Perforated stercoral colitis in an elderly patient with chronic constipation

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BACKGROUND

Fecal impaction is a common problem among elderly patients who suffer from constipation. An uncommon sequela of fecal impaction and constipation is stercoral colitis, an inflammatory colitis caused by pressure on the colon wall by impacted stool. Patients can present with a wide range of pathophysiology, ranging from pain to perforation.

CASE PRESENTATION

An 82-year-old female with a history of hypothyroidism and no surgical history presented to the emergency department complaining of abdominal pain and vomiting for two weeks. She came from her rehabilitation facility where she had been recovering from a scapula fracture sustained one month prior. Due to her severe shoulder pain, she had been frequently taking opioid pain medications and developed progressive constipation. She described her abdominal pain as diffuse, constant, and of moderate intensity. She reported a bowel movement earlier in the day. She denied fever, weight loss, or any other significant symptoms.

Physical Exam

- Vitals: tachycardic, afebrile, hemodynamically normal
- Appearance: cachectic, in moderate distress due to pain
- Abdomen: significantly distended and tympanic, rebound tenderness in the LLQ, mild tenderness throughout the rest of her abdomen

Laboratory

- WBC 22,000/µL

Imaging (figure 1)

- Computed tomography of the abdomen and pelvis revealed free intraperitoneal air, constipation with rectal fecal impaction, and small ascites



Figure 1: computed tomography of the abdomen and pelvis revealing free intraperitoneal air, constipation with rectal fecal impaction, and small ascites**.**

OUTCOME

- Diagnosis: colonic perforation secondary to stercoral colitis
- Perioperative antibiotics: piperacillin-tazobactam
- Operation: under anesthesia, a large amount of impacted stool was manually disimpacted from the rectal vault. Upon midline laparotomy and entry into the abdomen, her entire colon was noted to be massively dilated, with murky abdominal fluid seen in the pelvis. A 1 cm anterior perforation of the distal sigmoid colon was seen, and a large amount of hard stool was evacuated through the defect. A two-layer closure of the perforation was performed with 2-0 silk Lembert sutures. The appendix was also noted to be inflamed and was resected. The abdominal cavity was copiously irrigated, and a Jackson-Pratt drain was left in the vicinity of the perforation. A diverting descending loop colostomy was created, and the abdomen was closed.

POSTOPERATIVE COURSE

She was extubated in the ICU and her diet was slowly advanced. Her intraoperative fluid culture grew *E. coli*, for which she completed a six-day course of piperacillin-tazobactam. Pain was well controlled, her ostomy was functioning, and she was subsequently discharged to subacute rehabilitation. She continued to do well postoperatively and returned one month later for routine colostomy reversal.

DISCUSSION

- Stercoral colitis is an uncommon but potentially severe complication of fecal impaction in which the pressure from impacted stool causes ischemia in the wall of the colon, potentially leading to ulceration, colonic perforation, and death.[1]
- Presenting features include constipation, abdominal pain, leukocytosis, fever, peritonitis, or shock.
- Treatment includes aggressive oral and rectal bowel regimen with manual disimpaction, but failure of nonoperative management or suspicion of perforation should prompt urgent surgical intervention focused on obtaining source control, resecting ischemic bowel, and diverting fecal stream.
- Given the advanced age, frequent comorbidities, and debilitated state in which many of these patients present, palliative care is also a consideration. A mortality rate of 35% is often quoted for patients requiring surgery.[2]
- A high index of suspicion is needed for stercoral colitis as prompt diagnosis and surgical management of colonic perforation can lead to a positive outcome.

REFERENCES

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