

BACKGROUND

- Amyand hernia is a rare diagnosis making up approximately 0.5% of all hernias.¹
- Amyand hernia that is discovered due to acute appendicitis is even more rare, accounting for approximately 0.1% of cases.²
- Appendiceal neoplasms in general are rare and encompass only 0.7–1.7% of appendectomy specimens.²

PATIENT PRESENTATION

85-year-old male presented to the emergency department with three-month history of bilateral testicular pain which had acutely worsened to 10/10 pain

- Pain was localized to the right lower quadrant and right testicle and was aggravated by laying down flat and movement.
- Subjective increase in urinary frequency, but no subjective fevers, nausea, vomiting, constipation, or diarrhea. The patient denied tobacco, alcohol, or drug use. He denied any past abdominal or pelvic surgeries.
- Physical exam showed abdominal guarding and rebound tenderness to palpation the right lower quadrant and showed tenderness on palpation of suprapubic area, and right testicle.
- Vital signs on admission included temperature of 102.2°F, blood pressure of 147/76 mmHg, heart rate of 130 BPM, and PaO₂ of 100% on room air.

PRE-OPERATIVE COURSE

- Labs were significant for WBC of 12.6 K/ μ L.
- CT abdomen and pelvis showed an inflamed appendix that was located within a right inguinal hernia. (Fig. 1)
- Patient was consented for laparoscopic appendectomy.

INCARCERATED AMYAND HERNIA ASSOCIATED WITH ACUTE APPENDICITIS AND INCIDENTAL FINDING OF SERRATED ADENOMA

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Figure 1. (A) Coronal CT image showing appendix (red arrows) within a right inguinal hernia. (B) Axial pelvis CT image showing the looped herniated appendix in the right inguinal canal.

OPERATIVE COURSE

- An enlarged and inflamed appendix was identified within an inguinal hernia (Figure 2A)
- The appendix was carefully dissected out, and the appendiceal wall was separated from the inguinal hernia (Figure 2B)
- The appendix was stapled at its base, delivered, and sent for pathologic examination.

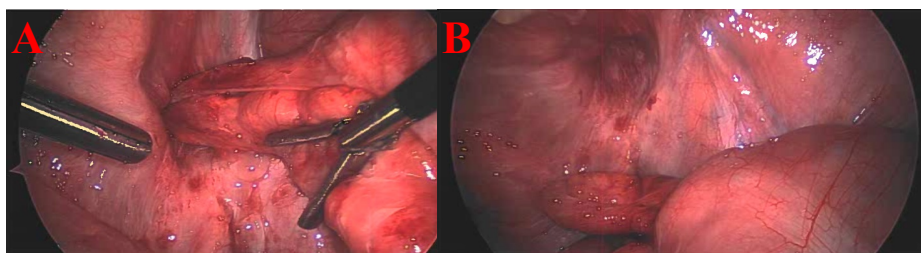


Figure 2. (A) Incarcerated Amyand hernia. (B) Reduced, inflamed appendix with inflamed inguinal hernia

REFERENCES

1. Moutafis, D. K., Tami, N., Antonopoulos, M. L., Antonopoulos, P., Achtschmitt, V., Papagrigoriou, D., ... & Xynos, E. (2021). Revisiting Amyand's Hernia: A 20-Year Systematic Review. *World Journal of Surgery*, 1-6.
2. Keç, C., Akbulut, S., Akalt, A. N., Şimşek, E. T., Tuncel, A., & Yılmaz, S. (2020). Nomenclature of appendiceal mucinous lesions according to the 2019 WHO Classification of Tumors of the Digestive System. *The Turkish Journal of Gastroenterology*, 31(9), 649.

PATHOLOGY

- Review of final pathologic specimens showed changes associated with acute appendicitis as well as a serrated adenoma with ruptured diverticulum (Fig. 4)
- Margins were free of diseased tissue.
- Specimens were sent off for second opinion at Johns Hopkins and Emory with agreement of stated pathology results.

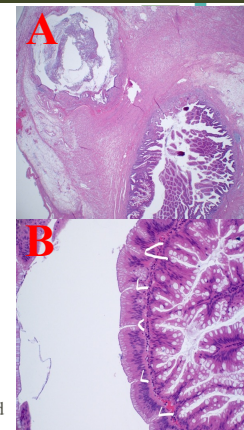


Figure 4. Pathologic specimens of (A) traditional serrated adenoma and diverticulum and (B) serrated adenoma with white arrows indicating serrations.

DISCUSSION

- This is a rare case of Amyand hernia presenting as acute appendicitis.
- The Amyand hernia was able to be diagnosed pre-operatively on CT scan, which this is most often diagnosed incidentally during an operation.
- We decided not to repair the inguinal hernia defect due to the presence of ongoing inflammation secondary to appendicitis. He was advised return for an interval inguinal hernia repair.
- Because serrated adenoma was seen on pathologic examination, CEA and CA-125 was obtained. These returned with levels within normal limits.
- Given that our patient is a relatively healthy and very functional, we recommended he undergo colonoscopy to evaluate for potential satellite lesions.