CLINICAL VIGNETTE

Campylobacter Infection Causing Small Bowel Obstruction

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Case Presentation

A 30-year-old female presented to the hospital with a one-week history of diffuse abdominal pain and bloating, which was progressively worsening. The symptoms were worse at night and exacerbated by oral intake. She then developed non-bloody emesis and diarrhea, without any associated fever or chills. She denied any recent travel or sick contacts. The patient had no significant past medical history, and surgical history was only significant for adenoidectomy. She was not taking any medications. At the time of presentation, she was hemodynamically stable and was afebrile. Her abdomen was soft and mildly distended with diffuse tenderness. There was no rebound or guarding on examination. Initial laboratory evaluation revealed a white blood cell count of 8.72 and hemoglobin of 14.2. Electrolytes, liver tests, ESR, CRP, and creatinine were all within the normal range. A CT scan of the abdomen and pelvis revealed a moderate to high grade small bowel obstruction, likely secondary to infectious versus inflammatory thickening occurring in the proximal large bowel/cecum. The appendix appeared normal.

A nasogastric tube was placed for initial management and Surgery was consulted. The patient symptomatically improved with nasogastric tube decompression, and it was decided that she did not require surgery. The abdominal pain and bloating improved, and the patient began to pass flatus. The nasogastric tube was removed and the patient tolerated a clear liquid diet, which was slowly advanced to solid foods. Repeat abdominal x-ray revealed a non-dilated bowel gas pattern with stool throughout the colon. Based on the concern for an infectious etiology, stool studies were sent. Because of concern for possible inflammatory bowel disease, colonoscopy was scheduled after her acute symptoms resolved. The stool studies returned positive for Campylobacter species. Her symptoms totally resolved and she returned to baseline without any further treatment.

At follow up appointment we discussed evaluation to exclude the possibility of inflammatory bowel disease and she agreed to start with non-invasive evaluation. CT scan one month later showed resolution of the previous bowel obstruction and cecal thickening. However, the terminal ileum was underdistended, and MR Enterography was recommended. This was performed three months later and showed no bowel distension and no bowel wall thickening. There was restricted diffusion of a 5 cm segment of terminal ileum, which may be related to prior infection/inflammation at the site. She then underwent colonoscopy with terminal ileum intubation and biopsies. The endoscopic appearance was normal and all biopsies were unremarkable. The patient continues to do well, without any recurrence of her symptoms.

Discussion

This case illustrates Campylobacter infection, which is a common infection, causing small bowel obstruction. Campylobacter is a common cause of infectious diarrhea worldwide, but unusual typical symptoms include abdominal pain and diarrhea, which can be less commonly preceded by dizziness, rigors, and body aches. Abdominal pain may occur in the absence of diarrhea.[1] Although, diarrhea typically resolves in an average of seven days, the abdominal pain may persist longer.[2-3]

There are several atypical presentations of Campylobacter infection that may mimic various other conditions. For example, it may be confused with acute appendicitis or cholecystitis.[4] It can also resemble inflammatory bowel disease, because it may present with bloody diarrhea.[5] Histologically, Campylobacter will show acute inflammatory changes in the absence of the chronic changes that can be seen with inflammatory bowel disease.[6] Later onset complications of Campylobacter infection include reactive arthritis and Guillain-Barre syndrome.

Typically, the infection is self-limited and does not require antibiotics for treatment. Treatment with antibiotics is generally reserved for patients who are immunocompromised, older, pregnant, or have markers of severe disease such as high fever, prolonged symptoms, bloody diarrhea, or extraintestinal manifestations.[7-8] In these select situations, the antibiotic of choice is usually azithromycin or a fluoroquinolone. Resistance and susceptibility rates should be examined prior to making a definitive decision.

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