

Outside In: Endometriosis of the appendix, cecum, and ileum masquerading as suspected Crohn's disease

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INTRODUCTION

- Extra-pelvic endometriosis is a rare condition that may present with nonspecific abdominal pain, diarrhea, and/or hematochezia, which can mimic symptoms associated with inflammatory bowel disease.
- We present a case of suspected Crohn's Disease (CD) in a patient who subsequently was found to have extra-pelvic endometriosis of the appendix, cecum, and terminal ileum

CASE

- A 34-year-old female presented with abdominal pain and intermittent hematochezia that was sporadically associated with her menstrual cycles.
- Fecal calprotectin (FC) was 510 mcg/g but her other inflammatory markers and labs were normal.
- Abdominal and pelvic computed tomography (CT) showed ileitis (**Figure B**).
- Colonoscopy showed inflammation of the appendiceal orifice (AO) and focal erythema in the TI (Figures A and C). There was mild anatomical distortion of the AO. Biopsies of those areas were entirely normal.
- Magnetic resonance enterography (MRE) revealed an inflammatory conglomeration of the appendix, cecum, and TI without a definitive fistula.
- She then received an empiric antibiotic course for possible chronic appendicitis without alleviation of symptoms and persistent findings on repeat MRE.
- Subsequent exploratory laparoscopy revealed chocolatecolored lesions deposited throughout the pelvis and at the confluence of the terminal ileum and cecum consistent with endometriosis (Figure D).
- After intraoperative consultation with gynecology, a decision was reached for definitive management with ileocecectomy. She reported improvement of symptoms after surgery.

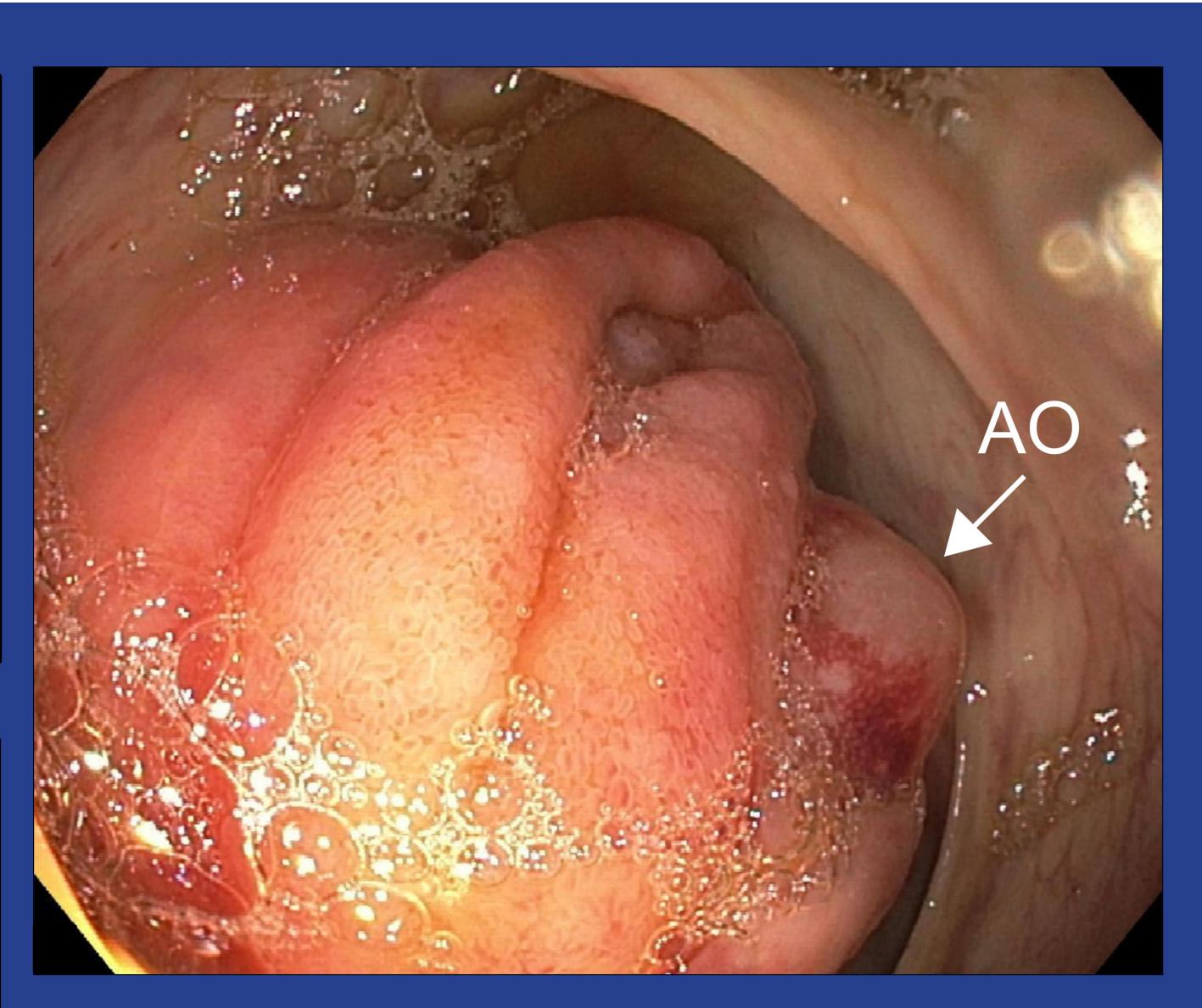


Figure A. Erythema and edema of the appendiceal orifice (AO).

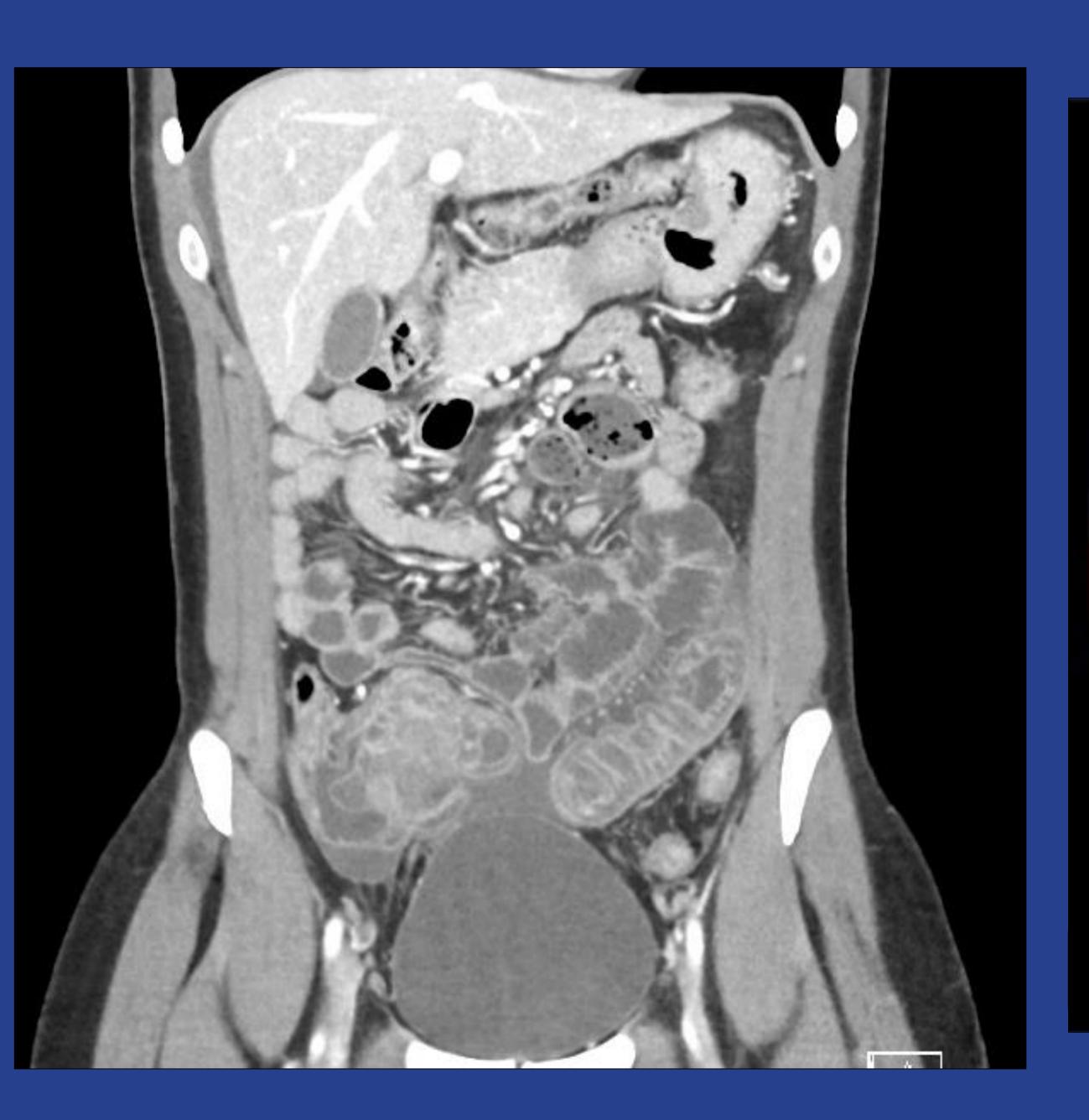


Figure B. Computed tomography of abdomen and pelvis with contrast showing ileitis.



Figure C. Focal area of edematous and erythematous mucosa within the terminal ileum.

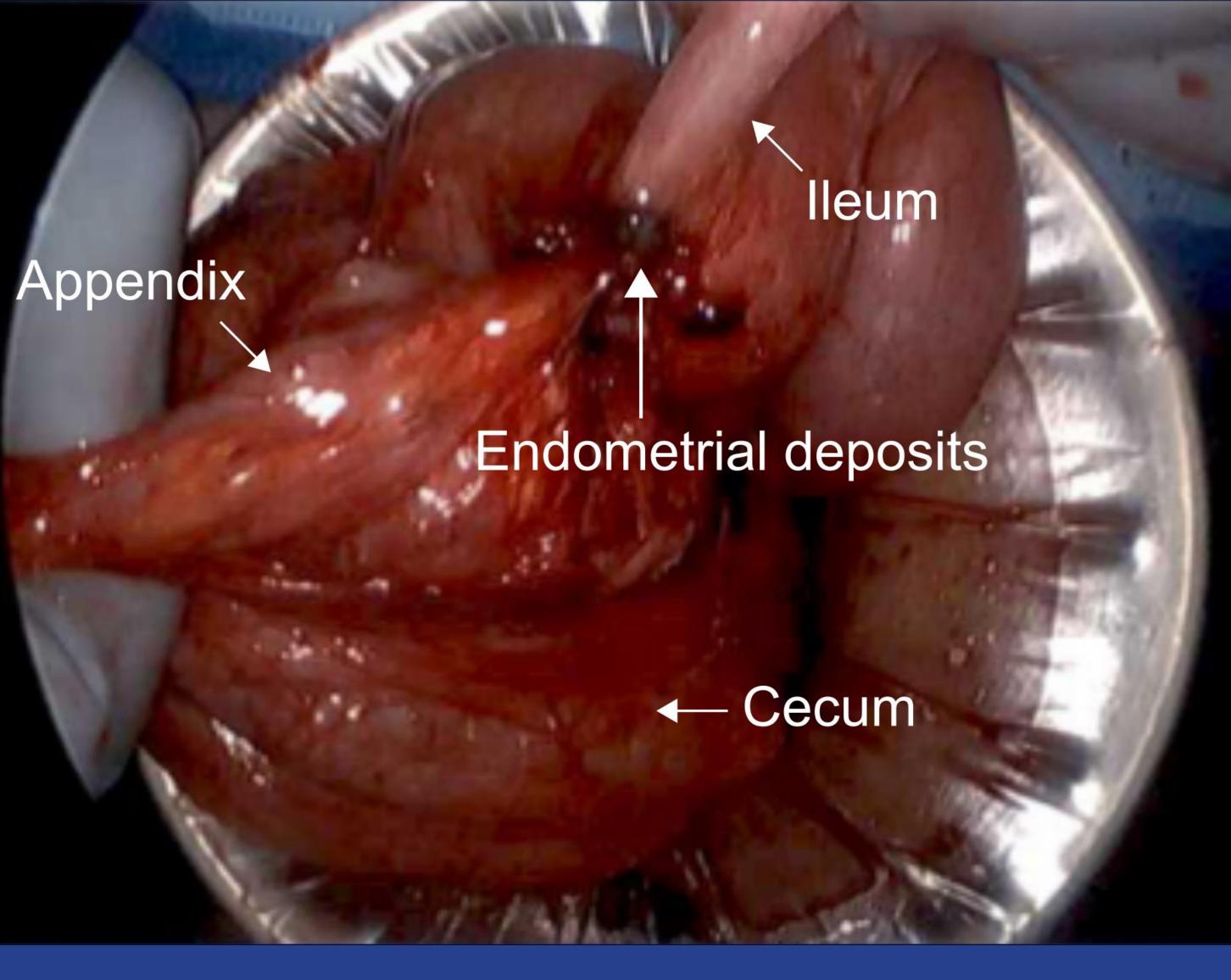


Figure D. Terminal ileum and cecum with endometriotic cysts during

laparotomy.

DISCUSSIONS AND CONCLUSIONS

- Extra-pelvic endometriosis accounts for 9% of endometriosis.
- Endometriosis of the appendix as a cause of acute appendicitis is rare and constitutes less than 1% of pathologies mimicking a clinical presentation of acute appendicitis.
- MRE can be useful in the diagnostic evaluation of endometriosis of the appendix, cecum, and TI but may be limited due to peristaltic artifacts and bowel contents.
- Laparoscopic intervention of endometriosis has been shown to improve symptoms.
- Our patient's presentation of abdominal pain with hematochezia, elevated FC, and ileitis on CT, was concerning for CD.
- Although endoscopic findings were suspicious for Crohn's disease, histological assessment was not, which contributed to the diagnostic dilemma in this case.
- Endometriosis should be on the differential in female patients presenting with intermittent abdominal pain, especially when the pain is associated with menstrual cycles.

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