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An Unusual Case of Small Bowel Obstruction Secondary to Calcium Carbonate Use

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An unusual case of Small Bowel Obstruction secondary to Calcium Carbonate use

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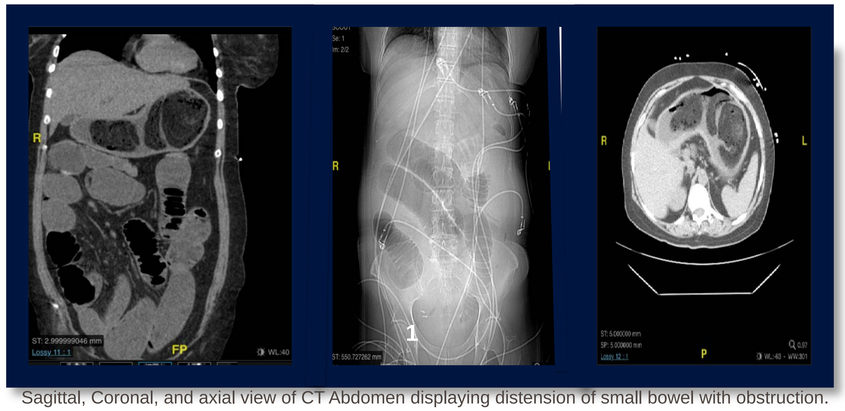
Introduction

A Gastric Bezoar is defined as an accumulation of indigestible foreign material found in an individual's GI tract. The incidence of gastric bezoar is 0.3% as reported by endoscopy studies. These formations usually consist of insoluble vegetable matter (phytobezoars), hair (trichobezoars), or medications (pharmacobezoar). In general, they can be asymptomatic for many years or cause nonspecific symptoms including abdominal pain, early satiety, and weight loss. However, in recent years, these have become increasingly problematic for the general population attributing to a variety of GI disturbances. We are reporting a case which revolves around a female patient with no history of abdominal surgery who developed a small bowel obstruction from multiple large bezoars.

Case Report

The patient is a 55 year old female who presented to the ED due to 12 day history of intractable vomiting, generalized weakness, and constipation. Patient has a PMHx of HTN managed with metoprolol and GERD relieved by daily use of Calcium Carbonate. She reported that she has used Calcium Carbonate daily for several years but has increased the amount and frequency over the past year due to worsening episodes of reflux. A CT abdomen and pelvis was performed which demonstrated a severe small bowel obstruction secondary to a gastric foreign body. Scope was passed into the stomach and immediately there were at least 3 large accumulations 6-8 cm noted. Due to the fact that these were unable to be fragmented during endoscopy, they were speculated to be formations of foreign material rather than impacted food. Therefore, the patient required surgical laparotomy where surgeons noticed massive dilation of the small intestine. Surprisingly, there was another large lesion found proximal to the terminal ileum and ileocecal valve which required enterotomy followed by removal of gastric lesions by gastrotomy. The pathology of the stones were negative for any malignant processes. Additionally, patient was evaluated for PICA although she denied ingesting any abnormal substances. Repeat CT abdomen and pelvis was performed to confirm complete removal of all masses as well as resolution of the obstruction. Patient responded well to the surgical procedure and after only a few days was discharged without further complications.

Images



Sagittal, Coronal, and axial view of CT Abdomen displaying distension of small bowel with obstruction.

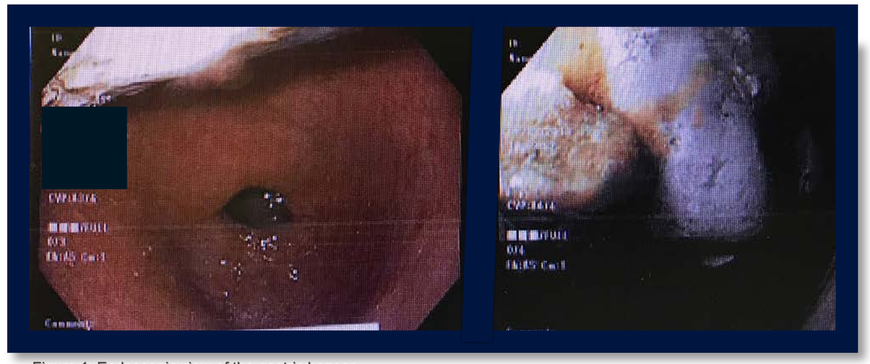
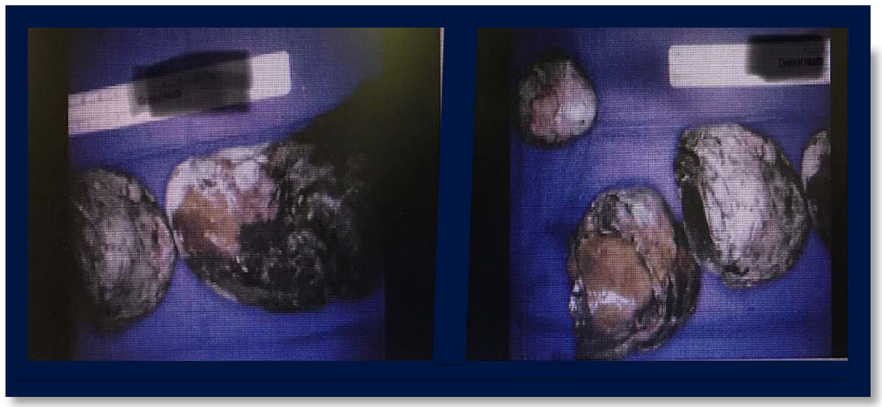


Figure 1: Endoscopic view of the gastric bezoar.

Figure 2: Gastric outlet where the white chalky appearance of the mass is most notable.



Surgically removed rom the intraluminal gastric and intestinal region 1.3 x 14.4 x 6.2 cm.

Discussion & Conclusion

Depending upon the type of material ingested, the standard care of treatment for gastric bezoars involves endoscopic fragmentation and suctioning or simply allowing passage through the GI tract after adequate fragmentation. However, in severe cases, such as in this patient, the only curative measure is surgical removal. We believe the patient's Small Bowel Obstruction can be attributed to her daily Calcium Carbonate use which she has taken for several years. Although Calcium Carbonate is a benign, widely used medication, with heavy use, it has the potential for negative consequences.

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