Gastric Remnant Leak after Revisional Bariatric Surgery for Laparoscopic Gastric Plication: a Rare Case Report and Review

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Background

- Laparoscopic gastric plication (LGP), although not gold standard, is a common weight loss procedure outside the United States.
- Given its high rate of subsequent revisional surgery, bariatric surgeons must be aware of the indications for surgery and how to recognize and treat the complications that may arise.
- The management of acute leaks depends on surgeon preference, with options ranging from external drainage, endoscopic closure and surgical revision.
- Prompt recognition of the postoperative leak is key. Close monitoring postoperatively is imperative in revisional bariatric surgery and these patients may require a higher degree of oversight during their hospitalization.

Case Study

This is a literature review of revisional bariatric surgery for LGP complicated by postoperative leak

- A 33 year-old female who underwent a LGP with inadequate weight loss and GERD was offered revisional Roux-en-Y gastric bypass (RYGB).
- A laparoscopic RYGB was performed with a side-to-side jejunojejunostomy anastomosis, a 150-cm roux limb, and 2-0 silk hand-sewn gastrojejunostomy (GJ), with a negative methylene blue leak test.
- On postoperative day 1, the patient became septic from a leak at the gastric remnant and required emergent re-exploration.
- The disrupted gastric remnant staple line was closed with prolene sutures, again with negative leak test.
- Patient ultimately was discharged from the hospital, and with successfully sustained weight loss and resolution of GERD.



Figure 1. Preoperative CT scan demonstrating the gastric plication

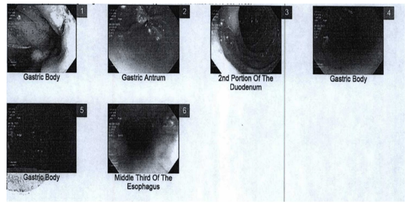


Figure 2. Preoperative EGD images of the gastric plication

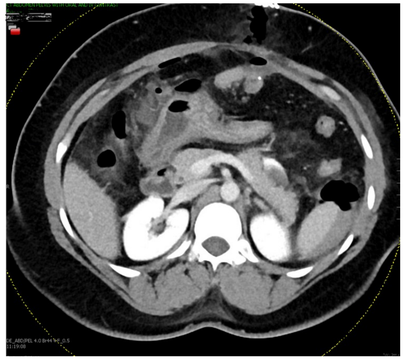


Figure 3. Postoperative CT demonstrating the gastric leak after RYBG



Figure 4. Postoperative CT demonstrating the gastric leak after RYGB

Discussion

We present a case of gastric remnant leak after revisional laparoscopic RYBG for LGP with inadequate weight loss and unresolved GERD, the take-home points include:

- Revisional bariatric surgery is technically complex and associated with a significant rate of complications. Compared with primary surgery, revisional RYGB is associated with greater perioperative morbidity, with complication rates ranging up to 33%.
- Specifically, the mechanism of leaks could be related to tension or ischemia, and risk factors include poor wound healing and obstructive sleep apnea on positive pressure ventilation.
- Current literature does not favor one particular method for revisional surgery, and thus surgical management should be patient-specific.

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Disclosures

The authors declare that they have no relevant or material financial interests that relate to the research described in this poster