

# Giant Fecaloma in A 16-Year-Old Boy: Case Report

Dev Fekalom Saptanan 16 Yaşında Erkek Hasta: Olgu Sunumu

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## ÖZET

Fekalom; sıklıkla sigmoid kolon ve rektumda lokalize, çıkartılmasında güçlük yaşanan, sertleşmiş büyük gayta kitlesi ile karakterizedir. Zaman içerisinde sertleşen fekalitler barsak tıkanıklığına, ülser gelişimine ya da kolon duvarında perforasyona sebep olabilir. Fekalite bağlı barsak tıkanıklığı özellikle düşkün, kronik hastalıkları olan yatalak ileri yaş hastalarda rastlanmaktadır. Olgu, subileus tablosunda acil servise başvuran ve rektumda lokalize dev fekalom saptanması üzerine non operatif yöntemlerle tedavi edilen 16 yaşında erkek hastaydı. Olgunun sunulmasındaki amaç oldukça nadir karşılaştığımız bu gibi hastalarda tedavi seçeneklerinin tartışılmasıdır.

Anahtar Kelimeler: Fekalom, Kolonik obstrüksiyon, Medikal tedavi

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# **ABSTRACT**

Fecaloma is characterized by a hardened large mass of feces frequently localized in sigmoid colon and rectum and is difficult to discharge. Fecaliths, stagnating and hardening by time, may cause intestinal obstruction, ulcer development and colonic wall perforation. Fecalith induced intestinal obstructions are commonly observed in elder aged patients disabled, bedridden with chronic disorders. We present the case of a 16-year-old boy who admitted to emergency service with complaints of inability to defecate. This is a rare case on late adolescence who was managed successfully by conservative measures of evacuation for a localized giant fecaloma in rectum.

Key words: Fecaloma, Colonic obstruction, Medical treatment

#### Introduction

Fecaloma is characterized by a hardened giant fecal mass, difficult to discharge and frequently localized in sigmoid colon and rectum. It is commonly seen in childhood, elder patients and following spinal cord injury. 1 Since few cases have been reported, there is not clear information related with its real incidence. Hard stool stagnancies may be encountered with different clinical findings depending on its localization in bowel and the extent of obstruction. Dependent treatment options vary with factors like colon width, megacolon formation, colonic innervation loss and co-morbidities. Diseases that cause this condition are defined as; Hirchsprung disease, psychiatric disorders, Chagas disease, inflammatory and neoplastic diseases and chronic constipation.<sup>2</sup> Softeners used by rectal route, oral mineral and olive oil usage are appropriate treatment methods for mild and moderate obstructions due to fecaloma. However, when medical treatment is unsuccessful and multiple fecalomas are present, surgery is required. We present a 16 year old boy with giant fecaloma that developed consequent to chronic constipation and managed by medical treatment.

## Case

A sixteen-year old boy admitted emergency service with complaints of abdominal pain, distention, and difficulty of defecation for 3 or 4 weeks. He was cashectic and his abdomen was distended. He had urging about 10 times a day but was unable to defecate for about a month except for minimal discharge of fecal leakage. At first, his complaints decreased by rectal enema and oral laxatives but he recently had discomfort in spite of these attempts. On physical examination, the abdomen was extremely distended and on abdominal inspection dilated colonic segmentws and peristaltic small bowel movements could be observed. Hard dilated colon segments could be palpated on abdominal examination. After informed about his history that he had these complaints for about two years and he could hardly have defecations on every 2 or 3 weeks, digital rectal examination revealed a large calcified fecaloma as huge as a big orange on ampulla recti surrounded by muddy fecal contents. On standing abdominal direct graphy showed that rectum was full of fecaloid. On abdominal ultrasound, grade III hydronephrosis was observed on left kidney. Abdominal tomography showed that all colon segments were extremely dilated and on widest part sigmoid colon was 16 cm, descending colon was 9 cm, ascending colon was 8.5 cm, and rectum was 11 cm. All segments had air-fluid levels and among dilated colon segments, collapsed small bowel segments were seen (Picture 1, 2).

Initially, calcified rectal fecaloma was extracted by breaking up with finger fracture method; he was followed by inserting a nasogastric catheter and rectal enema was applied 3-4 times a day regularly. All laboratory analyses were normal and vital functions were stable. By medical treatment with enemas and laxatives, he had discharged

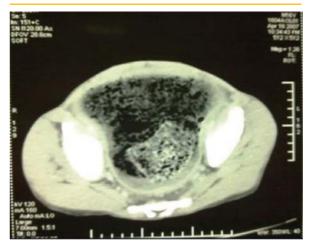


Figure 1. Giant fecaloma that filled rectum.



Figure 2. All colon segments were extremely dilated and grade III hydronephrosis was observed on left kidney.

huge amounts of feces and intestinal gas, after then nasogastric catheter was extracted. He began receiving oral fluid intake on the fourth day when oral laxatives were added to his diet (20-30 mL/day; increased to 70 mL on the third day and to 120 mL on the fifth day of oral intake). By means of this conservative treatment, he had abundant discharges for four or five times a day and his symptoms regressed, abdominal findings returned to normal and on control graphies all colon segments emptied and dilatation began to recover. He was trained for defecation habits and his maintenance treatment was arranged. He was planned for elective colonoscopy and was discharged on the seventh day of hospitalization. He was living with his grandmother with strict rules that he could not resist. This stress and depression may cause excessive acid in stomach that result in constipation. Afterwards, her mother took him to live together and meticulously cared about his meals. Three months later, his colonoscopic examination was normal without any extraordinary findings. By means of dietary and lifestyle changes, he did not suffer constipation or recurrent fecalomas furthermore for four years up to now.

## Discussion

Although colonic obstruction secondary to fecal impaction is a common result of chronic constipation, fecaloma causing megacolon has been rarely seen. Fecalomas are hard and are calcified that sometimes mimic carcinoma. They are commonly localized in sigmoid colon and rectum.<sup>3</sup> The symptoms are nonspecific such as outburst fecal discharge, diarrhea, constipation, weight loss and postprandial discomfort. Constipation is the main complaint of patients that urge them to refer a physician. Though the components of fecaloma are composed of miscellaneous substances, feces and small bowel debris are the most frequent ones.<sup>4</sup> The most common complications are obstruction, perforation, ulcer, and hydronephrosis.<sup>5-10</sup> When a

complicated megacolon is observed, it accompanies stercoral ulcer, necrosis and, though rare, perforation may develop. The first step of treatment is directed to fecaloma and megacolon, caused by chronic constipation. Fecalomas are usually extracted with laxatives and enemas by the help of rectoscopy or colonoscopy; those located in distal rectum may be fractured by digital rectal manipulations. When conservative approaches are inadequate, surgical interventions such as colostomy or segmentary resection is required to pull out fecaloma and prevent probable complications.

In a study of Bekkali *et al.* on 90 cases, enema and polyethylene glycol is reported to be equally effective and should be used as the first choice of treatment. Their success on crumbling and discharging fecaloma was reported as 80% for enema and 68% for polyethylene glycol.<sup>13</sup>

In order to succeed by medical treatment, first and foremost fecaloma should be removed and then in some group of patients long term enema is advised to be used to avoid recurrence.<sup>14</sup> Control radiologic examinations have been advised to recognize and treat recurrent fecalomas.<sup>15</sup>

In the present case, colonic obstruction secondary to a giant fecaloma located in distal rectum was managed by conservative treatment; primarily by mechanic extraction of fecaloma and then using oral laxatives and recurrent rectal enemas that procured abundant gas and fecal discharge. After discharge, colonoscopic examination on the third month was normal. His complaints related with constipation resolved by appropriate diet and medical treatment.

In conclusion, proper cases with obstruction symptoms by a fecaloma should be primarily tried to manage by medical treatment; in case of failure, surgical interventions should be planned and after discharge, maintaining medical treatment, proper diet, regular toilet training and follow-up further increases the success rate.

#### References

- Read NW, Celik AF, Katsinelos P. *et al.* Constipation and incontinence in the elderly. J Clin Gastroenterol 1995;20:61-70.
- Campbell JB, Robinson AE: Hirschsprung's disease presenting as calcified fecaloma. Pediatr Radiol 1973;1:161-3.
- 3 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.
- 4. Kaufman SA, Karlin H: Fecaloma of the sigmoid flexure. Dis Colon Rectum 1966;9:133-6.
- Segall H: Obstruction of large bowel due to fecalomasuccessful medical treatment in two cases. Calif Med 1968;108:54-6.
- Childress MH, Martel W: Fecaloma simulating colonic neoplasm. surg gynecol obstet 1976;142:664-6.
- 7. Ouaïssi M, Sielezneff I, Benoist S, *et al*. Lethal fecaloma. J Am Geriatr Soc 2007;55:965-7.
- 8. Maull KJ, Kinning WK, Kay S, *et al.* Stercoral ulceration. Am Surg 1982;48:20-4.
- 9. Knobel B, Rosman P, Gewurtz G, *et al.* Bilateral hydronephrosis due to fecaloma in an elderly woman.

- J Clin Gastroenterol 2000;30:311-3.
- Yuan R, Zhao G, Papez S, et al. Urethral obstruction and bilateral ureteral hydronephrosis secondary to fecal Impaction. J Clin Gastroenterol 2000;30:314-6.
- 11. Kim KH, Kim YS, Seo GS, , et al. A Case of fecaloma resulting in the rectosigmoid megacolon. Korean J Gastrointest Motil 2007;13:81-5.
- 12. Sakai E, Inokuchi Y, Inamori M, , *et al.* A: Rectal fecaloma: successful treatment using endoscopic removal. Digestion 2007;75:198.
- 13. Bekkali NL, van den Berg MM, Dijkgraaf MG, *et al.* Rectal fecal impaction treatment in childhood constipation: enemas versus high doses oral PEG. Pediatrics 2009;124:e1108-15.
- 14. Brocklehurst JC, Kirkland JL, Martin J, *et al.* Constipation in long-stay elderly patients: its treatment and prevention by lactulose, poloxalkol-dihydroxyanthroquinolone and phosphate enemas. Gerontology 1983;29:181-4.
- 15. Gau JT, Acharya U, Marx T, *et al*. Megacolon and stercoral proctitis after frequent fecal impactions: report of an unusual case and review of the literature. J Am Med Dir Assoc 2007;8:338-341.