Endometriosis of the Distal Ileum Resulting in Small Bowel Obstruction

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Introduction

- Endometriosis is defined as the presence of proliferative endometrial tissue located beyond the inner lining of the uterus. [1]
- In the matter of endometriosis there is no conclusive theory on the cause of the condition.[2]
- One theory is retrograde menstruation from the fallopian tubes causing endometrial implants.[3]
- This condition is common as it effects 4-17% of the female population.[4]
- Endometriosis primarily occurs in the pelvic peritoneum, ovaries, and pouch of Douglas.[5]
- Though cases with gastrointestinal involvement account for approximately 5.4% of cases of endometriosis. [6]
- Symptoms of small bowel endometriosis are generally non-specific consisting of bloating or abdominal pain [7]

Case Description

History

- A 32-year-old female PMHx of endometriosis and depression presented to the emergency department with a chief complaint of abdominal pain.
- She stated experiencing crampy abdominal pain since yesterday with associated nausea, vomiting, and diarrhea which started today with five episodes of non-bloody emesis since arriving in the emergency department.
- She denied any fever, chest pain, urinary urgency or flank pain.
- She has a surgical history for diagnostic laparoscopy with ablation of endometrial implants in 2015.
- She has a family history of cervical cancer.
- Was recommended observation with small bowel follow through which was declined.
- Patient returned three days later to the emergency department now complaining of obstipation and anorexia.

Objective Findings

•Vital Signs:
- Temp: 98.4 °F
- BP: 102/58 mmHg
- Pulse: 64 BPM
- Resp: 18 BPM

•Patient presented in no acute distress.

•Pulmonary: Clear to Auscultation Bilaterally equal rise and fall.

•Cardiac: Regular rate and rhythm.

•Abdomen: Soft, moderate tenderness to the lower abdomen, moderately distended, no peritoneal signs. Well healed surgical scars from prior laparoscopy.

•Extremities: 5/5 strength full ROM, no cyanosis or edema noted.

Diagnostics

•Lab results on initial visit showed a white blood cell count of 12.5 thou/uL with a leftward shift and a Mg of 1.4 mg/dL.

•Urine analysis showed a small amount of protein, trace ketones, and a large amount of blood.

•UA was negative for nitrites, leukocyte esterase, and bilirubin.

•The initial visit CT scan findings showed diffuse fluid filled jejunum and ileum with wall enhancement and small pelvic fluid with no obstruction at this time.

•A second CT was deferred at the time of second presentation due to worsening condition.

Discussion

- Endometrial implantation of the GI tract requiring resection accounts for less than 1% of call cases of endometriosis.[6]
- Endometriosis of the bowel can be commonly be misdiagnosed as a neoplasm. [8]
- There is no standard imaging modality that is diagnostic for endometriosis which is why management of these patients can be challenging. [9]
- Laparoscopic visualization of the site is the gold standard for diagnosis.[7]
- Due to this challenging diagnosis of bowel endometriosis, treatment is typically surgical. [10]
- Therefore, otherwise in a young and healthy individual, endometriosis of the intestine should be considered especially with a history of previous endometriosis. [2]

Imaging

Fig 1. Contrast Computed Tomography

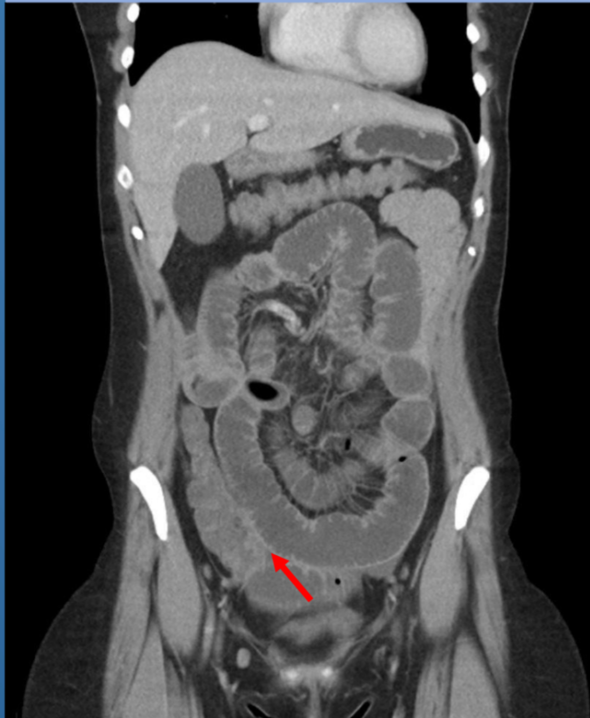
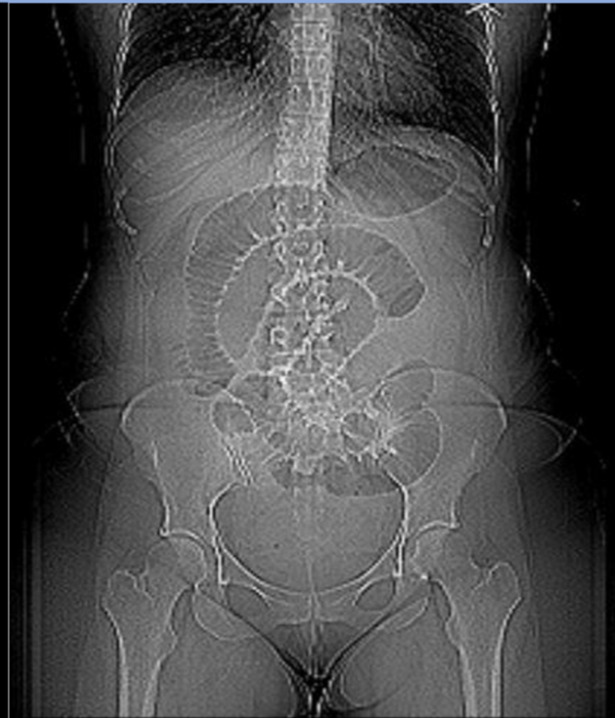


Fig 2. Upright Abdominal X-ray



Patient Management

• Upon second presentation in the emergency department, the patient symptoms had worsened. The patient was offered observation with small bowel follow through but due to the duration of her symptoms it was recommended at this time that diagnostic laparoscopy would be the best intervention for the patient. The patient agreed and was consented for surgery.

•Approximately ten centimeters proximal to the ileocecal junction a tight configuration of self adhered bowel with possible endometrial implants was visualized. Multiple attempts were made to free the loops of bowel which were unsuccessful.

•Due to the complex nature of the segment of small bowel and poor visualization, the decision was made to convert the case to an open procedure and a lower midline laparotomy incision was performed.

•The affected bowel was resected, and anastomosis was made. At this time, an appendectomy was performed to prevent future diagnostic uncertainty.

•Pathology of the resected bowel confirmed focal endometriosis of the distal ileum with acute inflammation of the appendix.

•The patient's prognosis was good post-operatively and she was started on a clear liquid diet with a return of bowel function post-op day one.

•On post-op day two the patient was progressed to a low fiber diet and subsequently discharged to home.

•At her two week follow up patient had no complaints and was discharged from the general surgery service.

Conclusion

- Endometriosis is a common condition within the female population.
- Though the condition does not typically arise in the gastrointestinal tract, there are documented cases.
- Therefore, endometriosis should remain in your differential diagnosis for a female presenting with an acute abdomen.

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