



Endometriosis Mimicking a Gynecologic Cancer Presentation

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Background

Typical Presentation of endometriosis includes dyspareunia, dysmenorrhea, chronic pelvic pain, infertility, and an adnexal mass; however, many women remain asymptomatic. Therefore, the presentation and course of the disease is widely variable and unpredictable. Diagnosis is made with laparoscopy and histology.

Lesions can be categorized as **superficial peritoneal or deeply infiltrating**. Superficial lesions typically contain both endometrial stroma and glands, but glands can be absent. Deeply infiltrating lesions tend to form solid masses implanted 5 mm below the peritoneum and are commonly found in the rectum, rectosigmoid colon, rectovaginal septum, bladder, and ureter.¹

Treatment for endometrial implants includes surgery and should be elected in patients with pain uncontrolled with medical management. For endometriomas, cystectomy is preferred over drainage.² A patient's age and fertility desires should be taken into account before the decision to perform surgery is made, as it can significantly reduce ovarian reserve.³ Bilateral salpingo-oophorectomy is reserved for severe symptoms that are unlikely to resolve with other interventions.

There have been other case studies demonstrating **rare endometriosis presentations**, including:

- Massive recurrent hemorrhagic ascites initially presenting with rapid abdominal distention⁴
- Bloody ascites and hemorrhagic shock initially presenting with lightheadedness and palpitations⁵
- Peritoneal and bladder infiltration with hydronephrosis mimicking advanced ovarian cancer initially presenting with lower abdominal pain and right adnexal mass⁶
- Solitary vaginal wall mass with initial US imaging suggestive of Gartner's duct cyst⁷

Case Report

A 44-year-old gravida 1 para 1 African American female with a history of an umbilical hernia and fibroids presented to the emergency department with one week of constant periumbilical pain that was associated with fever, emesis and non-bloody diarrhea. An abdominal mass was found on physical exam, and an extensive workup with labs and imaging was completed, revealing a large adnexal mass (see Figure 2.) The patient was transferred to Gynecologic Oncology service with fever of unknown origin in the setting of a pelvic mass and possible incarcerated umbilical hernia. She received two units of transfused blood for microcytic anemia and began antibiotics, although infectious workup was unrevealing. The patient was counseled about concern for possible neoplastic pathology and various management options. The patient elected to proceed with surgical exploration based on exam findings, rising leukocytosis, persistent anemia, thrombocytosis and an anticipated delay of pap smear pathological results due to timing of the holiday weekend.

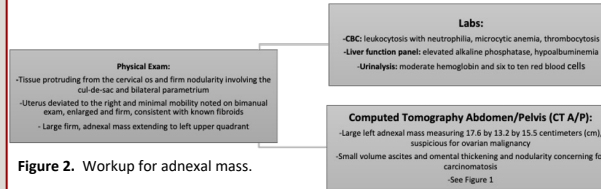


Figure 2. Workup for adnexal mass.

Surgical Findings: A 17 cm endometrioma that was densely adherent to the left side of the uterus and omentum was found. The mass, likely originating from the left broad ligament, was ruptured intraoperatively which revealed chocolate fluid. Extensive nodularity of the posterior parametrium resulted in an inability to mobilize the cervix for removal. The right fallopian tube and ovary appeared normal, but given the diagnosis of endometriosis and extensive intra-abdominal process, the decision was made to remove both tubes and ovaries to control the endometriosis process. The uterus was extensively replaced with calcified fibroids. Frozen pathology of endometrial biopsy and endocervical curettage was negative for malignancy. Frozen pathology of vaginal biopsy showed low-grade squamous intraepithelial lesion and endometriosis. Patient was discharged without complications on postoperative day 4.

Follow-up: At her three month postoperative visit, she remained well with a negative endocervical pap smear.

Clinical Significance

Endometriosis classically presents with symptoms of dysmenorrhea, dyspareunia, or infertility; however, up to 25% of patients remain asymptomatic.⁸ Only a few prior case reports have documented such acute presentations of endometriosis and rarely have they resulted in microcytic anemia. It remains unclear whether the red flag sign of microcytic anemia in this patient was a result of hemorrhagic ascites or a concurrent process from menstruation in the setting of leiomyomas. Yet even in the absence of microcytic anemia, the other findings of fever, leukocytosis and elevated inflammatory markers in the setting of a concerning physical exam and imaging mimicked a malignant process. This case represents an atypical presentation of endometriosis in a previously asymptomatic patient. Final pathological diagnoses of an endometrioma, endometriosis, leiomyomas, and an endometrial polyp highlight the importance of maintaining a broad differential that includes benign pathology and reliance on histopathological investigation.

Conclusion

In this case, the presentation of fever, atypical laboratory values, pelvic exam findings and suspicious imaging (pelvic mass with omental thickening) led to a differential prioritizing malignancy. The patient underwent surgical resection, with intraoperative pathology consistent with an endometrioma and extensive endometriosis implants.

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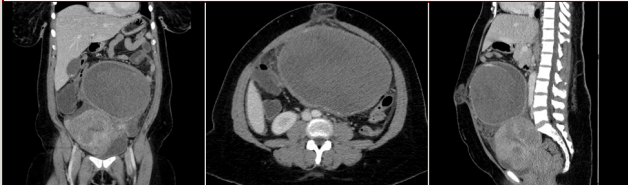


Figure 1: CT A/P showing 17.6 cm x 13.2cm x 15.5 cm left adnexal mass.