

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

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## Background

Amyand hernia is a rare diagnosis making up approximately 0.5% of all hernias.

- Amyand hernia that is discovered due to acute appendicitis is even more rare, accounting for approximately 0.1% of cases.
- Appendiceal neoplasms in general are rare and encompass only 0.7–1.7% of appendectomy specimens.

## Patient Presentation

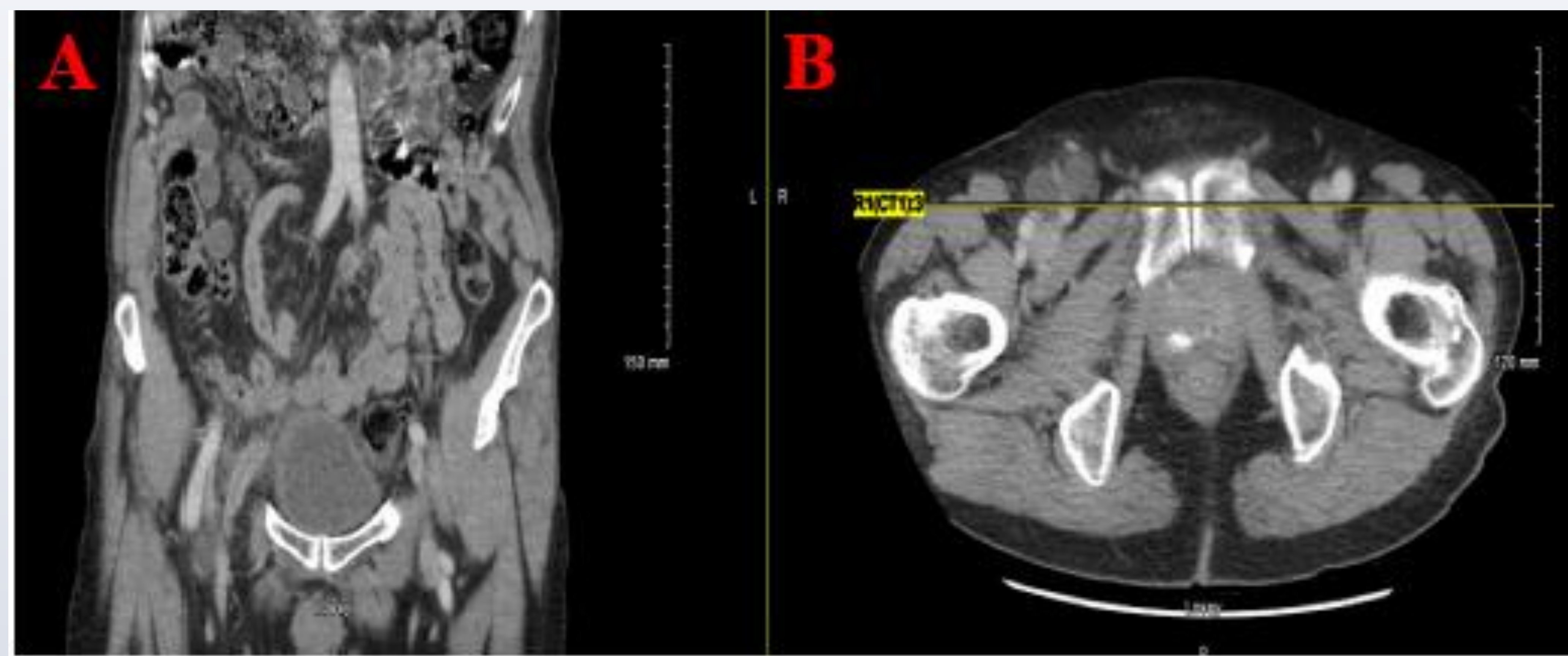
85-year-old male presented to the emergency department with three-month history of bilateral testicular pain which had acutely worsened to 10/10 pain

- 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

## Pre-Operative Course

- Labs were significant for WBC of 12.6 K/ $\mu$ 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.

## Data



**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

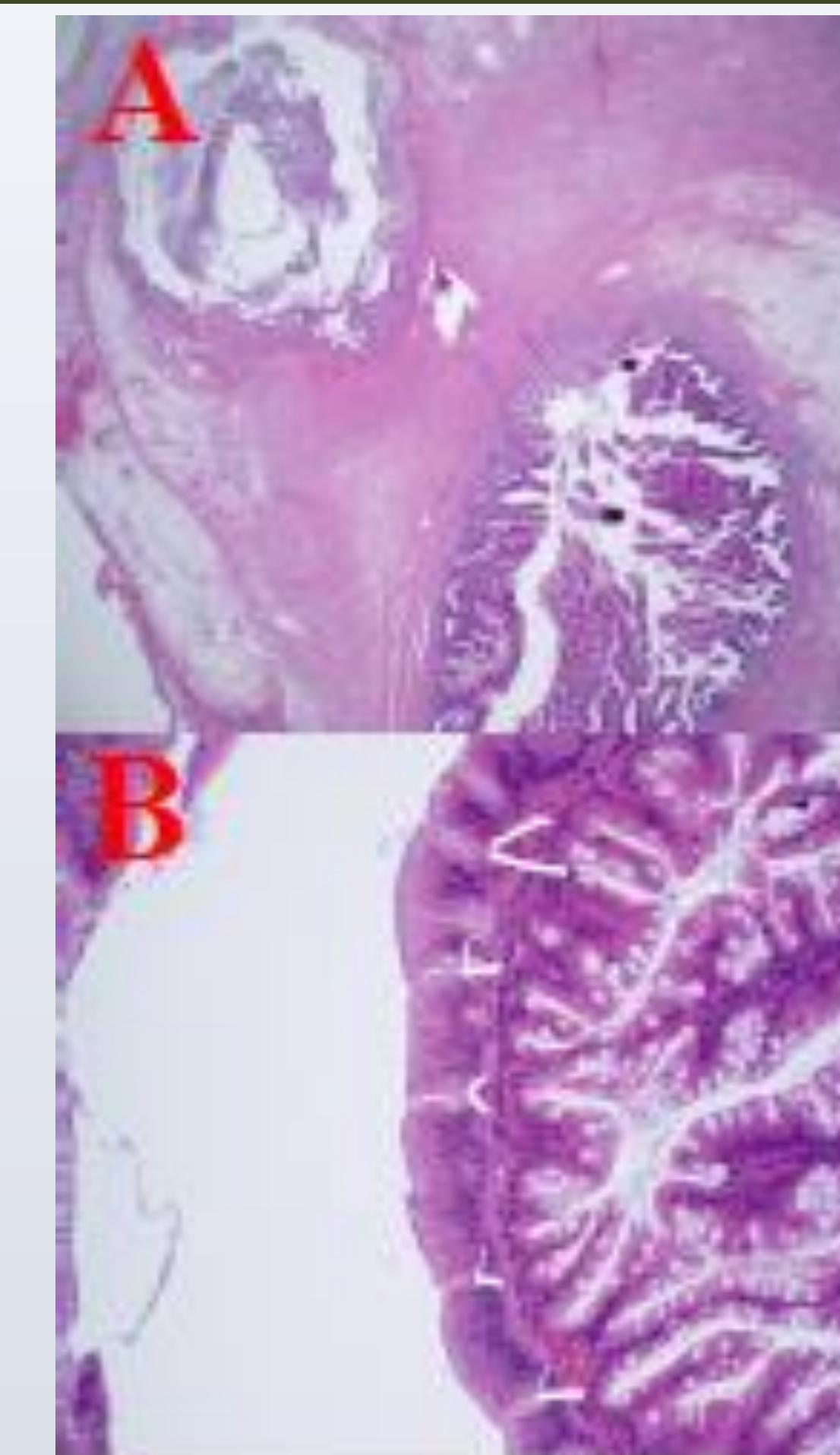
## References

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2. Koç, C., Akbulut, S., Akatli, A. N., Şamdanlı, E. T., Tuncer, 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 preoperatively on CT scan, which 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.