Obstructing Fecolith Resulting From Small Bowel Diverticulum

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INTRODUCTION

Small bowel diverticula make up the minority of all diverticular disease, 1-5%. (1) Of patients with small bowel diverticula, few have acute symptoms. Most patients have mild GI symptoms such as constipation. (2) However, in this report, we discuss the rare case of a fecolith arising from a small bowel diverticula causing a small bowel obstruction. This case illustrates the importance of having a broad differential for elderly patients with GI complaints.

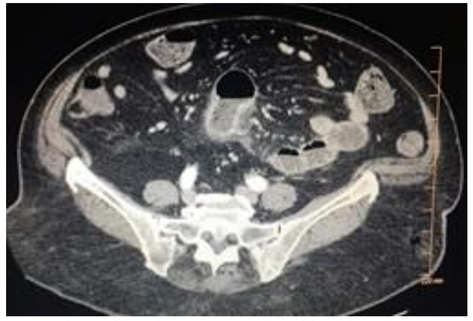


Image 1: CT scan demonstrating concern for small bowel abscess, this was later determined to be the small bowel diverticulum that had just released the fecalith.

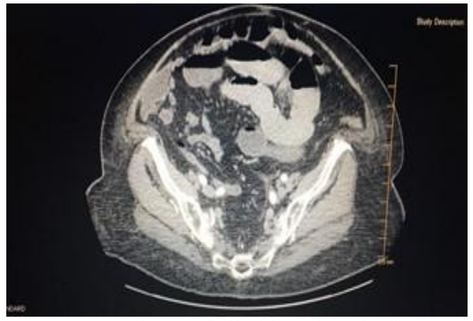


Image 2: CT showing air-fluid levels but resolution of small bowel abscess

CASE REPORT

This case concerns a 78-year-old female with past medical history of diverticulitis managed medically, insulin dependent diabetes mellitus, and past surgical history of hysterectomy. The patient presented to the emergency department with complaint of 3 days of epigastric abdominal pain accompanied by nausea and emesis. Upon presentation the patient had normal vital signs and labs were within normal limits. CT of the abdomen in the ED showed a small bowel fluid collection concerning for abscess as seen in image 1. Because of its location, percutaneous drainage was deemed unable to be performed by interventional radiology. Thus, the patient was treated conservatively with antibiotics and bowel rest. Over the next 48 hours, patient became increasingly distended and obstipated. Small bowel obstruction was presumed, so a nasogastric tube was placed and repeat CT was performed showing dilated loops of small bowel with air fluid levels as seen in image 2. Conservative management was attempted for 48 hours. When the patient continued to be obstipated, she was taken to the operating room for exploratory laparotomy. In the OR, it was discovered that the patient had a jejunal diverticulum in the location of the suspected abscess seen on initial CT. Additionally, it was discovered that a fecolith was the point of obstruction in the mid-jejunum. A proximal enterotomy was created and the fecolith was milked out of the small bowel, which was repaired primarily. The patient had return of bowel function over the next several days and was eventually discharged home.

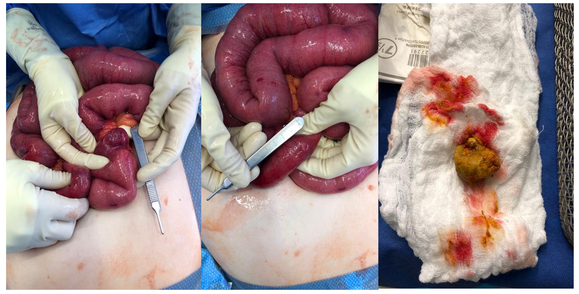


Image 4a, 4b, 4c:
4a- proximal jejunal diverticulum approx. 3 x 3 cm
4b- location of jejunal fecalith causing obstruction in mid ileum.
4c- fecalith ex vivo

DISCUSSION

This case demonstrates the diagnostic challenge small bowel diverticula can present. They are rare, 1-5% of diverticula, and are difficult to detect with only 35% being diagnosed via CT of the abdomen. (1,3) Thus they are likely to be low or not on many clinicians' differential diagnoses. However, as demonstrated by this case, the complications of small bowel diverticula can be serious and require operative intervention.

In this case, a small bowel diverticulum was initially believed to be an abscess. This led to a delay in definitive treatment a different treatment algorithm was initiated. Had small bowel diverticulum been higher on the differential diagnoses, this patient may have been able to have a shorter hospital course.

CONCLUSIONS

This case demonstrates the utility in keeping small bowel diverticular disease as a component of the differential diagnosis when a patient presents with gastrointestinal complaints. Although rare, small bowel diverticula and their sequelae can lead to significant morbidity for patients and should remain in the back of clinician's minds.

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