



Cecal fecaloma: A rare cause of right lower quadrant pain

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ABSTRACT

Fecalomas are masses of hardened feces that become impacted and accumulate. They are much harder in consistency than fecal impaction due to the associated coprostasis and are typically found in the sigmoid colon or rectum. Cecal fecalomas are much rarer. To date, only five cases have been previously reported in the English-language literature. We present the CT appearance of a surgically confirmed cecal fecaloma in a patient who presented with right lower quadrant pain, nausea, and vomiting, mimicking an acute appendicitis.

1. Introduction

Fecalomas or fecaliths are impacted, hardened masses of feces [1]. They typically occur in the sigmoid colon and rectum [2–4], but very rarely occur in the cecum [5–8]. They will usually present with a history of constipation and abdominal pain. Diagnosis is made radiographically by demonstration of a circumscribed intraluminal mass of stool attenuation. Most cases can be managed conservatively with laxatives and enemas. However, cases that are refractory to medical management require surgical intervention. We present here a case of cecal fecaloma as a rare cause of right lower quadrant pain.

2. Case report

A 51-year-old Caucasian male presented to the emergency department with a one-day history of diffuse abdominal pain that had subsequently migrated to the right lower quadrant. He had experienced some nausea and vomiting that day but endorsed no recent changes in his bowel habits. The patient's past medical and surgical history were unremarkable other than some mild gastroesophageal reflux disease. The patient was afebrile on exam but had a white blood cell count of $15 \times 10^{12}/L$.

An abdominal computed tomography (CT) scan with IV, oral, and rectal contrast was performed to assess for signs of appendicitis. This demonstrated wall thickening of the distal ileum and distention of the terminal ileum (Figs. 1A, 2). Fecalization of the distal and terminal ileum was visible, and rectal contrast could be seen filling the ascending colon. A lamellated-appearing mass containing mottled gas density was visible within the cecum, along with a small amount of fluid in the

mesentery and right lower quadrant (Fig. 1A-F, Fig. 3). No soft tissue mass was visible, and the classic target appearance for ileocolic intussusception was not seen in the distal ileum. No signs of bowel ischemia, such as pneumatosis intestinalis, were demonstrated and the appendix was unremarkable.

The patient was subsequently taken urgently to the operating room due to the long-standing fecal stasis and corresponding small bowel obstruction. On laparotomy, the cecum was found to be filled with a hard 10 cm mass causing the obstruction, consistent with a fecalith. The patient underwent ileocolic resection with corresponding intestinal anastomosis and recovered well.

3. Discussion

Fecaloma is a rare but severe sequela of fecal impaction. Fecalomas are usually found in the sigmoid colon or rectum due to the gradual hardening of stool as it passes through the gastrointestinal tract [9]. Cecal fecalomas are much rarer, especially in the absence of any risk factors for fecal impaction as in this patient. Traditionally, risk factors for development of fecaloma include chronic constipation and ingestion of a number of substances such as anti-cholinergic medications; narcotics, particularly opiates; large doses of tranquilizers; bismuth; barium; and kaolin [5].

Diagnosis of fecaloma is made radiographically by demonstration of a circumscribed intraluminal mass of stool attenuation with no mucosal attachment. Diagnosis may be aided by a history of constipation and abdominal pain [5]. Occasionally, patients will present with a palpable mass in the abdomen if the fecaloma is large enough. It should be noted that previous cases of cecal fecaloma have presented with complaints of

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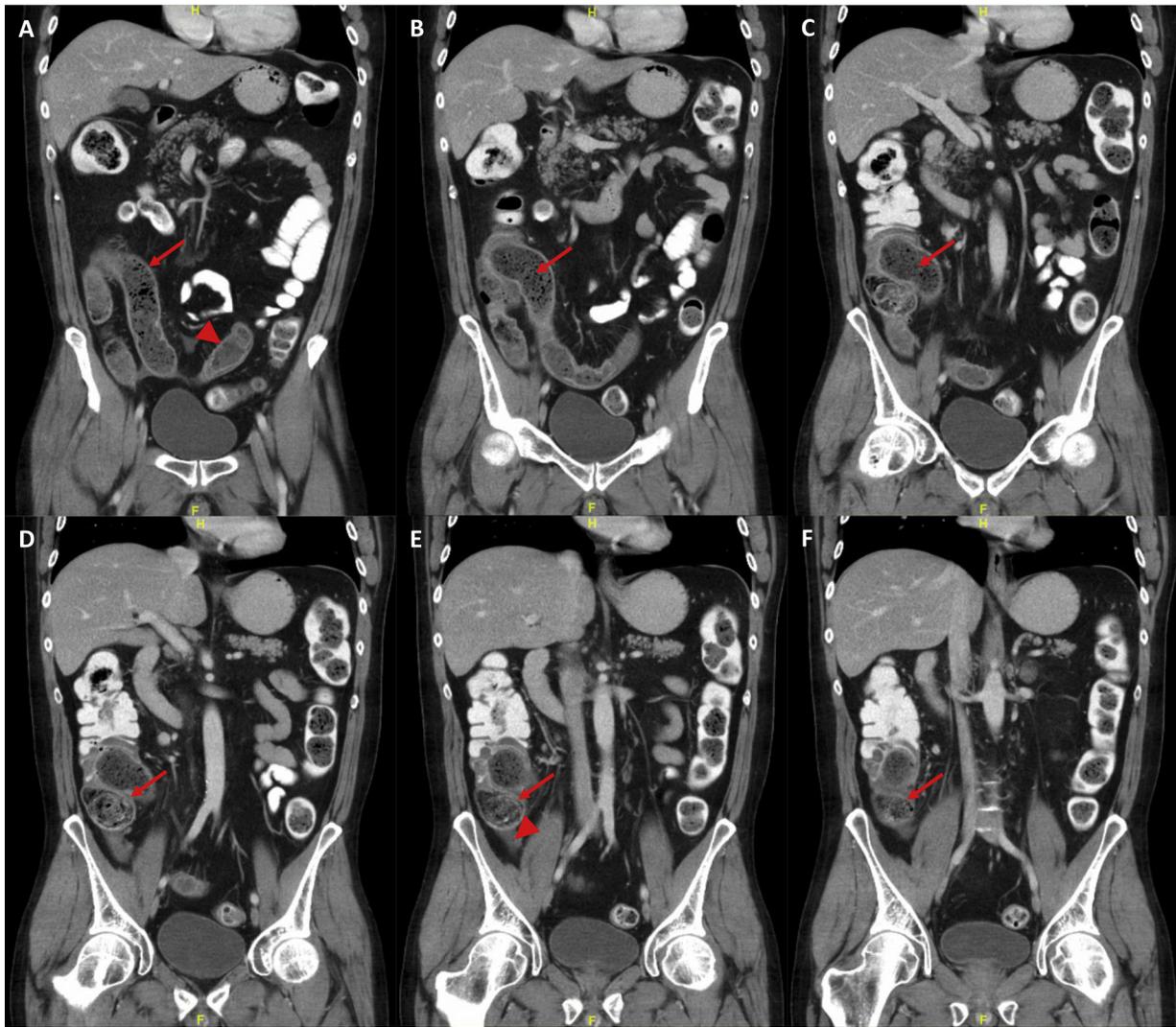


Fig. 1. Coronal reformats of an abdominal CT scan performed with IV, oral, and rectal contrast. (A) An arrowhead demonstrates distal ileum wall thickening and an arrow demonstrates terminal ileum distention with fecalized contents. A small amount of free fluid is visible in the mesentery. (B–C) Arrows demonstrate fecalization of the distal and terminal ileum. (D–F) Arrows demonstrate a mass with a lamellated appearance and mottled gas density within the cecum. Adjacent fat stranding and free fluid within the right lower quadrant are delineated by an arrowhead.

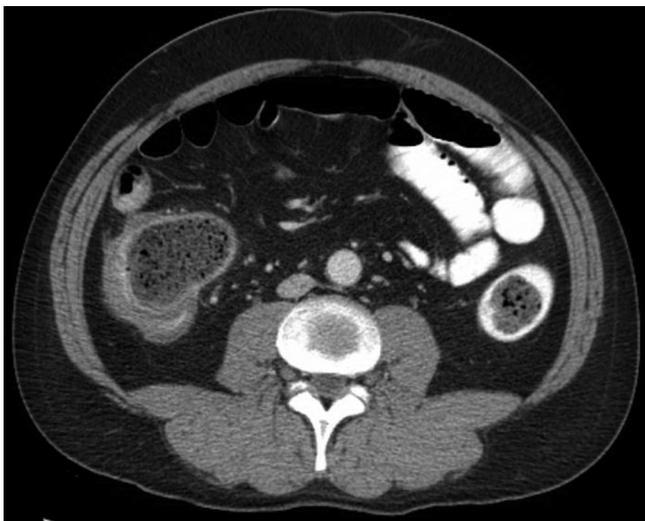


Fig. 2. Axial slice of an abdominal CT scan performed with IV, oral, and rectal contrast demonstrates distention and fecalization of the terminal ileum as well as mild associated mesenteric fat stranding.

diarrhea rather than constipation, presumably due to an inflammatory process secondary to the obstruction [5].

The majority of fecalomas are treated with laxatives, enemas, and manual disimpaction [5]. However, when conservative measures fail, escalation to surgical intervention is warranted. Traditionally this has been done via colectomy, although two previous case reports have documented removal of fecalomas using endoscopic techniques [8,9]. If left untreated, complications of fecaloma include obstruction, bowel perforation, and bowel ischemia.

This was a case of a surgically confirmed cecal fecaloma that initially presented as right lower quadrant pain. Cecal fecalomas are very rare, with only five cases having been previously documented in the literature [5–8]. They are a rare cause of right lower quadrant pain, diffuse abdominal pain, and small bowel obstruction, and should be considered on the differential in the presence of radiographic findings of a lamellated, intraluminal mass without mucosal attachment.

Conflict of interest statement

The authors declare that there are no conflicts of interest.



Fig. 3. Sagittal reformats of an abdominal CT scan performed with IV, oral, and rectal contrast. Rectal contrast can be seen filling the ascending colon at the arrow. Inferiorly, an arrowhead demonstrates the lamellated mass containing mottled gas density. Superiorly, an arrowhead demonstrates the distended terminal ileum with fecalized contents approaching the cecum at the level of the fecalith.

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