ORIGINAL RESEARCH PAPER

Surgery

KEY WORDS: Fecaloma, small bowel obstruction, Enterotomy.

A CASE OF SMALL BOWEL OBSTRUCTION DUE TO FECALOMA : A CASE REPORT.

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ABSTRACT

Introduction: Fecaloma is an accumulation of feces that has formed a mass and has failed to be expelled spontaneously. Because fecal matter is harder and firmer in the left side of colon, and the diameter of the bowel is smaller compared to the right, fecalomas mostly form in recto-sigmoid area. Small bowel fecaloma formation is an extremely rare condition. Here is a case of small bowel fecaloma. **Case presentation:** We report a 67 years old man who presented with small bowel obstruction due to ileal feca- lomas for whom enterotomy and removal of fecaloma was done with good outcome. **Discussion:** Fecal matter can accumulate in the intestinal lumen to form a mass separate from other intestinal contents which eventually becomes fecaloma. Formation is usually related to chronic constipation, conditions causing intestinal motility disorder, or in psychiatric patients who could have ingested extraordinary substances. Fecaloma can present as abdominal mass, stercoral colitis, urinary retention or intestinal obstruction. Treatment options include conservative management with bowel rest, laxatives, endoscopic removal, laparotomy and removal via enterotomy. **Conclusion:** Fecaloma can be considered in patients who present with small bowel obstruction without any risk factors. Initial noninvasive management should be considered. Failed conservative treatment can be followed by laparotomy and fecaloma removal.

INTRODUCTION:

ecaloma is an accumulation of feces that has formed a mass and has failed to be expelled spontaneously. The most common sites of fecaloma are rectum and sigmoid colon accounting for about 90% of cases [1] . They usually form in association with other diseases like Hirschsprung's disease, Chagas disease, in psychiatric or debilitated patients, and inflammatory or neoplastic conditions that incited chronic constipation [1,2] . Formation of fecaloma in small bowel without presence of inciting factors is an extremely rare condition. The first case report in English literature was reported in 2015 [3] . We report a case of a 67 years old man who presented with small bowel obstruction due to ileal fecaloma. To the best of our knowledge, this is the third case to be reported.

Case Presentation:

A 67 years old man who was relatively healthy two weeks prior to his presentation came to our Emergency Room with crampy abdominal pain . He also gives history of nausea, vomiting and progressive abdominal distension for last 4 days. He also gives history of obstipation and constipation for the last four days. He denies any history of previous surgery and also denies any fever, significant weight loss or prior similar symptoms. He is relatively healthy man with no known neuropsychiatric diseases. He was not on any medications and he has no allergy. He has no relevant family illness. On presentation his vitals were in normal range with pulse rate of 86. Abdominal exam was remarkable for gaseous distension and scanty formed stool in rectum but there was no tenderness. Blood work showed normal white count and erect plain abdominal film showed multiple central air fluid levels while the rest of abdomen showed opacity. Because is vitals were stable he was admitted in surgical ward for conservative management. After 48 h of follow up in the ward, he was not improving. He was having more abdominal cramp and progressive abdominal distension, and 1.6 L of bilious output was recorded from nasogastric tube. He was taken to operation theatre for failed conservative management. Prophylactic antibiotics were given. He was explored through midline laparotomy. The intra operative findings were the bowel was free of adhesions and the proximal small bowel was dilated upto 7 cm. There was one intraluminal hard mass of size 4 x 4 x 3cm about 70 cm from ileocaecal valve. The intraluminal mass was fixed and couldn't go distally any further. The ileum and large bowel distal to the obstruction was collapsed. Enterotomy was made and fecaloma was removed through the enterotomy. The whole bowel was examined but there was no stricture or mass. Ileo-cecal valve was patent. Post- operatively the patient passed flatus on 2nd day and faeces on 5th day. Postoperative course was stable except for surgical site infection for which we opened about 2 cm length skin stiches below umbilicus. Patient was stable at six months of follow up.

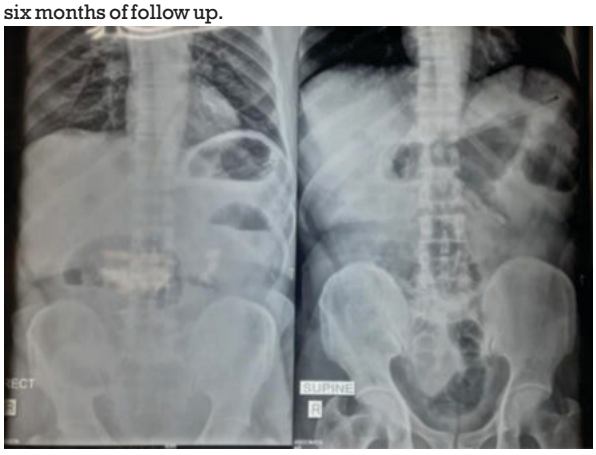

Figure1 :X-ray showing multiple air fluid levels.

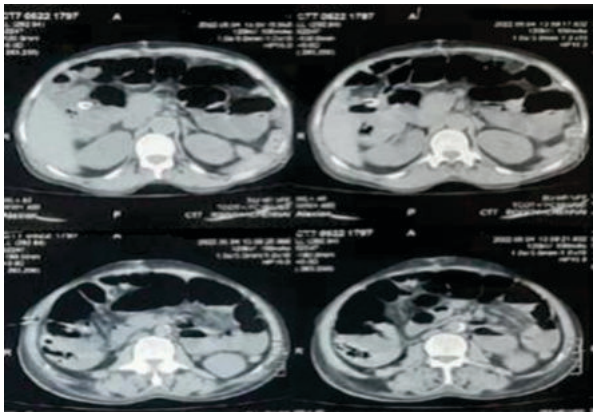

Figure 2: CT abdomen showing distended bowel loops.

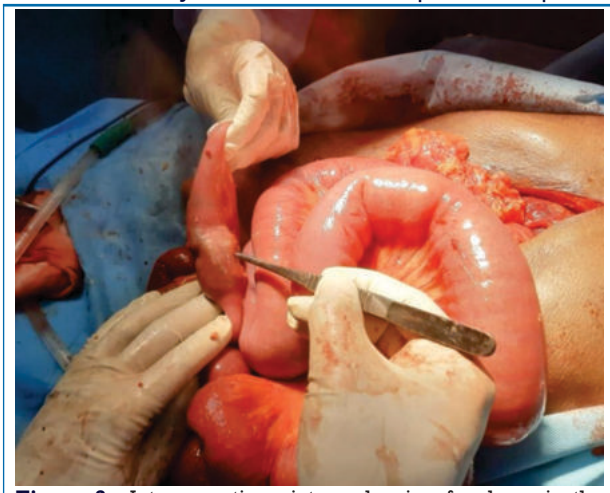

Figure 3 : Intraoperative picture showing fecaloma in the distal small bowel.

Figure 4: Macroscopic picture of fecaloma .

DISCUSSION:

Fecal matter can accumulate in the intestinal lumen to form a mass separate from other intestinal contents [3,5]. This forms a fecaloma. Formation is usually related to chronic constipation, conditions causing intestinal motility disorder, and in psychiatric patients who could have ingested extraordinary substances [1]. Because fecal matter is harder and firmer in the left side of colon, and the diameter of the bowel is smaller compared to the right, fecaloma mostly form in recto-sigmoid area [1,3]. In our case, the patient had no risk factors.To best of our knowledge, this is the third case report in English literature when small bowel fecaloma presents with bowel obstruction in a patient with no risk factors. The peculiar thing is the fact that the first case report of jejunal fecaloma happened in a patient who had laparotomy for perforated duodenal ulcer 10 years prior to presentation with fecaloma, while our patient had no previous history of any abdominal surgery.

Fecaloma has varied presentations. Some of the presentations are abdominal mass, stercoral colitis, urinary retention and intestinal obstruction[1,5,6,7]. A systematic review of complications of fecal impaction showed that intestinal obstruction accounts for 13%, while 67% were complications on intestinal wall like perforation, stercoral ulcer [8]. All of the very few cases of small bowel fecaloma reported present with intestinal obstruction [3,5]. Our case had two fecalomas in the distal small bowel that presented with acute obstruction.

The treatment options for fecaloma depend on the site and presentation. There is no formed protocol, but conservative management with bowel rest, laxatives and endoscopic removal have been reported. Patients who present with acute abdomen might require surgical intervention. All retrieved published cases of small bowel obstruction due to fecaloma required surgical removal [1,3,5]. A trial of conservative management also did not work for our patient so enterotomy and removal was done.

CONCLUSION:

Fecaloma can be considered in patients who present with intestinal obstruction without any risk factors. Initial noninvasive management with bowel rest, laxatives and endoscopic removal should be tried. Patients with failed conservative management can be treated with enterotomy and removal of fecaloma with excellent outcome.

REFERENCES:

[1] M.E. Abella, A.T. Fern´andez, Large fecalomas, Dis. Colon Rectum 10 (5) (1967) 401–404.
[2] J.D. Garisto, L. Campillo, E. Edwards, M. Harbour, R. Ermocilla, Giantfecalomaina 12-year-old-boy: a case report, Cases J. 2 (2) (2009) 1–4.
[3] M. Mushtaq, M.A. Shah, A.A. Malik, K.A. Wani, N. Thakur, Q. Parray, F., Giant fecaloma causing small bowel obstruction: case report and review of the literature, Bull. Emerg. Trauma 3 (2) (2015) 70–72.
[4] R.A. Agha, T. Franchi, C. Sohrabi, G. Mathew, A. Kerwan, A. Thoma, et al., The SCARE 2020 guideline: updating consensus Surgical CAse REport (SCARE) guidelines, Int. J. Surg. 84 (October) (2020) 226–230.
[5] H.Y. Yoo, H.W. Park, S.H. Chang, S.H. Bae, Ileal fecaloma presenting with small bowel obstruction, Pediatr. Gastroenterol. Hepatol. Nutr. 18 (3) (2015) 193–196.
[6] M.A. Khan, H.A. Dar, A.H. Shah, G. Javid, B. Singh, N.A. Sheikh, et al., Fecaloma presenting as huge abdominal mass, JGH Open. 4 (2) (2020) 294–295.
[7] J.S. Park, T.J. Park, J.S. Hwa, J.H. Seo, C.H. Park, H.S. Youn, Acuteurinaryretention in a 47-month-old girl caused by the giant fecaloma, Pediatr. Gastroenterol. Hepatol. Nutr. 16 (3) (2013) 200–205.
[8] B. Serrano Falco´n, M. Barcelo´ Lo´pez, B. Mateos Mun˜oz, A. A´lvarez S´anchez, E. Rey, Fecal impaction: a systematic review of its medical complications public health, nutrition and epidemiology, BMC Geriatr. 16 (1) (2016) 1–8.