Phytobezoar after Gastrectomy Requiring Surgical Intervention:
A Rare Case Report and Review

Katelyn Larson, MD[a], Alexander Hien Vu MD[a], Stacy Sebastian MD[a], Eric Chuang MD[a], Franchesca Hwang, MD[a]

[a] **Department of General Surgery, New York University Langone Health, Brooklyn, NY**

Background

- **What is a bezoar?** A collection of undigested materials that builds up in the GI tract
- **Risk factors**: abdominal surgery (especially gastrectomy), anatomical abnormalities, psychiatric disorders
- **Incidence of small bowel obstruction (SBO) secondary to bezoar**: 2-3%. Of that, 5-12% found in those who had gastrectomy.

Case Review

- 64-year-old female presenting with abdominal pain, nausea, vomiting, and no flatus x 24 hours.
- Surgical history: gastric cancer status post gastrectomy and Billroth II reconstruction and partial transverse colon segmental resection 7 years prior
- **Differential diagnosis**: SBO secondary to adhesions, recurrent malignancy, or foreign body
- **Workup**: CT abdomen/pelvis showed SBO with a transition point in the left mid abdomen. Small bowel adherent to the anterior abdominal wall at this level without obvious implants (Fig. 1).
- **Preoperatively:** NGT decompression with modest relief → Worsening LUQ pain with new hypotension & fever → Taken to the operating room for exploration

Disclosures

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

References

1. Bedioui H et al. 15 cases of small-bowel obstruction secondary to phytobezoars: predisposing factors and diagnostic difficulties. Gastroenterol Clin Biol. 2008 Jun. PMID: 18487032.
2. Ben-Porat T, et al. Gastrointestinal phytobezoar following bariatric surgery: Systematic review. Surg Obes Relat Dis. 2016 Nov. PMID: 27989523.
3. Hemmasi G et al. Risk factors, endoscopic findings, and treatments in upper gastrointestinal bezoars: multi-center experience in Iran. Gastroenterol Hepatol Bed Bench. 2021 Spring;14(2):160-164. PMID: 33968343; PMCID: PMC8101514.
4. Herschman A. Ileal obstruction due to adhesions and phytobezoar following gastrectomy. Radiology. 1969 May. PMID: 5790641.
5. Yang JE et al. A large-sized phytobezoar located on the rare site of the gastrointestinal tract. Clin Endosc. 2013 Jul. PMID: 23964339.

Figures

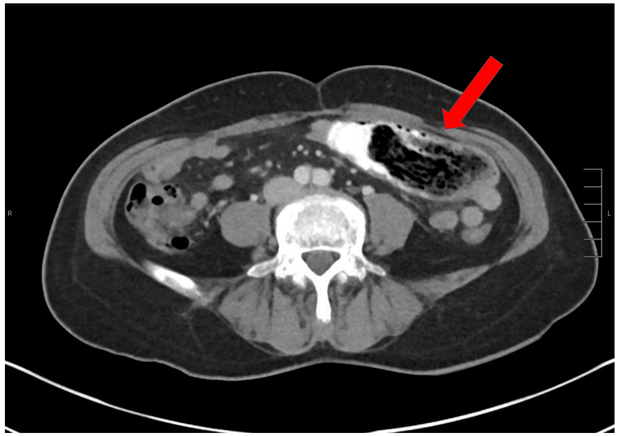


Figure 1. CT axial imaging demonstrating transition point in the left upper abdomen. No obvious mass demonstrated.

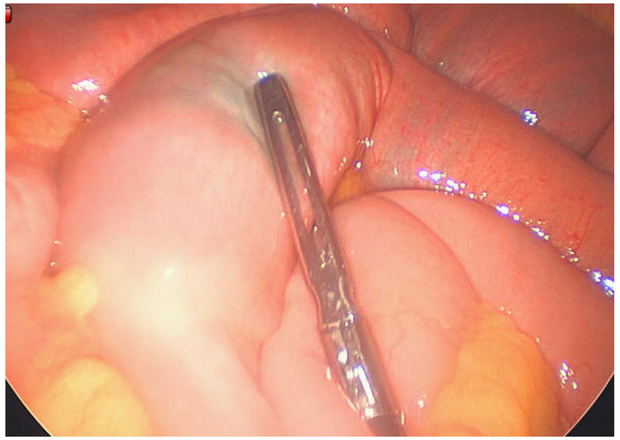


Figure 2. Laparoscopic image of phytobezoar.

Operative Details

Diagnostic laparoscopy revealed a firm mass (Fig. 2) in the proximal small bowel with decompressed bowel distally; decision was made to convert to laparotomy. A small enterotomy was made proximal to the obstruction, and a dense, fibrous mass was found consistent with a phytobezoar. The mass was completely removed. The enterotomy was closed in a transverse fashion with an interrupted 3-0 Vicryl suture. Abdomen was closed. Pathology confirmed digestive food material consistent with phytobezoar.

Post Operative Course

Patient was found to have *Klebsiella aerogenes* bacteremia, which resolved with antibiotics. She had return of bowel function, tolerated diet, and was discharged home.

Discussion

We present a case of SBO secondary to a phytobezoar, the take-home points are:

1. Although a rare source of SBO, surgeons should keep a high index of suspicion for bezoars in patients with prior gastric surgeries, especially gastrectomy.
2. Patients can present within months and up to 30 years after gastrectomy with obstructive symptoms.
3. Treatment includes milking the bezoar to the cecum, dissolving the mass with nasogastric lavage or endoscopic cola infusions, lithotripsy to break up the mass, or most aggressively, surgical removal.