

Acute Perforated Appendicitis Secondary to Endometriosis

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INTRODUCTION

- Endometriosis is a well known and prevalent condition in which functional endometrial tissue exists outside of the uterus resulting in aappendicitis.
- First described myriad of presentations.
- A rare and infrequently described presentation of endometriosis is acute in 1860, endometriosis causing appendicitis accounts for less than 3% of gastrointestinal endometriosis.
- In the female population of childbearing age with chronic lower abdominal pain seccase of a 41 year old female with a past medical history significant for fibroids and endometriosis who presented with 11 days of lower abdominal pain who was ultimately found to have acute perforated ondary to endometriosis, it is important to keep acute appendicitis in the differential for acute lower abdominal pain.
- Here we present a rare case of an acute perforated appendicitis secondary to endometriosis

CASE REPORT

- Patient is a 41 year-old female with a significant past medical history of a myomectomy presented with 11 days of lower abdominal pain
- Patient stated that the pain had progressed and was no longer amenable to Ibuprofen
- In the emergency department, the patient was febrile to 101F with a mild leukocytosis of 11.6
- Coronal and transversal CT abdomen pelvis demonstrated a 1cm appendix with phlegmonous changes at the tip concerning for acute appendicitis with possible perforation (Figure 1 a and b)
- Upon entering the abdomen, the appendix was identified and further dissection revealed a bulbous mass-like structure adhered to the appendiceal wall
- Surgical pathology demonstrated endometriosis involving the appendix (Figure 2 a and b)

IMAGING



Figure 1a

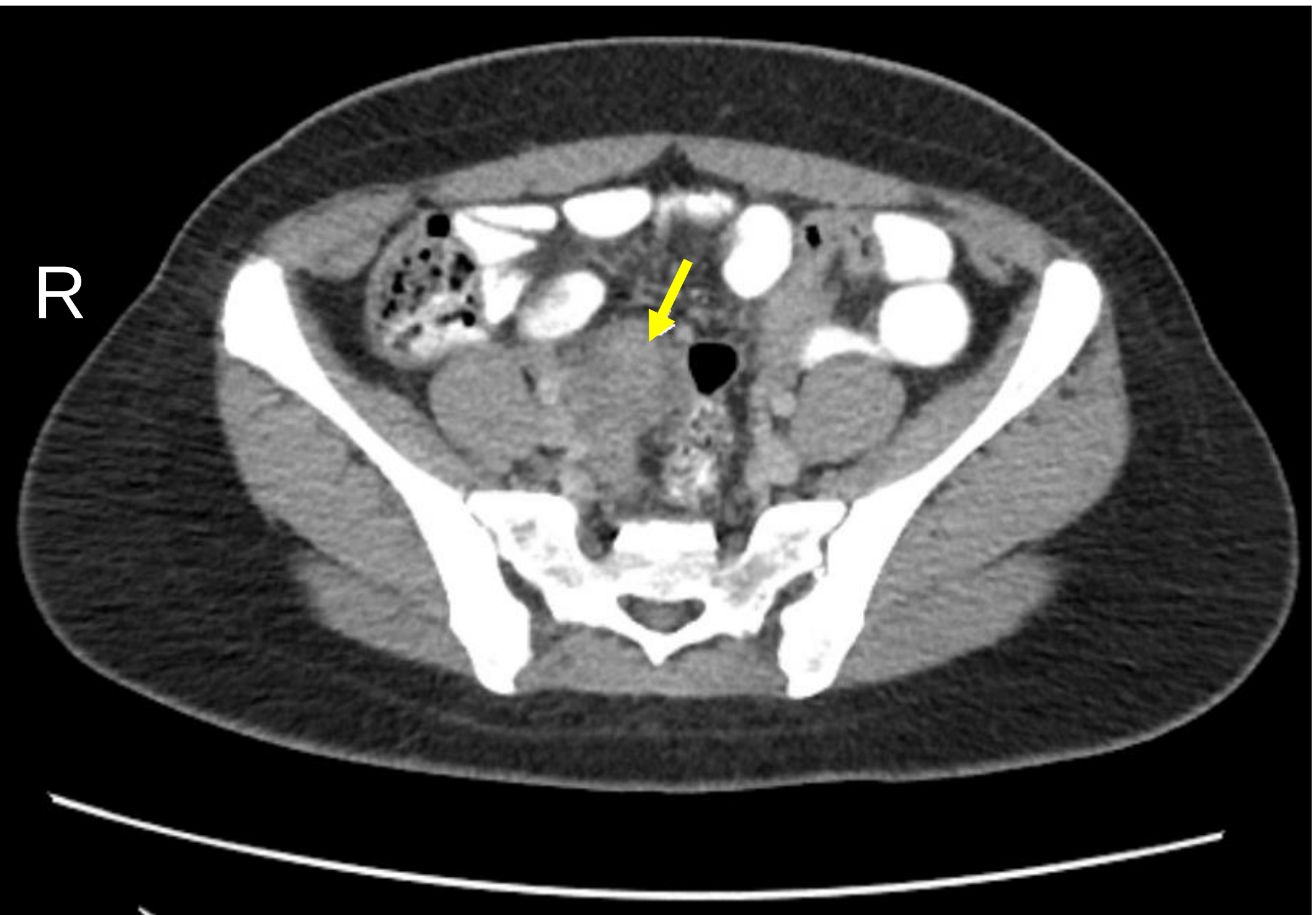


Figure 1b

PATHOLOGY

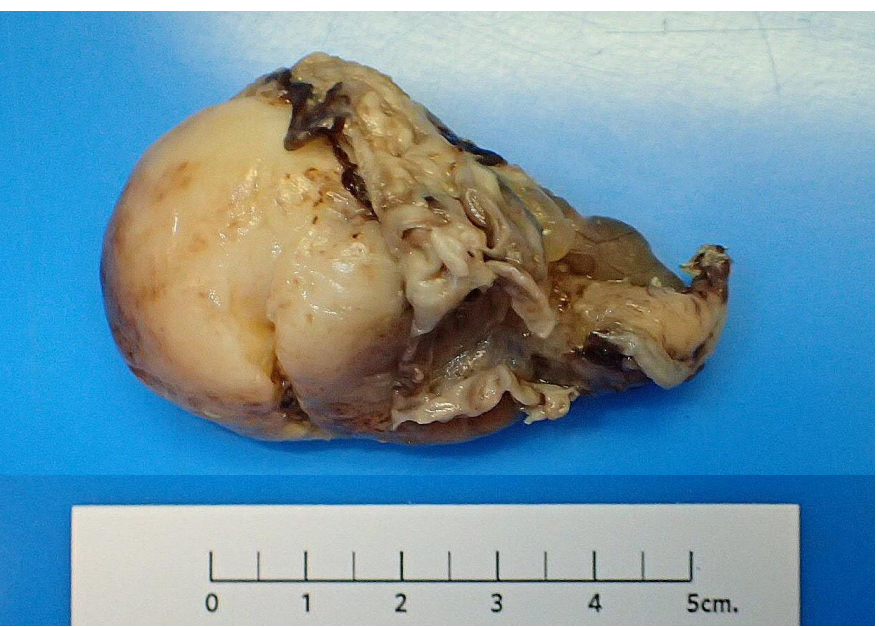


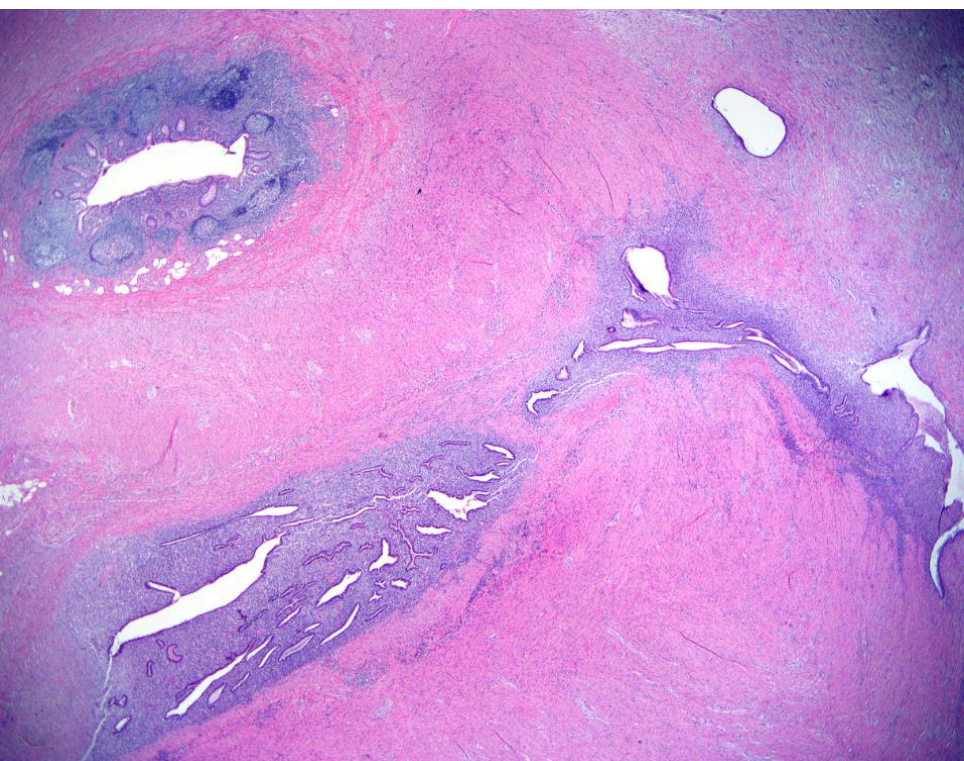
Figure 2a- Intact appendectomy specimen. The appendix displayed a mass-like distention at the tip. The overlying serosa displayed edema and purulent exudates.



Figure 2b- Longitudinal cross-section of the appendiceal tip at the area of distention. Scattered dark-brown hemorrhagic foci are embedded within a thickened and edematous appendiceal wall.

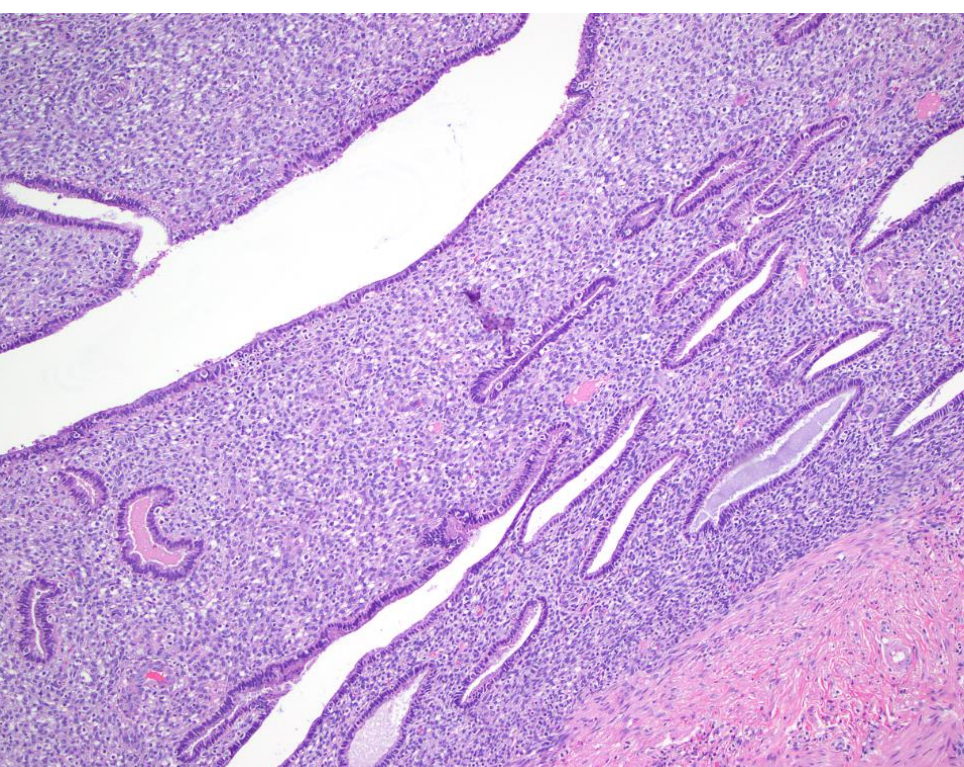
PATHOLOGY

- On gross examination, the appendix displayed a mass-like distention at the tip. The overlying serosa was edematous and covered with tan-white exudates (Figure 3)
- On cross-section, the appendiceal wall was thickened and contained scattered dark-brown soft hemorrhagic foci (Figure 4)
- On microscopy, cross-sections of the area of distention revealed well-circumscribed lobulated foci of endometrial-type glandular epithelium surrounded by endometrial-type stroma extending through appendiceal muscularis propria and subserosa, diagnostic of endometriosis involving the appendix



- Figure 3

- Endometriosis involving appendix (photomicrograph of hematoxylin and eosin section, 20x magnification)
- Well-circumscribed lobules of glandular epithelium associated with dense endometrial-type stroma and embedded within appendiceal muscularis propria (Figure 3) and subserosa (Figure 4)
- The adjacent appendiceal mucosal lumen appears unremarkable (Figure 4)



- Figure 4

- Endometriosis involving appendix (photomicrograph of hematoxylin and eosin section, 100x magnification)
- On higher power, the glands are lined by benign pseudostratified columnar epithelium and surrounded by densely packed stroma comprised of bland spindle cells with scant cytoplasm

CONCLUSION

- Endometriosis of the appendix resulting in acute appendicitis is a rare condition which should remain on the differential in female patients with lower abdominal pain