

CLINICAL VIGNETTE

An Unusual Cause of Recurrent Right Lower Quadrant Pain, Intestinal Endometriosis

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The patient is 43-year-old Caucasian female who lives bi-coastally in Los Angeles and Atlanta as a consequence of her work. In July 2015, she had an episode of acute abdominal pain and was told that she might have a ruptured appendix. She was seen in the emergency room at Emory University Hospital. An imaging study revealed a large ovarian cyst and a normal appearing appendix. Subsequent to that, she was seen in a fertility clinic for evaluation for IVF treatments. She had a hysterosalpingogram, but she had a severe inflammatory response to the procedure necessitating a consultation with a Gastroenterologist for evaluation of persistent RLQ pain. An IBD-7 panel was reported as normal (Figure 1). The patient underwent a colonoscopy, which was normal, but the endoscopist was unable to enter the terminal ileum. A small bowel capsule endoscopy was performed, which revealed some blood in the ileum but no ulcerations were reported. She was given a course of Flagyl and her symptoms improved.

She was seen in our office after a 4- to 5-day history of severe lower abdominal pain with an episode of nausea and vomiting. She had some diarrhea but no hematochezia or melena. There were no associated fever or chills.

There is no family history of inflammatory bowel disease. Her only surgery was a tonsillectomy. She is a non-smoker and an occasional drinker. She was taking no medications and had lost 10-15 lbs over the last few months. Vital signs were normal. Her weight was 138 lbs with a BMI of 21.01. Examination of the abdomen revealed a slightly distended and mildly tender hypogastrium with hyperactive bowel sounds. There was no rebound tenderness. A stat KUB film revealed a loop of distended jejunum with a relatively gasless colon (Figure 2).

The patient was referred to the GI service at UCLA/Santa Monica Hospital for hydration and evaluation by surgery. She was given antibiotics and IV fluids. Her symptoms abated, and she was discharged pending an outpatient workup.

MRI enterography was performed on 12/23/15. It revealed a long segment of distal ileal wall thickening and enhancement with mass-like inflammatory changes of the terminal ileum, obscuring the ileocecal valve. The appendix was not visualized.

She was taken to surgery at which time she was found to have what was thought to be a complex walled off perforated

appendicitis with phlegmon of the ileocecal valve. She was also noted to have chronic terminal ileitis with extensive mesenteric lymphadenopathy of the distal 30 cm of ileum. She underwent a laparoscopic right hemicolectomy with resection of 30 cm of ileum (Figure 3).

Pathology: Antibody Probe: ER positive in endometrial glands and stroma; PR positive in endometrial glands and stroma; PAX8 positive in endometrial glands; CD10 positive in endometrial stroma.

Final pathology was consistent with endometriosis involving the ileum and cecum.

Discussion

Endometriosis occurs when endometrial glands and stroma are present at extrauterine sites. The pathogenesis of endometriosis has not been definitively established. The theory of implantation contemplates that endometrial cells shed into the uterus during menstruation are transported through the fallopian tubes (retrograde menstruation).¹ There may also be dissemination to remote sites through lymphatics or blood vessels. There is also a postulate that the peritoneal cavity contains undifferentiated cells capable of dedifferentiating into endometrial tissue. Endometriosis is usually confined to the pelvis but can be found in more remote locations. It is estrogen dependent and is most often found in women between the ages of 25-35. Patients may be asymptomatic but may also suffer from pelvic pain and distress.¹ Intestinal involvement with endometriosis has been described since at least 1860 by Rokitansky in some studies there is involvement of the intestinal tract in 3-34% of women with an average prevalence of about 5.4% and has been reported in women through the seventh decade as a result of exogenous hormone use.² The most common sites of involvement are rectum and sigmoid colon followed by the appendix, terminal ileum, cecum and ascending colon. Most of the time involvement is asymptomatic but may be associated with abdominal crampy pain, change in bowel habits, or abdominal distention. Findings on exam and in imaging studies can mimic appendicitis, intussusception of the appendix into the cecum, or inflammatory bowel disease.³ Symptoms may occur in concert with gynecologic symptoms such as dysmenorrhea, dyspareunia, and infertility as in this patient. Chronic pain and obstructive symptoms can occur.

Intussusception of the appendix into the cecum has known to be associated with endometrial involvement.⁴ In this patient, chronic RLQ pain was associated with endometrial involvement of the appendix, cecum, ileum, and ascending colon. Her symptoms resolved after surgical resection.

Figures

Figure 1. KUB film showing dilated loops of bowel in the RLQ.

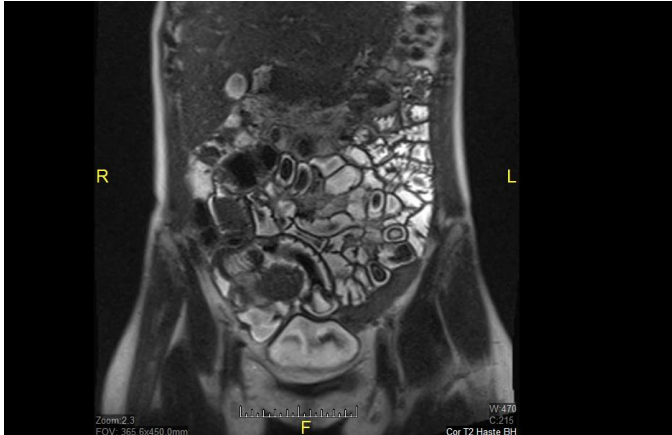


Figure 2. MRI enterography.



Figure 3. Resected specimen.



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