Yersinia enterocolitica Infection Presenting as Left Lower Quadrant Pain

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Abstract

Yersinia enterocolitica (*Y. enterocolitica*) is an anaerobic gram-negative coccobacillus that cause acute gastroenteritis marked by fever, abdominal pain and nausea. This is the case of a 57 year old male with history of NSAIDS use who presented complaining of loose stools for 6 months. Initial CT of abdomen only showed diffuse gastric wall thickening and diverticulosis while colonoscopy showed only hyperplasic polyps. His symptoms increased with LLQ abdominal pain and occasional hematochezia. A leukocytosis of 15,000 k/mm³ was found, suspect for acute diverticulitis. Repeat CT abdomen revealed diffuse circumferential thickening of the left colon c/w infectious/inflammatory colitis. Stool cultures later revealed 4+ growth of Y. enterocolitica. He was treated with Moxifloxacin and then Bactrim due to tendonitis concerns and had resolution of diarrhea after a full 6 week course.

Discussion

* We present a case of a 57 y/o male with a history of chronic NSAIDS use complaining of loose stools for 6 months. Initial CT of abdomen only showed diffuse gastric wall thickening and diverticulosis while colonoscopy showed only hyperplasic polyps. His symptoms increased with LLQ abdominal pain and occasional hematochezia.

A leukocytosis of 15,000 k/mm³ was found, suspect for acute diverticulitis. Repeat CT abdomen revealed diffuse circumferential thickening of the left colon c/w infectious/inflammatory colitis. Stool cultures later revealed 4+ growth of Yersinia enterocolitica. He was treated with Moxifloxacin and then Bactrim due to tendonitis concerns and had resolution of diarrhea after a full 6 week course.

* Contaminated food and water are the main routes of transmission, with incubation ranging from 1 to 11 days. Consumption of pork, pasteurized milk, carrots, vegetable juice and contact with infected swine/cattle are all sources of infection.

* Common postinfection sequelae include reactive arthritis and erythema nodosum. Complications of yersiniosis include ulcerative ileitis/colitis, peritonitis, intussusception, toxic megacolon, cholangitis and multi-organ abscess formation. Overall mortality from Yersinia has been quite low despite the severity of many of these complications.

* Microbiological stool culture is the standard for diagnosis. It often remains culture positive for weeks after an acute infection. Serologic tests, although widely used in Europe and Japan, are not readily available in the United States.

* Grossly and on histopathology, findings include inflammation around the appendix, terminal ileum, and inflammation of the mesenteric lymph nodes, either alone or in combination. The appendix itself is usually normal or shows only minimal inflammation on histopathology.

* No antimicrobial treatment is necessary unless severe disease is present. If warranted via the severity of symptoms or co-morbidities, a fluoroquinolone is adequate for moderate disease, but a 3rd generation cephalosporin combined with gentamicin is recommended for septicemic patients.

* There are no controlled trials on the duration of treatment; however based on clinical case series, it is suggested that patients should receive five days of oral antibiotics. For more severe extraintestinal infections e.g. septicemia, patients should receive three weeks of therapy.

Conclusions

* We present an interesting case of an atypical presentation of Y. enterocolitica presenting as left lower quadrant pain rather than right lower quadrant pain.

* Y. enterocolitica infections are best prevented by having safe food processing, adequate hand washing especially after pork products, and using clean water for food processing.

References:


Background

* Yersinia enterocolitica (*Y. enterocolitica*) is an anaerobic gram-negative coccobacillus that cause acute gastroenteritis marked by fever, abdominal pain and nausea.

* Gastroenteritis due to Yersinia infection cannot easily be distinguished clinically from other causes of acute diarrhea. Bowel movements number 5 to 10 per day at the peak of illness, which is similar to many other etiologies.

* Yersinia enterocolitica (Y. enterocolitica) is an anaerobic gram-negative coccobacillus that cause acute gastroenteritis marked by fever, abdominal pain and nausea.

* Abdominal pain with *Y. enterocolitica* is usually in the right lower quadrant and is frequently confused with appendicitis; especially when abdominal tenderness is elicited.

* Yersinia enterocolitica (Y. enterocolitica) is an anaerobic gram-negative coccobacillus that cause acute gastroenteritis marked by fever, abdominal pain and nausea. This is the case of a 57 year old male with history of NSAIDS use who presented complaining of loose stools for 6 months. Initial CT of abdomen only showed diffuse gastric wall thickening and diverticulosis while colonoscopy showed only hyperplasic polyps. His symptoms increased with LLQ abdominal pain and occasional hematochezia.

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