

Colonic Obstruction Secondary to Giant Fecolith

Fekalite Bağlı Kolon Obstruksiyonu

KEMAL ATAHAN, ATILLA ÇÖKMEZ, EVREN DURAK, SERHAT GÜR, ERCÜMENT TARCAN
İzmir Atatürk Eğitim ve Araştırma Hastanesi, Genel Cerrahi Kliniği, İzmir

ÖZET

Fekalite bağlı barsak tıkanması, özellikle güçsüz, hareket kısıtlı olan yaşlı hastalarda ve kronik hastalıkları olanlarda barsak tıkanmasının sık görülen bir nedenidir. Zaman zaman sertleşen fekalitler, ülserasyona ya da kolon duvarında perforasyona sebep olabilir. Büyük bir fekalitin sıkışmasına bağlı olarak gelişen kolon tıkanmaları nadirdir. Fekaliti olan çoğu hasta, kolon tıkanıklığı bulgularıyla acil servise başvurur ve genellikle kronik kabızlık öyküleri vardır. 45 yaşında hasta 3 günlük karın ağrısı, kusma, kabızlık ve karında şişlik yakınmaları ile acil servise başvurdu. Fizik muayenede batında tüm kadrantlarda hassasiyet, dinlemekle metalik ses ve ileri dercede distansiyon mevcuttu. Hasta acil operasyona alındı. Tanısı büyük bir fekalite bağlı barsak tıkanmasıydı. Hastaya fekalitlerin çıkarılması ve transverse kolostomi yapıldı. Kolon obstruksiyonuna bağlı akut karın semptomlarında fekalite bağlı bağırsak tıkanmasının neden olabileceği akla getirilmelidir.

Anahtar Kelimeler: Fekalit, Kolon obstruksiyonu, Akut karın

Başvuru Tarihi: 26.04.2010, Kabul Tarihi: 14.08.2010

Dr. Kemal Atahan

6342 Sok. No: 44 K: 3 Daire: 6

Bostanlı 35540 İzmir - Türkiye

Tel: 0.232.2444444, 0.532.5324126805

e-mail: kemalatahan@yahoo.com.tr

Kolon Rektum Hast Derg 2010;20:84-86

ABSTRACT

Fecal impaction is a common cause of colonic obstruction especially in elderly debilitated patients and in patients who have chronic illnesses. Occasionally hard fecoliths may lead to ulceration or perforation of the colonic wall. Colonic obstruction secondary to impaction of a large fecolith is rare. Most of the patients with fecolith are admitted to the emergency service with the signs of intestinal obstruction and they have a history of chronic constipation. A 45-year-old man presented to our emergency department with a 3 days, history of intermittent, severe abdominal pain, bilious vomiting, constipation, and abdominal distention. Physical examination revealed abdominal tenderness in all quadrants, metallic bowel sounds and distention. The patient underwent an urgent laparotomy. The diagnosis was fecal impaction, and the patient was treated by removal of the fecoliths and transverse colostomy. Fecal impaction causing abdominal emergency should always be taken into account in the management of colonic obstruction.

Key words: Fecolith, Colonic obstruction, Acute abdomen

Introduction

Massive fecal impaction is a common cause of colonic obstruction particularly in elderly and debilitated patients. Intestinal obstruction caused by inspissated stool in the terminal ileum and cecum has been well documented; however, distal colonic obstruction caused by giant fecolith has been reported rarely.¹ Neglected fecal impaction may lead to a megacolon causing an abdominal compartment syndrome and colorectal obstruction, perforation or necrosis.² Urgent and appropriate operation is life saving in those patients. We present a case of a patient with colonic obstruction secondary to impaction of a large calcified fecolith.

Case Presentation

A 45-year-old man presented to our emergency department with a 3 days, history of intermittent, severe abdominal pain, bilious vomiting, constipation, and abdominal distention. The patient has had two previous abdominal operations during his childhood because of anus imperforatus and colovesical fistula. He denied any chronic illness and any kind of long-term drug use. Physical examination revealed abdominal tenderness in all quadrants, metallic bowel sounds and distention. The patient was dehydrated; laboratory investigation showed increased blood leucocyte, urea and creatinin levels. A 15-cm wide, rubber-like mass was appreciated in the right upper quadrant of the abdomen. Manual rectal examination showed tubular, narrowed and fibrotic rectum. Rectal wall was rigid but no tumor was palpated. Plain abdominal x-rays showed multiple air-fluid levels. An abdominal computed tomography scan was obtained preoperatively, revealing a 12 cm middle attenuation mass in the right upper quadrant and another 10 cm mass in the pelvis (Figure 1). The masses were well defined and there was no invasion to the adjacent tissues on CT images. The density and radiographic appearance suggested tumor-like lesions which appeared to be functioning as a lead point for colonic obstruction. Colonoscopy was not performed since he had extreme distention and signs of acute abdomen. The patient underwent an urgent laparotomy with the diagnosis of ileus caused by intraluminal mass.

During the exploration, small bowels were distended and megacolon was remarkable. There were two large masses inside the colon, one at the right flexure, another

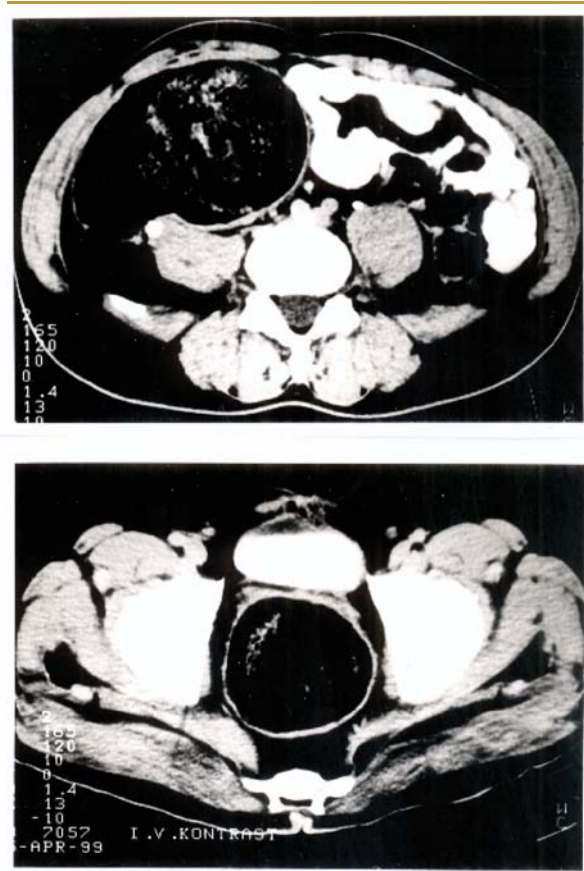


Figure 1. Abdominal CT scan showing large calcified masses in the transverse and distal colon.

at the rectosigmoid junction. The masses were mobile inside the colon and had rubber-like features. Colonic distention was remarkable until the sigmoid colon where the larger fecolith was located. The colon was opened at transverse and sigmoid colon levels and the fecoliths were removed manually (Figure 2). Since the colon wall was odematous and fragile, the operation was ended with transverse colostomy.

The postoperative course was unremarkable, and he was discharged on postoperative day 5. Pathologic examination confirmed large masses to be fecal impaction with rare dystrophic calcifications. His colostomy was closed successfully four months later and he is dealing with his daily activities normally 24 months after the operation.



Figure 2. Macroscopic appearance of the fecoliths removed from the colonic lumen.

Discussion

Although a common occurrence in the pediatric population, intestinal obstruction secondary to fecal impaction is unusual in healthy adults. Less than 20 cases of colonic obstruction from fecal impaction have been reported in the literature over the past 20 years.³ Most cases are treated with urgent operation and removal of the mass. In the adult population most cases are associated with an underlying pathology such as abdominal adhesions, previous operations and especially in patients debilitated and mentally handicapped. Recurrent fecolith formation is rarely reported in these patients.

Fecal impaction with intestinal obstruction can cause gangrene of the colon, megarectum, abdominal compartment syndrome, colorectal obstruction, perforation or necrosis.⁴ Measures to prevent fecal impaction are of paramount importance and prompt manual disimpaction before the above complications develop is mandatory. Appropriate operative treatment may be life-saving.⁵ Our patient had history of previous anorectal surgery and he was admitted with the presence of colonic obstruction findings.

The distribution of fecolith throughout the colon tends to favor the left side with the majority found in the rectum. In literature, size of the fecolith has been a prediction of symptoms, with lesions larger than 3 cm in adults causing intussusceptions, pain, constipation and bowel obstruction.⁶

Direct abdominal x-rays, ultrasnography and CT scans are the preferred radiological modalities for diagnosing intestinal obstruction caused by fecal impaction. Barium enema and colonoscopy are additional measures that may aid in diagnosis but have limited value in the presence of acute abdomen. Although many radiological methods can be used, most of them diagnosed intraoperatively. Urgent operation and removal of fecolith is life saving, physicians and surgeons should be aware that large fecoliths should be considered in the differential diagnosis of acute colonic obstruction.

References

1. Nee J. Colonic Obstruction Secondary to Impaction of a Large Calcified Fecolith. *Am Soc Col Rec Surg* 1983;12:3706:677-78.
2. Senati E, Coen LD. Massive Gangrene of the colon -A complication of fecal impaction. *Dis Colon Rectum* 1989;32:146-49.
3. Wang SY, Sutherland JC. Colonic Perforation secondary to fecal impaction. *Dis Colon Rectum* 1977;20:355-56.
4. Teasdale C, Mortensen NJ. Acute necrotizing colitis and obstruction. *Br J Surg* 1983;70:44-47.
5. Lohlun J, Margolis M, Gorecki P, Schein M. Fecal impaction causing megarectum-producing colorectal catastrophes. A report of two cases. *Dig Surg* 2000;17:196-98.
6. Shatila A, Ackerman NB. Stercoraceous ulcerations and perforations of the colon: report of two cases. *Dis Colon Rectum* 1997;43:173-76.