

Case Report

Lithobezoar: a case report

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Received: 10 October 2019

Revised: 20 November 2019

Accepted: 21 November 2019

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ABSTRACT

We present a unique case of a colonic lithobezoar in a relatively healthy, young male with no history of psychological or psychiatric disorders. Furthermore, unlike previously reported cases, this patient had no history of gastric surgery. The mode of presentation and the rarity of disease pose difficulties in diagnosis of lithobezoar. The different modalities of treatment, both surgical and nonsurgical, were thought of and discussed. The diagnosis of a lithobezoar in a healthy patient requires a high index of suspicion, as it presents with nonspecific symptoms. The standard treatment for bezoars is discussed but lithobezoar needs special mention due to its rarity and no specific surgery guidelines.

Keywords: Bezoar, Sigmoid colon, Lithobezoar, Male

INTRODUCTION

A bezoar is a conglomeration of partially digested or undigestible foreign material in the gastrointestinal tract.¹ The term derives from Arabic “bazahr” or “badzehr”, which means antidote, due to the fact that until the 19th century, bezoars obtained from sacrificed animals were utilized to cure several illnesses.¹ Bezoar refers to swallowed material (either food or foreign body) that fails to clear from the stomach and accumulates into masses of concretions.² However, even large foreign bodies are cleared from the stomach of normal individuals in 80 to 90% of patients. Therefore, bezoar formation usually implies altered gastric anatomy or physiology as well as continued ingestion of the offending substance.³ Till date only 6 cases of colonic Lithobezoar have been reported. It was first described by Baudamant in 1779 and credit of first preoperative diagnosis to Stelzner in 1896.¹ After analyzing its composition it is classified as lithobezoar (stones) phytobezoars (vegetable matter) and trichobezoars (hair), lactobezoars (concentrated milk formulas) and inorganic

material bezoars. It usually presents as abdominal pain. The stomach is the most frequently affected organ with small intestine second site but colon is a rare site.^{4,5} Colonic lithobezoar are usually associated with history of pica or iron deficiency anemia or psycho-social disorders.⁶

CASE REPORT

A 24 years old male presented with abdominal distension and pain in abdomen with absolute constipation for 3 days. No history of any addictions or co-morbidities.

On examination patients a pulse rate was 105/min and BP-130/70 mmHg. On abdominal examination a large (22×20 cm), non-tender, partially mobile mass in left iliac fossa, extending to the suprapubic region. No palpable organomegaly. Hernial orifices were normal and scrotal examination did not reveal any abnormality. Lymph nodes were not palpable. Bowel sounds were exaggerated in all quadrants.

Haematological and biochemical investigations were within normal limits. On PR examination, rectum was empty.

Patient had similar complaints 3 years ago for which he was treated with manual removal of hard faeces under anaesthesia.

USG abdomen revealed a poorly defined lesion extending from umbilicus to suprapubic region of 15×15 cm; impacted stones in ureter with hydronephrosis; bowel mass.

X-ray abdomen erect showed multiple small radio-opaque masses in the region of sigmoid colon with no air-fluid levels. CT abdomen report showed the large lithobezoar in sigmoid colon.

The exploratory laparotomy was performed which showed redundant distended sigmoid colon with lithobezoar. The sigmoid colon was dilated and redundant. Hence sigmoidectomy with end-to-end anastomosis was done. The postoperative course was uneventful and the patient was discharged on the seventh postoperative day.



Figure 1: (A) Pre-operative picture showing lump in abdomen; (B) distended sigmoid colon; (C and D) lithobezoar in sigmoid colon; (E) post-operative picture showing lithobezoar.

DISCUSSION

The clinical presentation of colonic bezoars is abdominal pain and sometimes associated with a palpable mass. And also presents with abdominal distension, vomiting, constipation or diarrhea.^{7,8} Palpable abdominal mass on rectal examination is “colonic crunch sign” which was positive in this patient. The diagnosis of colonic bezoar is made on x-ray abdomen erect and contrast CT scan. The typical bezoar image, involving a mottled air pattern, was visible in only 18% of patients with small bowel obstruction on plain radiography.⁹ CT is considered imaging technique of choice for confirming the diagnosis. In this case, CT diagnosis of bezoar was based on identifying a low density intraluminal mass containing air bubbles and exhibiting a characteristic mottled appearance.¹⁰ The treatment of colonic bezoars depends on the site, the type and the size.¹¹ In the literature review the previously reported colonic lithobezoar cases were

treated by anal dilatation and extraction of the stones under anaesthesia.¹¹ Colonoscopic removal is considered if enemas fail. Surgery can be considered if colonoscopy fails or colonic injury occurs.^{12,13} Chronic constipation is a very common problem in aging population. Large bowel obstruction due to colonic bezoar is a diagnostic challenge and may have life threatening complications. Treatment options depend on the patient's condition, and management of proximal colon as a part of a definitive treatment.

CONCLUSION

The diagnosis of a lithobezoar in a healthy patient requires a high index of suspicion, as it presents with nonspecific symptoms. The standard treatment for bezoars is discussed but lithobezoar needs special mention due to its rarity and no specific surgery guidelines.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Chowksey S, Deshmukh S, Kalbande S. Lithobezoar: a case report. *Int Surg J* 2020;7:284-6.