MANAGEMENT OF ACUTE and CHRONIC Marginal Ulcers

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Marginal Ulcers
Ulcers

- **Peptic** ulcers = ulcers that occur in the distal gastric antrum or duodenum
  - Incidence of peptic ulcers after LAGB or VBG is similar to that of patients who had not undergone bariatric surgery.
  - In contrast, the incidence is much lower in patients with gastric bypass (0.26%).

- **Marginal** ulcers = anastomotic ulcers
  - Mucosal erosion on the intestinal side of the GJ anastomosis
  - Most occur in the first few months of surgery
  - Incidence:
    - 3 - 5% (in divided RYGB)
    - 5 - 15% (in undivided RYGB)
    - 3 - 11% (BPD)
    - 0 - 1.6% (BPD/DS)

Marginal ulcers CONT

- Risk factors (Patient):
  - NSAID, steroids, immunomodulators
  - cigarette smoking
  - diabetes
  - H pylori
  - stress?
  - gastro-gastric fistula

- Risk factors (Intra-operative):
  - use of non-absorbable sutures at the GJ anastomosis
  - tension and/or ischemia at the GJ anastomosis
  - creation of a “larger” gastric pouch
  - use of stapled anastomosis (linear / circular)?

Different pathophysiology for early vs late marginal ulcers?
Marginal ulcers CONT

• Clinical presentation:
  - Nausea / vomiting (food intolerance)
  - Abdominal pain (epigastric pain +/- radiation to back)
  - GI bleeding (hematemesis or occult LGIB, anemia)

• Diagnosis:
  - Upper GI series
    - not sensitive for detecting most ulcers
    - but, helpful for evaluating for GG fistula
  - Upper endoscopy
Marginal ulcers CONT

• **Treatment:**
  - Remove offending agent(s)
  - Medications
    - PPI
    - misopristol
    - sucralfate
  - Test for H pylori and treat if (+)
  - TIME and MORE TIME

• **Prognosis:**
  - Good
    - < 10% of patients requiring surgical revision
  - Not good for ulcers secondary to ischemia or GG fistula
  - Follow-up endoscopy needed to document healing
Marginal ulcers

Surgical Revision

• Indications for surgery
  - fails medical therapy
  - presence of GG fistula
  - significant blood loss
  - perforation

• Surgical options
  - endoscopic removal of offending suture and/or staple
  - fibrin glue +/- stent placement (for GG fistula treatment)
  - truncal vagotomy only (or concurrently with resection of ulcer?)
  - resection and redo GJ anastomosis +/- resection of GG fistula
  - for perforation, treat like perforated PUD
Marginal ulcers
*Thoracoscopic truncal vagotomy*

- **Why NOT do it laparoscopically?**
  - you may encounter significant scar tissue around the GE junction area
  - this procedure is less riskier than resection/redo GJ anastomosis (and if you attempt to do this laparoscopically, there will be more scar tissue in this area next time)

- **Duke series**
  - retrospective study (2007 – 2011)
  - 8 female patients underwent TTV (unilateral thoracotomy with ligation of bilateral vagus nerves)
    - 4 underwent revisonal RYGB prior to TTV
    - 7 had multiple abdominal surgeries related to their RYGB
  - mean F/U was 11 months → 1 recurrence (in a smoker)