The Post Bariatric Surgery Patient: What's the Role of the Gastroenterologist?

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Agenda

• Obesity
• Bariatric surgery
• Complications and management
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Obesity

- More common worldwide than hunger
- Increasing prevalence in the U.S.
- Associated with multiple comorbidities
- Increased mortality (Cancer, heart disease)

Qualification for Surgery

- BMI > 35 with comorbid conditions
- BMI > 40

NIH clinical guidelines 1998

Bariatric Surgery

- Lap Band
- Vertical Banded Gastroplasty
- Sleeve Gastrectomy
- Roux-en-Y Gastric Bypass
- Biliopancreatic diversion
Roux-en-Y Gastric Bypass

• Most common bariatric surgery in the U.S.

• Now typically done laparoscopically

• Creates a small gastric pouch for a restrictive effect and bypasses a portion of small bowel

• Expect 62 to 68% EWL at 1 year

Sleeve Gastrectomy

• Partial gastrectomy removing the majority of the greater curve

• Primarily restrictive mechanism of weight loss but does remove most ghrelin producing cells

• Can be a bridge to RYGB

• Fewer complications than RYGB but more than lap band

• Less weight loss than RYGB but more than lap band
Complications

• Anastomotic ulcers
• Postoperative hemorrhage
• Anastomotic strictures
• Internal hernia
• Malnutrition
• Band complications
• Leaks/fistulas
• Gastrogastric fistulas
• Biliary tract disease
• Weight regain

Anastomotic Ulcers

• Occurs in 0.6 – 16% of RYGB patients
• Commonly occurs in the first 3 months post-op
• Often complicated by hemorrhage
• Etiology
  • H. pylori
  • Ischemia
  • Foreign body reaction
  • Gastrogastric fistula
  • NSAIDs
  • Long gastric pouch
  • Smoking

Sapata JA et al. Obesity Surgery 1998
Anastomotic Ulcers

- Diagnosis typically made by EGD
- Test for *H. pylori* stool Ag
- Treatment
  - PPI (oral disintegrating tabs)
  - Carafate
  - Smoking cessation
  - FB removal
  - Treat *H. pylori*
- Endoscopic suturing ( oversew)
- Surgery for refractory cases

Strictures

- Etiology
  - Ulceration
  - Ischemia
  - Band Complication
- Higher incidence with circular staplers
- Location
  - Gastrojejunostomy 4-19%
  - Jejunojejunostomy 0-2%
  - Adhesions 0-2%

Sapata JA et al. Obesity Surgery 1998
Peifer KJ et al. GIE 2007
Stricture Treatment

- Balloon Dilation
  - Successful 66-93% of the time
  - May require multiple sessions
  - Do not dilate beyond 15 mm initially
- Foreign Body removal
- Injection with saline/steroids
- Surgery for refractory strictures

Peifer KJ et al. GIE 2007

Leaks/Fistulas

- Can occur with any operation (except band)
- Occurs at an anastomosis
- Can present early or late
- Early leaks often present with sepsis and instability
- Occurs in 1.5-6 % of RYGB patients and 5% of sleeve gastrectomy patients
- Higher rates in revisional surgeries
Leaks/Fistulas - Treatment

• Management
  – NPO
  – Correction of electrolyte imbalances
  – Antibiotics for infections
  – TPN
  – Consider octreotide
  – Percutaneous drainage of fluid collections

Merrifield B et al. GIE 2006

Leaks/Fistulas - Treatment

• Endoscopic Management
  – Endoscopic clipping (OTSC)
  – Endoscopic suturing
  – Stent placement
  – Fibrin glue

• Overall success rate 75-87%
  – Low complication rates

• Opening > 1 cm associated with poor outcome

Merrifield B et al. GIE 2006
Weight Regain after RYGB

- Mechanism not well understood – likely multifactorial and variable
  - Dietary noncompliance
  - Anatomic considerations
    - Dilation of gastrojejunostomy
    - Gastrogastric fistula
  - ?Change in gut flora
  - ?Hormonal Changes

- Surgical revision carries high rate of morbidity and mortality


OverStitch
Stoma Reduction

• Occurs in 0-29% of Roux-en-Y patients
  ‒ Much less common with newer surgical techniques

Symptoms and associated findings
  ‒ GERD
  ‒ Weight regain
  ‒ Marginal ulceration
    ‒ Abdominal pain
  ‒ Strictures

Etiology
  ‒ Staple Gun Failure
  ‒ Ischemia
  ‒ Ulcers
  ‒ Inflammation

Fernandez-Esparach et al. Surg Obes Relat Dis 2010

Gastrogastric Fistula

• Occurs in 0-29% of Roux-en-Y patients
  ‒ Much less common with newer surgical techniques

• Symptoms and associated findings
  ‒ GERD
  ‒ Weight regain
  ‒ Marginal ulceration
    ‒ Abdominal pain
  ‒ Strictures

• Etiology
  ‒ Staple Gun Failure
  ‒ Ischemia
  ‒ Ulcers
  ‒ Inflammation

Fernandez-Esparach et al. Surg Obes Relat Dis 2010
Gastrogastric Fistula

• Endoscopic treatment options include OTSC and endoscopic suturing
• No published data with Overstitch suturing system
  – Data on use of other suturing systems demonstrated improved closure with < 1 cm
• Generally successful at initial closure
  – Main challenge is persistent closure
    ▪ Edges of fistula should be treated with APC to improve tissue apposition

Fernandez-Esparach et al. Surg Obes Relat Dis 2010
Summary

- Obesity is a metabolic disease
- Bariatric surgery is effective at inducing weight loss
- Complications are not uncommon after bariatric surgery and are often treated or diagnosed endoscopically
- Endoscopic suturing can treat weight regain and gastrogastric fistulas after RYGB