

Learning Objective

GI pathogen Panel testing will identify more cases of Yersinia enterocolitica in hitherto unknown areas, Detection is vital to contain the spread.

Case Summary

- 88-year-old male who presented with sudden onset of emesis, pain in abdomen, and bloody stools.
- **Significant Medical History**
- He had an extensive past medical history of coronary artery disease. .
- **At presentation**
- obese, pale, lethargic, oriented, and in no distress at a presentation; the temperature was 98.5 F, Heart Rate was 84/minute, blood pressure was 94/54mm, and SpO2 was 99% on room air. mottled skin on the legs pitting edema. The abdominal examination was normal except for a mild tenderness in the left lower quadrant.
- **Hospital course**
- Received IV saline boluses, pressor support, and ICU admission and started on Piperacillin/Tazobactam in view of sepsis. With GI pathogen panel positive for Y. enterocolitica and he was started on IV Doxycycline. This led to his improvement, and he was later discharged in a stable condition.
- **Investigation:**
- **CI pathogen Panel by PCR** was positive for Yersinia enterocolitica
- **Gastro duodenoscopy and flexible sigmoidoscopy** two clean-based antral ulcers with no bleeding and a circumferential inflammation of the right colon with ulcerated and friable mucosa.
- **CT abdomen** mild wall thickening in the left colon suggesting colitis

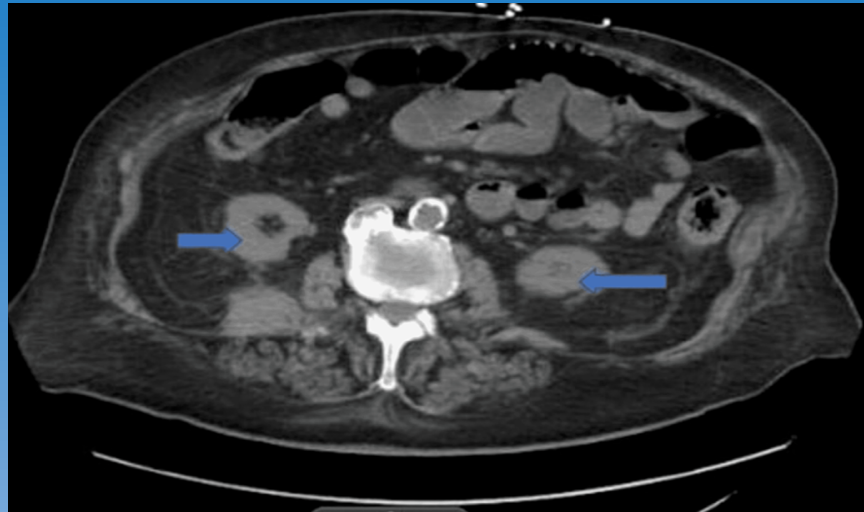


Figure 1: CECT of the abdomen (transverse section) with thickened intestines suggestive of colitis (arrows)

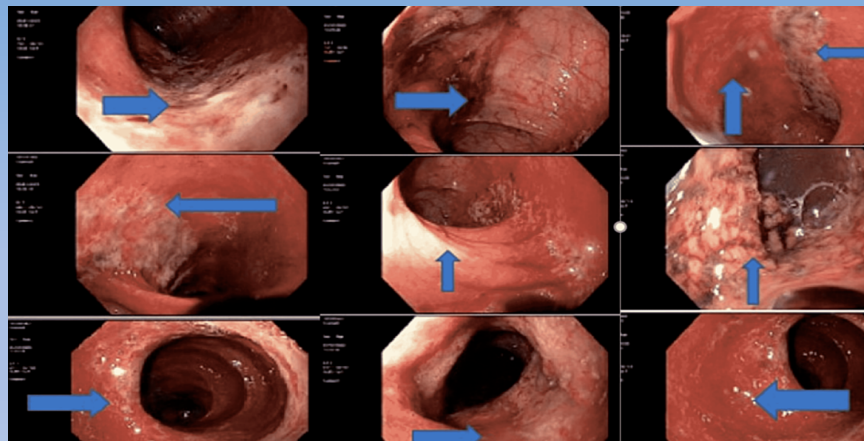


Figure 2: Sigmoidoscopy images: Blue arrows show edematous friable mucosa with ulceration and submucosal edema suggestive of colitis

Discussion

Yersinia Enterocolitica (YE) is a facultative anaerobic Gram-negative bacillus, in 2020 incidence of Yersiniosis has been less than 0.3 per 100,000, most commonly reported in infants and children.

Infections are usually self-limited, but they can cause sepsis with up to a 50 percent fatality rate in people with iron overload conditions like thalassemia, hemochromatosis, and blood transfusions.

It causes pseudoappendicitis, mesenteric lymphadenitis, and endocarditis in susceptible adults. Reactive arthritis affecting the wrists, knees, and ankles is seen in people with HLA-B27. Erythema nodosum can occur.

Bacterial shedding can continue for up to three months after recovery. Detection is vital to contain the spread.

We discussed a case of an elderly man from the nursing home, who tested positive for yersiniosis, this condition was not reported in the northeast USA,

Using GI pathogen PCR testing will lead to the detection of more cases of YE in geographical regions where it was not considered prevalent.