Small Bowel Obstruction Secondary to Peritoneal TB

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INTRODUCTION

- Peritoneal tuberculosis (PTB) is a rare disease in developed countries
- It can occur following reactivation of latent tuberculosis in the peritoneum via hematogenous spread from a primary lung focus, as well as hematogenous spread in the setting of active pulmonary TB or miliary TB
- As the disease progresses, the peritoneum becomes studded with tubercles
- Bowel obstruction is a potential complication of PTB secondary to progressive strictures or adhesions

CASE PRESENTATION

- This is a case of a 21-year-old male who presented with 10-day history of abdominal pain, diarrhea, nausea and emesis
- Prior to presentation he was treated with oral antibiotics for possible bacterial gastroenteritis
- He had no past medical or surgical history nor family history of cancer or IBD
- He recently emigrated to the US from China 6 months prior to presentation
- Patient was having normal bowel function on the day of the presentation
- In the emergency room, he was tachycardic to 125 and febrile to 39.4. His white blood cell count was 11.7 K/μL and lactate was 2.3
- On exam, abdomen was slightly distended with some tenderness to palpation on left side, without rebound or guarding
- A computed tomography of the abdomen and pelvis showed high grade small bowel obstruction with possible bowel ischemia, due to possible volvulus



Figure- Small bowel and mesenteric studding

CASE PRESENTATION

- Patient was taken to the operating room and exploratory laparotomy revealed dilated loops of small bowel with extensive studding suspicious for intestinal Tb
- He was also found to have a closed loop obstruction secondary to adhesive band which was lysed, and bowel was viable
- On further inspection, the liver, entire peritoneum and small bowel mesentery had studding (Figure)
- Biopsies of the small bowel mesenteric lymph nodes, omentum, and peritoneum showed diffuse necrotizing and non-necrotizing epithelioid granuloma and AFB and FITE stains were positive for acid fast microorganisms
- Patient had uneventful recovery post-operatively. His AFB was positive, and he was treated for active pulmonary TB and PTB

DISCUSSION

- In the United States in 2017, Centers for Disease Control and Prevention reported that 5.9 percent of all extrapulmonary TB cases were peritoneal
- Diagnosing PTB can be challenging. Patients can present with ascites, abdominal pain, fever or SBO. In young patients without past surgical history, extrapulmonary TB should be kept in the differential diagnosis
- Care should be taken to consider TB in the setting of the patient's symptoms, comorbidities, immune- suppressing medications, recent travel and exposure history

The authors have nothing to disclose