# Ileal fecaloma in a 2-month healthy boy

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# ABSTRACT

A fecaloma is a fecal matter that builds up to form a hard mass of feces that is extremely rigid than a mass connected with fecal impaction. Fecalomas are commonly in the rectosigmoid region. Our report aimed to give a brief review of this case and discuss the treatment options for it. A 2-month-old male presented with bowel obstruction and a palpable mass on the right side of the abdomen. A simple abdominal radiograph and contrasted abdominal computed tomography scan were performed immediately, resulting in small intestine mechanical obstruction. A  $4.6 \times 6.6 \times 4$  cm fecaloma was found in the distal ileum. We consequently diagnosed a case of ileal fecaloma producing small bowel obstruction. The patient was surgically managed after conservative treatment failed.

Key words: Bowel, Distal ileum, Fecaloma, Ileal fecaloma, Obstruction

ecaloma was first described in 1967 as a clinical disease characterized by the accumulation of feces in the sigmoid colon and rectum, which is firmer than impacted feces due to corprostasis and stagnates in the bowels [1]. It remains symptomless until the intestine shifts deformed and obtains features similar to those of a tumor [2]. There are many reasons for fecaloma that have been reported in relation to Hirschsprung's syndrome [3], psychiatric cases, Chagas disorder, inflammatory and neoplastic disorders, and cases suffering from prolonged constipation [4].

Here, we report an ileal fecaloma in a 2-month-old male. To the best of our knowledge, this is the first case report of such an age group in English literature.

#### CASE REPORT

A 2-month-old boy product of normal vaginal delivery at fullterm, breastfeeding, and medically free brought by his mother for worsening bilious vomiting with constipation for 1 week. There was no history of fever. Medications for constipation were taken by the parents.

On examination, a non-tender, firm, and palpable mass was seen in the right iliac fossa. The abdomen was distended and vital signs were stable.

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A plain abdominal radiograph revealed an intraluminal mass filling the right side of the abdomen with a mottled appearance and smooth contour which was associated with dilated bowel loops on the left side of the abdomen. Air was seen in the rectum (Fig. 1a). All laboratory investigations including complete blood count, renal function test, liver enzymes, and thyroid tests (TSH, T4, and T3) were normal. Contrast enema study reveals a normal rectosigmoid junction. Normal contrast fills the colon and appendix with a reflex of contrast to the terminal ileum (Fig. 1b). Contrast-enhanced CT abdomen showed a large intraluminal nonenhancing lesion seen within the distal ileal loop measured about  $4.6 \times 6 \times 4$  cm in keeping with impacted fecal matter. Another similar appearance was noted proximally, measuring about 2  $\times$  2.3  $\times$  3 cm. There was significant dilatation of the ileal loop before mass (Fig. 2). The colon was collapsed. Thus, the diagnosis of fecaloma was made.

The patient was managed surgically after the failure of the conservative treatment. He underwent laparotomy and resection of the dilated ileal segment with mid-end-to-end anastomosis. During surgery, we found dilated ileal segment about 50 cm away from the ileocecal valve. The dilated segment was loaded with fecal mass, the proximal bowel was dilated, and the distal to this segment was collapsed.

The pathology report for resected ileal bowel segment showed small bowel with local submucosal fibrosis and serosal adhesion. Ganglion cells were normal in numbers and distribution.

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Figure 1: (a) X-ray showed plain abdominal radiograph revealed intraluminal mass filling right side of abdomen with mottled appearance and smooth contour (green arrow). There were associated dilated bowel loops on the left side of abdomen (thick blue arrow). Air was seen in the rectum (red arrow). (b) Contrast enema revealed contrast filling the colon with normal caliber (red arrow) and normal rectosegmoid ratio (white arrow). No stricture, filling defect, or masses

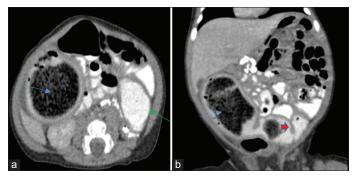


Figure 2: Contrast-enhanced Axial CT abdomen (a) with coronal reformat (b) showed large intraluminal non-enhancing lesion seen within the distal ileal loop in keeping with impacted fecal matter (blue arrow). Another similar mass was noted proximally (thick red arrow). There was a significant dilatation of ileal loop before fecaloma (green arrow)

The patient remains on total parenteral nutrition for 6 days. His mother was recommended to manage the lactation sessions and give him extra fluids. On discharge, he was passing stool with oral feeding, no fever, and a healthy wound.

#### DISCUSSION

Fecalomas mostly occur in the rectosigmoid region, of which the small bowel is the most unusual position [5]. It was found that the feces in the left colon are firmer than those on other sides as the diameter of the colon is narrower on the left than on the right [6]. Here, we presented a rare case of ileal fecaloma inducing small bowel obstruction.

Usually, old, debilitated, and bedridden cases are more likely to get fecal impaction, although patients have been reported with fecaloma localizing to the 15–65-year age group [7]. However, to the best of our knowledge, our case was a 2-month-old male; this is the first case report of such an age group.

The fecaloma symptoms are commonly non-specific with diarrhea (overflow), constipation, decreasing weight, and vague intestinal pain after feeds. Constipation is the most commonly encountered gastrointestinal disease and one of the most prevalent signs for medical consultation [8]. Our case was referred mainly to bilious vomiting and constipation with abdominal mass for 1 week.

Further imaging with Doppler ultrasound, computed tomography, or magnetic resonance imaging could be obtained to characterize the mass [9]. The diagnosis of our case depended mainly on a contrast-enhanced CT abdomen, which showed a large intraluminal non-enhancing lesion seen within the distal ileal loops. A contrast enema study demonstrated no radiological sign of Hirschsprung's disease.

Most fecalomas are favorably managed by traditional methods such as laxatives, enemas, and rectal evacuation [10]. However, when conservative therapies fail, surgical intervention may be required [11]. The surgical method usually includes either exploratory laparotomy or laparoscopy accompanied by fecaloma removal and resection of the affected colonic segment [12]. For successfully managed cases, it is necessary to maintain a close follow-up with them and commanded stool softeners. Regarding our patient, he was managed with laparotomy and resection of the dilated ileal segment along with mid-end-to-end anastomosis.

#### CONCLUSION

Our case is a rare case of a neonate boy who suffered from ileal fecaloma. Constipation and vomiting were the major symptoms of our case. The diagnosis mainly depended on the CT results, which reported intraluminal non-enhancing lesions. He was managed surgically.

#### DATA AVAILABILITY

The patient's investigations and imaging scans are available on request.

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