

Rare Presentation of Large Sigmoid Fecaloma Causing Ball-Valve Effect, In a 45-Year-Old Female a Case Report

Dr. Jameel Akhter¹, Dr. Ashwin Chandhrasekaran²

¹MS, FIAGES, FMAS Senior Consultant Laparoscopic Surgeon

²MBBS, DNB General Surgery resident.

Abstract

Fecaloma is a mass of hardened feces being impacted mostly in the rectum and sigmoid colon. There are several causes of fecaloma such as Hirschsprung's disease, psychiatric patients, Chagas disease, both inflammatory and neoplastic situations, and also seen in patients with chronic constipation. We present a case of a 45 year old female with a history of chronic constipation who was further evaluated and was diagnosed to have giant fecaloma. This current report highlights the importance of aggressive treatment for chronic constipation to prevent life threatening complications

Keywords: Fecaloma, chronic constipation, aggressive treatment

Introduction

A fecaloma is a solid fecal mass that usually forms over time due to stasis of fecal matter secondary to chronic constipation [1]. There are reports of fecalomas which are formed secondary to disorders of colonic innervation, which suggests the main pathophysiological mechanism of fecalomas. Fecalomas are associated with a considerable risk of life threatening conditions, including large bowel obstruction, lower gastrointestinal bleeding, colonic perforation. Treatment can be medical, endoscopic or surgical removal [2]. Here we discuss a 40 year old female, with giant fecaloma causing large bowel obstruction, with failed medical therapy and failed endoscopic therapy, underwent laparoscopic assisted fecaloma evacuation through anus. We are reporting a case of fecaloma of the sigmoid colon which is unusual and requiring surgical management.

Case Presentation

A 40 year old female was referred to our clinic with a history of chronic constipation for 2 years and past history of rectal prolapse (details unavailable). The constipation was progressive and was partially responsive to stimulant laxatives. She also has associated abdominal pain which was colicky in nature and confined to the left lower abdomen. She denies any rectal bleeding, but has a history of weight loss and loss of appetite with the fear of constipation. She was tolerating liquid foods. She has no other comorbidities nor any psychiatric illness. On examination she looked lean, but able to walk, her vitals were stable, BMI was 22.2kg/m². Abdominal examination on inspection abdomen was slightly distended, no visible peristalsis nor visible swellings, on auscultation normoactive bowel sounds were audible, no organomegaly nor palpable masses. Her blood workup was within limits, she was evaluated with

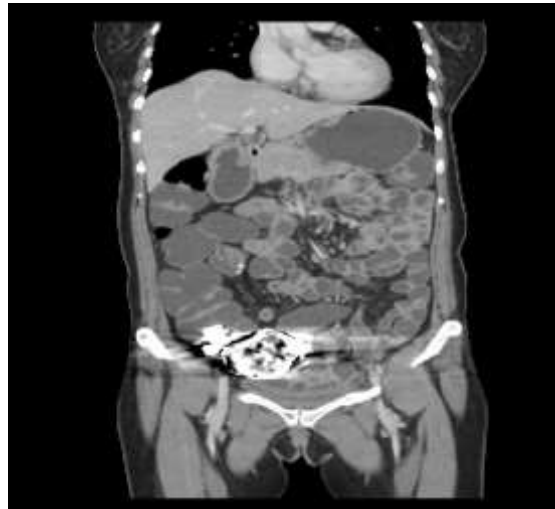
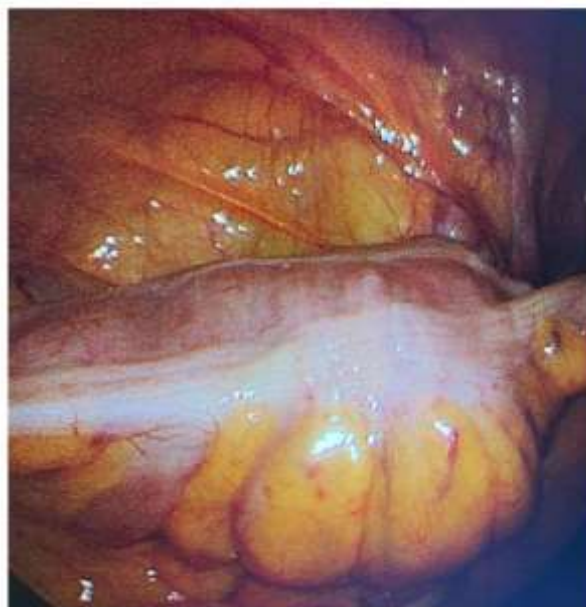
colonoscopy prior to our visit where she was given bowel preparation with COLOPREP (sodium sulfate, potassium sulfate, magnesium sulfate) which gave her symptomatic relief. On colonoscopy a giant fecaloma was observed in the sigmoid colon, past which the scope couldn't pass ahead, which was suggestive of a ball valve effect. Endoscopic trial of retrieval was done but was unsuccessful. Procedure was abandoned and further evaluation was done, to rule out any malignant source of the impaction . Patient underwent 640 SLICE Contrast enhanced enterography[Figure 1], which revealed normal bowel loops, no mechanical cause of impaction, but a 14 cm flat fecaloma with calcification was noticed within the sigmoid, and rectosigmoid junction. With further discussion with a medical gastroenterologist, the patient was offered surgery for retrieval. Initial plan was to perform Diagnostic laparoscopy and proceed with enterotomy and retrieval, followed by primary closure of the enterotomy if the bowel mucosa is normal and without necrosis. But during laparoscopy with the help of bowel graspers, the fecaloma was been able to push down towards the rectum without enterotomy, following which it was retrieved through anus manually[Figure 3]. Postoperatively patient was placed on regular polyethylene glycol to treat her constipation and was seen for follow- up.

Discussion

Fecaloma is accumulation of hard fecal matter within the bowel lumen, left sided colon is the most common location because the stool becomes firmer and colonic diameter is small as compared to right side. Clinical presentation of Fecaloma is variable depending upon the size, site and underlying etiology. In this case report no specific cause of fecaloma was identified. We analysed the specimen to rule out any nidus of bezoar over which this fecaloma had formed, but there was no evidence of be zoarandit was only fecal matter. The composition of fecaloma in our patient was mostly fecal matter and debris.[1] Fecaloma is mostly formed in a laminar fashion with layers of calcification between the fecal material. Management depends on the symptomatology of the patient , ranging from conservative, endoscopic, surgical. As in this patient , due to failed conservative and endoscopic management , the patient underwent surgical management.[4] Fecaloma should be considered in the differential diagnosis of any patient with history of chronic constipation and abdominal mass. [4]Often the diagnosis can be made form the clinical and radiologic features. In the beginning, therapy should be conservative. Rarely laparotomy is required to remove the mass. The management of fecalomas can be an emotionally distressing experience for the patient and a challenging for the physician.[5]The complications of this condition are rectal bleeding, anemia resulting from a chronic blood loss and stercoral ulcer from pressure necrosis leading to colic perforation which can cause stercoral peritonitis evolving rapidly into a septic choc. Paradoxically, while constipation accompanied by fecal impaction manifests commonly, the occurrence of stercoral perforation, marked by a notably high mortality rate, is a rare phenomenon. Indeed, stercoral perforation is a very serious consequence of untreated constipation.

Conclusion

Early suspicion and intervention is required to achieve a favourable outcome in such patients. Prompt diagnosis and urgent fecal disimpaction should be performed to avoid complications.

Figure 1:**Figure 2:****Figure 3:**

Sigmoid colonic segment showing mass like appearance which is shown to be fecaloma.

References:

1. Mushtaq M, Shah MA, Malik AA, Wani KA, Thakur N, Parray FQ. Giant fecaloma causing small bowel obstruction: case report and review of the literature. *Bulletin of Emergency & Trauma*. 2015 Apr;3(2):70.
2. Curro G, Lazzara C, Latteri S, Bartolotta M, Navarra G. Supergiant fecaloma as manifestation of chronic constipation. *Il Giornale di Chirurgia-Journal of the Italian Surgical Association*. 2017 Jan 1;38(1):53-4.
3. Qureshi A, Alhankawi D, Petrosyan A, Disbrow D, Chintanaboina J. S3370 fecaloma causing large bowel obstruction in a 23-year-old male. *Official journal of the American College of Gastroenterology|ACG*. 2020 Oct 1;115:S1753-4.
4. Garisto JD, Campillo L, Edwards E, Harbour M, Ermocilla R. Giant fecaloma in a 12-year-old-boy: a case report. *Cases Journal*. 2009 Dec;2:1-4.
5. Bahrou N, Elmouhib S, Hamzaoui JE, Khedid YZ, El Absi M, Echarrab EM, El Ounani M, El Hassan EA. Giant fecaloma: Can early surgical intervention prevent stercoral peritonitis?. *Journal of Medicine, Surgery, and Public Health*. 2024 Dec 1;4:100146.
6. Alkhiari R, Alkhiari R. Large Sigmoid Fecaloma: A Rare Case of a Common Condition in Patients with Parkinson's Disease. *Cureus*. 2023 Sep 1;15(9).
7. Wang BT, Lee SY. Cecal fecaloma: A rare cause of right lower quadrant pain. *European Journal of Radiology Open*. 2019 Jan 1;6:136-8.
8. Campbell JB, Robinson AE. Hirschsprung's disease presenting as calcified fecaloma. *Pediatric Radiology*. 1973 Oct;1:161-3.