Robotic Remnant Gastrectomy for Recurrent Gastric Perforated Ulcers

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INTRODUCTION

- Although peptic ulcer disease may occur in patients with a history of Roux-en-Y gastric bypasses (RYGB), perforated remnant stomach ulcers have rarely been reported.
- The anatomical alterations that patients endure with RYGB often prevent them from routine evaluation.
- Our case involves a robotic remnant gastrectomy to provide a definitive solution for recurrent remnant stomach perforated ulcers.
- We highlight a rarely reported pathology with an operative solution that can be beneficial in select patients.

CASE REPORT

- 59 yo F with PMH of cocaine abuse, GERD, HTN, HLD, DM and a past surgical history of RYGB, initially presented with a 9 mm perforated duodenal ulcer with peritonitis. The patient was taken to the operating room on 5/12/2023 for a primary repair of her duodenal ulcer.
- The patient re-presented to an outside hospital with abdominal pain and was found to have a contained remnant stomach perforation on 7/4/2024. The patient was managed conservatively till she left the hospital against medical advice on 7/11/2024.
- The patient presented to clinic on 7/16/2024 with epigastric abdominal pain and was admitted to the hospital.
- The patient was taken to the operating room on 7/18/2024 after failure of conservative management for a robotic total remnant gastrectomy.
- The patient was appreciated to have multiple remnant stomach gastric perforations with contained abscesses. After the remnant gastrectomy the patient was appreciated to have an intact duodenal stump with adequate blood flow identified via Spy Angiography.
- On post-op day (POD) 1, the patient was appreciated to have oral thrush. In addition to broad spectrum antibiotics, Fluconazole was added to the patient's regimen.
- On POD 5, GI preformed an EGD which demonstrated candida esophagitis.
- The patient was discharged on POD 8.
- Pathology demonstrated gastritis, duodenitis, mucosal ulceration, no evidence of malignancy or H. pylori.
- The patient re-presented to the hospital on POD 12, secondary to abdominal pain after ingesting collard greens. The patient was discharged on POD 13 after return of bowel function.
- The patient has not followed up in clinic or been admitted since her discharge on POD 13.

IMAGING



Figure 1: CT prior to total remnant gastrectomy

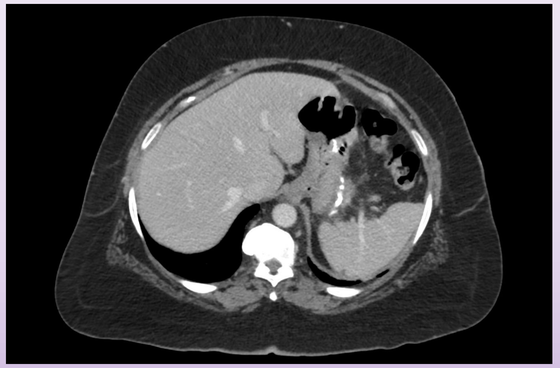


Figure 2: CT after total remnant gastrectomy

DISCUSSION

- Patients status post RYGB have anatomical alterations that can prevent them from routine evaluation. Often times operative or advanced endoscopic interventions are necessary for adequate visualization.
- Secondary to these barriers, patients' remnant stomachs are often under evaluated.
- Negative sequelae are often under-reported and under-observed for remnant stomach complications (perforations, malignancies, etc.) which is a disservice to bariatric patients.
- The diagnosis for acute complications of a remnant stomach can be challenging due to the altered symptomatology and problematic diagnostic modalities.
- As a result, intervention is often delayed, which can significantly increase morbidity and mortality.
- There is a scarcity of literature about perforated ulcers in remnant stomachs and no clear delineation for ideal management. However, there is support for at least obtaining a biopsy of the ulceration to rule out malignancy.
- Intervention entails complex endoscopy, intraoperative gastroscopy, ulcer repair with concomitant vagotomy, or definitive remnant gastrectomy.
- Remnant gastrectomies have been associated with nutritional deficiencies and alterations in gut microbiota. Secondary to the patient's recurrent episodes of contained perforations, lack of medical compliance, and concern for malignancy; we elected to perform a remnant gastrectomy.
- Early operative intervention for remnant stomach sequela may lead to decreased morbidity and mortality. Remnant gastric resection would lead to definitive treatment without potentially requiring further intervention.

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