

A Rare Ileus Etiology: Giant Fecaloma

Nadir Bir İleus Etiyolojisi: Dev Fekalom Genel Cerrahi

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Özet

Giris: Fekalom sıklıkla sigmoid kolon ve rektumda yerleşmiş masif taşlı kitleler ile karakterizedir. Fekalom ciddi komplikasyonlara neden olabilir. Gastrointestinal sistemin perforasyonu, fekal bölümün uzun süreli basısı ve tıkanıklığın ilerlemesi ile meydana gelebilir. Olgu Sunumu: Yetmiş yedi yaşında erkek hasta yaklaşık dört gün boyunca gaz dışkılarının bulunmaması nedeniyle acil servise başvurdu. Özgeçmişinde 5-6 ay süren kronik hipopotasemi olduğu öğrenildi. Hastanın abdominal muayenesinde, abdomende distansiyon görülmüş olup, tüm kadranlarda barsak sesleri hipoaktifti. Rektal ampulla bostu. Radyografik görüntülemede ince bağırsak-kolon seviyesinde çok sayıda hava-sıvı seviyesi vardı. Hastada, distansiyonun ilerlemesi ve radyografik görüntüleme kontrollerinde devam eden ileus nedeniyle acil laparotomi planlandı. İnen kolonun proksimalinde yaklaşık 10 x 5 cm boyutlarında bir fekaloma vardı. Postoperatif izlemde, batın muayenesi ve radyografik görüntüleme normal hale geldi. Tartışma-Sonuç: İleus ön tanılı geriatrik ve yatağa bağlı hastalarda fekal obstrüksiyon düşünülmelidir. Uzun süreli ve medikal tedaviden fayda görmeyen ileus vakalarında, ileus tedavisinin algoritmasına laparotomik cerrahi yaklaşım eklenmelidir.

Anahtar kelimeler: Hava-sıvı seviyesi, Fekalom ve İleus

Abstract

Introduction: Fecaloma which is characterized by massive stony masses that are often localized in the sigmoid colon and rectum. Fecaloma can cause serious complications. Perforation of the gastrointestinal system may occur prolonged pressure of the fecal compartment, and progress of the obstruction. Case Report: A seventy-seven-year-old male patient was admitted to the emergency service due to the absence of gas-feces for about four days. It was learned that there was chronic hypopotassemia about 5-6 months on his resume. In the abdominal examination of patient, distantion was seen in the abdomen and the bowel sounds were hypoactive in all quadran. The rectal space was empty. There was a multiple air-fluid level at the small intestine-colon level in radiographic imaging. Emergency laparotomy was planned for the patient because of progression of the distention and continued ileus in the radiographic controls. There was a approximately 10 * 5 cm in size distal to the descending colon. In the postoperative follow-up, the examination of the abdomen and the radiographic imaging became normal. Conclusions: Fecal obstruction should be considered in geriatric and beddependent patients which applied ileus pre-diagnosis. Laparotomic surgical approach should be added to the algorithm of ileus treatment in cases of ileus with prolonged and without benefit from medical treatment.

Keywords: Air-fluid level, Fecaloma and Ileus

Introduction

Fecaloma was first described in 1967 as a mass of stool most frequently noted in the rectum and the sigmoid colon. Usually, the fecal matter accumulates in the intestine, then stagnates and increases in volume until the intestine becomes deformed and acquires characteristics, similar to those of a tumor ¹.

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There are several causes of fecaloma and have been described in association with Hirschsprung's disease ², psychiatric patients, Chagas disease, both inflammatory and neoplastic diseases, and in patients suffering from chronic constipation ³.

This is a report of a giant, solitary, and stubborn fecaloma not responding to medical treatment.

Case Report

A seventy-seven-year-old male patient applied to the emergency service because of nausea, vomitting, abdominal distention and colicky abdominal pain presented for about four days. It has been learned from his medical history that he had chronic hypopotassemia that continued for 5-6 months. There was no past surgery history. The patient was mildly hypotensive (80/50 mm mercury) and tachycardic (114/min) demostrating dehydration. Body temperature was normal. On physical examination, there was mildly diffuse tenderness in all of abdominal quadrants. No bowel sounds were noted The anal canal was empty. In the laboratory; leukocyte count was 3,4 10 ^ 3 / uL, blood potassium level was 2.1 mmol / L, blood creatine level was 1,9 mg / dL. The other laboratory parameters were unremarkable. There were multiple air fluid levels at small intestine-colon segments on radiographs (Figure 1).

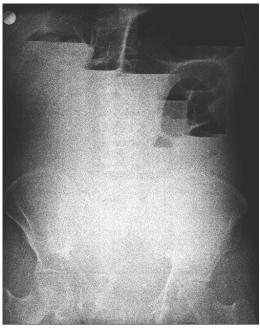


Figure 1

Multiple air fluid levels at small intestine-colon segments at radiographic imaging

The patient's creatine value was high. Because of that the patient interned without intravenous-contrast abdominal computed tomography (CT). Nasogastric catheter was fitted. Oral intake was stopped. Rehydration, digital evacuation and enema teraphy was started. Hypokalemia treatment was performed by nephrology consultants. With hypokalemia treatment, blood levels of potassium were elevated to normal values. In the follow-up the creatine level increased to 2.5 mg / dL. Despite aggressive treatment, abdominal distention increased. So the patient underwent urgent laparotomy (Figure 2).





Figure 2

Increased multiple air fluid levels at radiographic imaging

At the surgery, there was a huge fecaloma approximately 10 * 5 cm at distal segment of the descending colon. There was large dilation of the proximal small intestine and colonic segments because of the fecaloma obstruction. Fecaloma was softened by palpation and advanced to the distal colon. In the postoperative follow-up, the enema treatment resumed and radiographs were normal (Figure 3).



Figure 3Last imaging of the patient before externation



Case Discussion

Fecaloma represents an accumulation of hard stool in the rectum and, rarely, in the sigmoid colon ⁴. Fecal impactation is a common condition and fecaloma is an extreme variety of impactation that refers to an accumulation of stool material which forms a mass separable from the rest of the bowel contents. This condition is uncommon and the majority of reported cases have been in adults. Fecaloma presents variably from urinary retention ⁵ to toxic megacolon ⁶ or abdominal mass ^{7,8}. Constipation was the main symptom referred by our patient. In fact, constipation is one of the most frequently experienced gastrointestinal complaints and one of the most frequent indications for medical consultation ⁹.

The composition of the mass is quite inconstant, but usually consists of fecal matter and intestinal debris ¹⁰. Often is formed in a laminated fashion due to deposits of calcium soaps in layers. Distal colon and rectum are the most common sites for fecalomas ¹¹. Common complications of fecalomas and fecal impaction include obstruction ¹², perforation ^{13,14}, ulceration ¹⁵ and hydronephrosis ^{16,17}. Most cases of fecaloma are treated conservatively with digital evacuation and enemas. In severe and unremitting cases, surgery is required to prevent significant complications (bowel obstruction, ulceration, rectosigmoid megacolon). Fecaloma should be considered in the differential diagnosis of any patient with history of chronic constipation and abdominal mass ⁴. Another approach such as endoscopic removal had also been described ¹⁸.

Obstruction because of stool should be considered when considering ileus pre-diagnosis in geriatric and beddependent patients. With additional imaging, this condition of ileus must be demonstrated. The necessary medical approaches and treatments must be applied to remove the etiology. The laparotomic surgical approach should be added to the algorithm of ileus treatment in cases of ileus with fecal obstruction. In our case, we want to show necessity of surgical approach to the ileus patients because of fecal obstruction.

References

- 1. Abella ME, Fernández AT. Large fecalomas. Dis Colon Rectum. 1967;10:401-4.
- 2. Campbell JB, Robinson AE. Hirschsprung's disease presenting as calcified fecaloma. Pediatr Radiol. 1973;1:161-3.
- 3. Caiazzo P, et al. Megacolon for a giant fecaloma with unlucky outcome case report and review of the literature. Ann Ital Chir. 2013;84(3):319-22.
- 4. Curro G, et al. Supergiant fecaloma as manifestation of chronic constipation. G Chir. 2017; 38(1): 53-54.
- 5. Park JS, et al. Acute urinary retention in a 47-month-old girl caused by the giant fecaloma. Pediatr Gastroenterol Hepatol Nutr. 2013;16(3):200-5.
- 6. Ribas Y, Bargallo J, Lamas S, Aguilar F. Idiopathic sigmoid megacolon with fecal impaction and giant calcified fecaloma. Am Surg. 2013;79(2):E96-7.
- 7. Zimmers T. Giant calcified fecaloma. Ann Emerg Med. 1984;13(9 Pt 1):749.
- 8. Yucel AF, Akdogan RA, Gucer H. A giant abdominal mass: fecaloma. Clin Gastroenterol Hepatol. 2012;10(2):e9-e10.
- 9. Sonnenberg A, Koch TR. Physicians visits in the United States for constipation: 1958–1986. Dig Dis Sci 1989;34:606-11.
- 10. Kaufman SA, Karlin H. Fecaloma of the sigmoid flexure. Dis Colon Rectum. 1966; 9:133-6.
- 11. Rajagopal A, Martin J. Giant Fecaloma with idiopathic sigmoid megacolon: report of a case and review of the literature. Dis Colon Rectum. 2002;45:833-5.
- 12. Segall H. Obstruction of large bowel due to fecaloma-successful medical treatment in two cases. Calif Med. 1968;108:54-6.
- 13. Childress MH, Martel W. Fecaloma simulating colonic neoplasm. Surg Gynecol Obstet. 1976; 142:664-6.
- 14. Ouaïssi M, et al. Lethal fecaloma. J Am Geriatr Soc. 2007;55:965-7.



- 15. Maull KJ, Kinning WK, Kay S. Stercoral ulceration. Am Surg. 1982;48:20-4.
- 16. Knobel B, Rosman P, Gewurtz G. Bilateral hydronephrosis due to fecaloma in an elderly woman. J Clin Gastroenterol. 2000;30:311-3.
- 17. Yuan R, et al. Urethral obstruction and bilateral ureteral hydronephrosis secondary to fecal Impaction. J Clin Gastroenterol. 2000; 30:314-6.
- 18. Sakai E, et al. Rectal fecaloma: successful treatment using endoscopic removal. Digestion. 2007;75:198.