Management of Retained Stomach after Gastro-Gastric Fistula Perforation: A Multidisciplinary Surgical Approach

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Introduction

- Gastro-gastric fistulas (GGF) in patients with Roux- en-Y gastric bypass (RNYGB) is a rare but challenging surgical problem[1]
- Clinical presentation
  - poor oral intake
  - weight regain
  - overall emotional and clinical decline.
- Surgical management can involve revision of the gastrojejunostomy anastomosis or remnant gastrectomy[2]
- We present a complex case of a perforated GGF

Pre-operative course

- A 51-year-old female with a history of RNYGB underwent a revision for weight regain, due to GGF.
- The patient subsequently presented to our tertiary care institution with persistent reflux and poor oral intake.
- Subsequent esophagogastroduodenoscopy (EGD) identified a small fistulous opening suggestive of recurrent GGF and gastrojejunostomy stricture (Fig 1).
- Following multidisciplinary evaluation, endoscopic dilation of this tract was attempted but resulted in perforation, necessitating emergent surgical intervention (Fig 2).

Intra-operative course

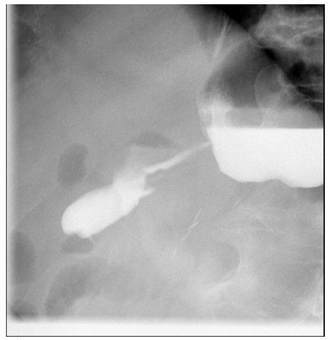
Figure 1

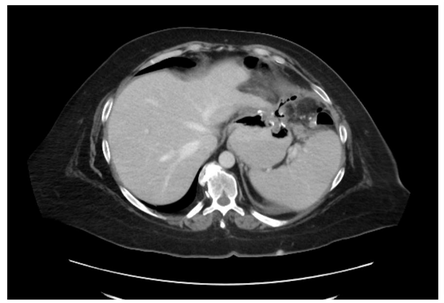
Figure 2

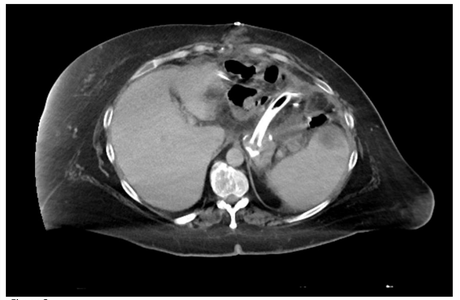
Figure 3

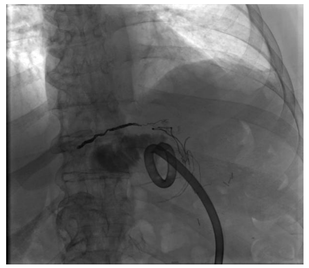
Figure 4

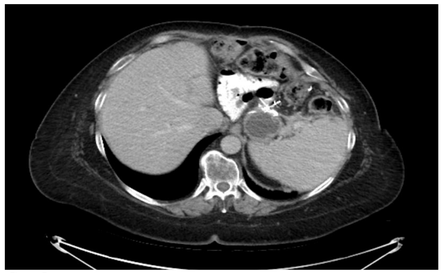
Figure 5

- Intraoperatively, dense adhesions, phlegmon, and significant inflammation were noted near the gastric fundus, precluding safe dissection from the splenic hilum due to the risk of uncontrolled hemorrhage.
- A 5 × 5 cm segment of gastric mucosa, inseparable from the splenic hilum, was intentionally left behind and staple excluded from the remainder of the stomach. This pouch was managed with a Malecot drain and omental coverage to control potential leakage of gastric contents.
- A completion gastrectomy was next performed with construction of an esophagojejunal roux en y anastomosis. Post operative CT scan with Malecot drain is seen in Figure 3.

Post-operative course

- Postoperatively, no leak was observed on upper GI imaging.
- To sclerose the pouch, interventional radiology performed angioembolization of the gastric remnant; however, the patient continued to have persistent drainage from the Malecot drain.
- Sclerotherapy was performed with downsizing of the surgical Malecot to 20Fr drain (Fig 4). This drain was progressively withdrawn over a few months and eventually removed
- She continues to have a stomach remnant seen on scan which has been stable without any symptoms (Fig 5)

Discussion

The approach described here represents a novel, pragmatic strategy in the management of a retained stomach. Surgical options were significantly limited by extensive adhesions and prior anastomotic complications; however successful management was achieved through close collaboration among bariatric surgery, thoracic surgery, gastroenterology, and interventional radiology.

References

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