 30.5 years and average BMI was 45.1 mg/kg². Fifteen (78.9%) had open GBP, 4 (21%) had laparoscopic GBP. Median duration from GBP to diagnosis was 55 months. 7 (36.8%) presented with gangrene or perforation, 6 (31.6%) spontaneously reduced, 6 (31.6%) were successfully reduced at the time of surgery. 13 (68.4%) were treated with surgical resection with one recurrence (7.7%), 2 (10.5%) with simple reduction with 1 recurrence (50%), and 4 (21%) with plication with 1 recurrence (25%).

Conclusion: Reverse intussusception of the jejunum after GBP is more common than previously believed. While resection and revision of the area of intussusception appears to be an effective treatment, more research is needed about other possible treatments and prevention of this problem in the future.

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35.

CUMULATIVE META-ANALYSIS OF THERAPEUTIC TRIALS FOR WEIGHT-LOSS SURGERY USING THE SWEDISH ADJUSTABLE GASTRIC BAND OR LAP-BAND®.

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Background: Swedish Adjustable Gastric Band (SAGB) and LAP-BAND® are commonly used weight-loss devices. A large body of literature describing adjustable gastric banding exists, but few studies directly compare devices.

Methods: Systematic review of studies published from 1998 to 2005 with at least 10 patients implanted with SAGB or LAP-BAND® reporting efficacy or safety outcomes. Quantitative summaries were prepared using meta-analytic techniques.

Results: 34 SAGB and 111 LAP-BAND® studies met criteria. Only 8 studies contained both SAGB and LAP-BAND®. There were 4,857 patients in 36 treatment groups in the 34 SAGB studies. In the 124 LAP-BAND® groups, there were 24,399 patients. Mean BMI at baseline was similar for SAGB and LAP-BAND® (42.2 kg/m² vs. 45.8 kg/m²). The *pars flaccida* technique was used for all or some of the patients in 15/36 SAGB groups and 34/124 LAP-BAND® groups. In the 8 studies comparing both bands, weight-loss outcomes appeared greater for SAGB at 2 years (48.4 vs. 41.9 kg). Adjustment techniques/strategies weren't reported. The frequency of late band revisions was lower for SAGB vs. LAP-BAND® (1.5% vs. 5.4%). Removal rates were similar (4.8% vs. 4.0%) as was leakage (2.1% vs. 1.7%). SAGB appears to have less frequent slippage/migration (3.7% and 7.0%). Complication rates varied widely in magnitude and differences were not significant.

Conclusion: At all time points up to 3 years, SAGB weight loss appeared equal to or greater than LAP-BAND®. Rates of complications between devices were not significantly different, except slippage, which was less in SAGB.

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36.

BANDING OR BYPASS? CHOICE OF THE PROCEDURE CANNOT BE INFLUENCED BY THE PRESENCE OF HIATUS HERNIA AND ESOPHAGEAL REFLUX.

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Background: Indication for Laparoscopic Adjustable Gastric Banding (LAGB) or Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) in patients with Hiatus Hernia (HH) and Gastro-Esophageal Reflux Disease (GERD) is controversial. Retrospective comparison of esophageal symptoms in patients who underwent both operations was performed.

Methods: From January 2000 to October 2005, 61 obese patients with HH and GERD underwent LRYGB (n=26, Group A) or LAGB (n=35, Group B). All patients underwent hernia reduction and posterior repair (HHR). Group A patients were: 5M/21F, mean age: 37.0 ± 15.6 yrs, range: 18-58, mean BMI: 42.5 ± 12.1 range: 35.1-52 kg/m². Group B patients were: 2M/33F, mean age: 41.7 ± 18.1 yrs, range: 18-68, mean BMI: 38.8 ± 10.9, range: 32.8-47.0 kg/m². Frequency and intensity of heartburn, regurgitation, and pyrosis were evaluated pre and postoperatively at a minimum of 12-months follow-up by a standardized questionnaire. Weight loss, intra and postoperative complications and hospital

stay were evaluated. Data were reported as mean \pm SD, statistical analysis was by Fisher's exact test ($p < 0.05$ was significant).

Results: Follow-up was achieved for all patients. Median hospital stay was 4 ± 1 (Group A) and 3 ± 1 (Group B) days ($p = \text{NS}$). Significant improvements ($p < 0.05$) were observed in GERD symptoms: heartburn from 78.5% to 42.8% (Group A) and from 75.2% to 26.3% (Group B); regurgitation from 57.1% to 0% (Group A) and 78.9% to 47.3% (Group B); pyrosis from 57.5% to 0% (Group A) and 78.5% to 0% (Group B). After one year the mean BMI was 31.1 ± 9.4 (range: 26.9-36.5 kg/m²) in LRYGB and 32 ± 10.1 (range: 27.6-39.5 kg/m²) for LAGB.

Conclusion: Concomitant HHR and LRYGB or LAGB can be safely performed with significant improvement of GERD symptoms. HH with GERD should not influence the choice between these two bariatric operations.

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37.

MAXIMUM WEIGHT LOSS AFTER STANDARD AND RINGED LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS. A RANDOMIZED CONTROLLED TRIAL.

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Background: The Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) leads to significant weight loss and correction of comorbidities in most patients. However, weight regain may occur years after surgery. The ringed LRYGB was designed to 1) enhance weight loss and 2) avoid weight regain.

Methods: A randomized controlled trial to compare maximum weight loss and weight regain in patients with standard and ringed (6.5cm) LRYGB was designed. The present study analyzes maximum weight loss.

Results: Patients were divided in two groups: Group 1. Standard LRYGB ($n = 30$) and Group 2. Ringed LRYGB ($n = 30$). There were no differences between both groups in terms of age, gender, body mass index (BMI) and surgical time. Weight loss results are described in Table 1. The % of patients who lost $\geq 50\%$ of EBW at 1, 2, and 3 years was 87%, 100%, 100% and 90%, 85%, 75% respectively for the groups 1 and 2.

Conclusion: There was no difference in maximum weight loss in patients undergoing standard or ringed LRYGBP.

Follow-up	BMI kg/m ²			%EBWL		
	Group 1	Group2	p	Group 1	Group2	p
Preop	47 \pm 5	48 \pm 5	0.52	-	-	-
6	34 \pm 5	35 \pm 4	0.52	54 \pm 15	53 \pm 11	0.69
12	30 \pm 4	31 \pm 4	0.34	71 \pm 14	68 \pm 14	0.39
24	30 \pm 4	31 \pm 5	0.60	71 \pm 15	69 \pm 16	0.65
36	29 \pm 4	34 \pm 5	0.09	74 \pm 15	57 \pm 19	0.09

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38.

ELIMINATION OF DUODENO-GASTROESOPHAGEAL REFLUX IN OBESE PATIENTS WITH BARRETT'S ESOPHAGUS: THE EFFECT OF ROUX-EN-Y GASTRIC BYPASS (RYGB).

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Background: Esophageal reflux of gastroduodenal contents (acid, bile) contributes to development of Barrett's esophagus (BE) and progression to the dysplasia-carcinoma sequelae. Obese patients have a high incidence of gastroesophageal reflux and may be at increased risk for developing BE and esophageal adenocarcinoma. The effect of eliminating esophageal reflux of duodenogastric content on BE is not known. **HYPOTHESIS:** RYGB, by eliminating reflux of acid and/or bile, induces regression of BE. **AIM:** To assess changes in length of BE and presence of dysplasia in patients undergoing RYGB.

Methods: Retrospective review of all patients with pre-existent, clinically important, biopsy-proven, LONG SEGMENT (> 3 cm) BE undergoing RYGB at our institution. Only patients with > 1 yr of endoscopic, biopsy-controlled follow-up (mean 34 mo) were included.

Results: Five patients (3 men, 2 women) were identified. Preoperative length of BE was 6 ± 2 cm (mean \pm SEM), 2 patients had low-grade dysplasia, and 1 had indeterminate dysplasia. At postoperative follow-up (> 1 yr), length of BE decreased in 4, while overall length was 2 ± 1 cm; only 1 patient had dysplasia. In the 1 patient in whom no change in length was noted at 38 mo after conversion of prior symptomatic (GERD) vertical banded gastroplasty to RYGB, the low-grade dysplasia was not seen. All patients experienced either reduction of Barrett's length ($n = 4$), resolution of BE ($n = 2$), or improvement in degree of dysplasia ($n = 3$). Body mass index (BMI) decreased from 43 ± 4 to 33 ± 3 , and all experienced subjective improvement in reflux symptoms postoperatively.

Conclusion: SUMMARY: RYGB resulted in complete or partial regression of BE in 4 of 5 patients and improvement in reflux symptoms in all. **CONCLUSIONS:** RYGB may be the procedure of choice in morbidly obese patients (and even in less obese subjects?) with BE requiring surgical treatment for gastroesophageal reflux disease.

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39.

GASTRIC BANDING FOR THE TREATMENT OF TYPE 2 DIABETES MELLITUS IN THE MORBIDLY OBESE.

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Background: Obesity is a leading cause of type 2 diabetes (DM). Our aim was to assess the efficacy of the Swedish Adjustable Gastric Band (SAGB) in the treatment of diabetes in the morbidly obese.

Methods: We identified all patients with either DM or impaired glucose tolerance (IGT) at the time of surgery from our database of 774 consecutive patients who underwent placement of the SAGB