

Chronic Constipation and Its Complications: An Interesting Finding to an Otherwise Commonplace Problem

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Abstract

Background. Fecalomas are hard dense masses separate from surrounding fecal material or bowel contents. This case report intends to provide a brief review of the literature and differential diagnosis for a pelvic mass in a pediatric patient. **Case Presentation.** The patient is a 5-year-old male presenting with worsening constipation and stool leakage over several months, found to have a rare calcified pelvic mass on abdominal X-ray consistent with a fecaloma. **Conclusion.** Fecalomas should be considered on the differential diagnosis of pediatric patients who present with chronic constipation and a calcified pelvic mass.

Keywords

constipation, fecaloma, pelvic mass, abdominal mass, pelvic calcification

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Case Report

A 5-year-old male presents to the emergency room with worsening constipation and stool leakage. For the past 2 months, he had only been passing small amounts of smearing and sticky stool once every few days. He has had no abdominal pain or vomiting, and he only had occasional discomfort with mild distention. Examination of the abdomen was soft, mildly distended, nontender, without masses, and the rectal exam was normal without fissures. Abdominal X-ray showed significant amount of fecal material noted throughout the colon with rectal impaction and no evidence of small bowel obstruction (Figure 1). He was then admitted for bowel disimpaction treated medically with multiple laxatives and enemas.

Follow-up abdominal X-ray 3 days later revealed clearance of excessive fecal material but persistence of a slightly ill-defined rounded density measuring 3.5 cm by 4 cm with an irregular appearing rim-like calcification seen in the pelvis, most consistent with a fecaloma in the rectum. This finding was confirmed by a low-dose computed tomography scan of the pelvis (Figures 2 and 3).

Final Diagnosis

Fecaloma

Hospital Course

He was subsequently evaluated by Gastroenterology and Surgery for possible Hirschsprung's disease with rectal biopsies revealing normal colonic mucosa and the presence of ganglion cells. His fecaloma required manual disimpaction after failed medical management.

Discussion

Fecalomas are hard dense masses of fecal material distinctly separate from the remainder of bowel contents and occur most often in the rectum and sigmoid colon.¹ Fecalomas may gradually enlarge in size and cause various complications due to their mass effect including small bowel obstruction, urinary retention with hydronephrosis,² abdominal compartment syndrome,³ and idiopathic megacolon⁴ with gut perforation if not treated in a timely manner.⁵

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Figure 1. X-ray of the abdomen shows a large amount of fecal material throughout the colon with rectal impaction.



Figure 2. Abdominal X-ray after disimpaction demonstrates a slightly ill-defined rounded density measuring 3.5×4 cm with an irregular appearing rim-like calcification seen in the pelvis, consistent with a fecaloma with a rim of calcification.

Findings of a fecaloma should prompt evaluation into potential causes such as chronic constipation, Hirschsprung's disease,⁶ Chaga's disease, or psychiatric/behavioral disorders. The differential diagnosis of a pelvic soft tissue mass in a pediatric patient includes teratomas, pelvic or retroperitoneal neuroblastoma,⁷ germ cell tumors, Hodgkin's or non-Hodgkin's lymphoma, rhabdomyosarcoma of the bladder or prostate.



Figure 3. Computed tomography scan of the pelvis shows a slightly irregular shaped rounded 3-cm sized rim calcified fecaloma in the rectum at the S3-S4 level surrounded by fecal material.

In conjunction with anorectal malformation and sacroccocygeal osseous defects, a presacral mass is also characteristic of Currarino's triad. Other more benign etiologies include hydrocolpos, intestinal duplication, lymphangioma, and ovarian cysts.⁸ Even more rarely in a pediatric patient and in this case report, a calcified pelvic mass may be consistent with urinary stones, calcified soft tissues from prior hemorrhage or inflammation, calcified hemangiomas, calcified foreign bodies, or calcified tumors of the abdomen in areas such as the mesentery or ovary/uterus.⁹ Further imaging with an ultrasound with Doppler, computed tomography, or magnetic resonance imaging may be obtained to further characterize the mass,⁸ and rectal biopsy should be considered to rule out Hirschsprung's disease. In this case report, the pelvic mass was most consistent with a fecaloma given the clinical context and radiographic location of the mass inside the distal colon.

Conclusion

Constipation is a common pediatric dilemma, but fecalomas are relatively rare in the pediatric population. Fecalomas should initially be managed medically with laxatives and enemas. However, manual disimpaction, endoscopy, or surgical resection may be required in medically refractive cases.^{1,2}

Author Contributions

MC: Contributed to conception and design; drafted the manuscript; critically revised the manuscript; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

SG: Contributed to analysis; critically revised the manuscript; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

AR: Contributed to analysis; critically revised the manuscript; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

SCC: Contributed to conception and design; contributed to analysis; critically revised the manuscript; gave final approval;

agrees to be accountable for all aspects of work ensuring integrity and accuracy.

Declaration of Conflicting Interests

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