



Perforated Appendicitis in Amyand's Hernia Requiring Appendectomy and Ileocolotomy not Demonstrated on Preoperative Computed Tomography



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Introduction

Amyand's hernia, where the appendix resides in the hernia sac is rare. Appendicitis with or without complication may resemble symptomatic or incarcerated hernias.

Case Presentation

62 y/o Male with RLQ and groin pain with nausea and vomiting for 3 days.

PMH: Obesity, Diverticulitis, Hypertension, COPD, Schizophrenia and Hypothyroidism.

PSH: Sigmoidectomy.

Vitals: T 37.6 °C, HR 101, BP 124/82, RR 20.

Exam: RLQ tenderness with voluntary guarding, no rebound tenderness, or distension. Small non-reducible tender groin bulge.

Lab: WBC 18.8 K/uL

CT Abdomen:

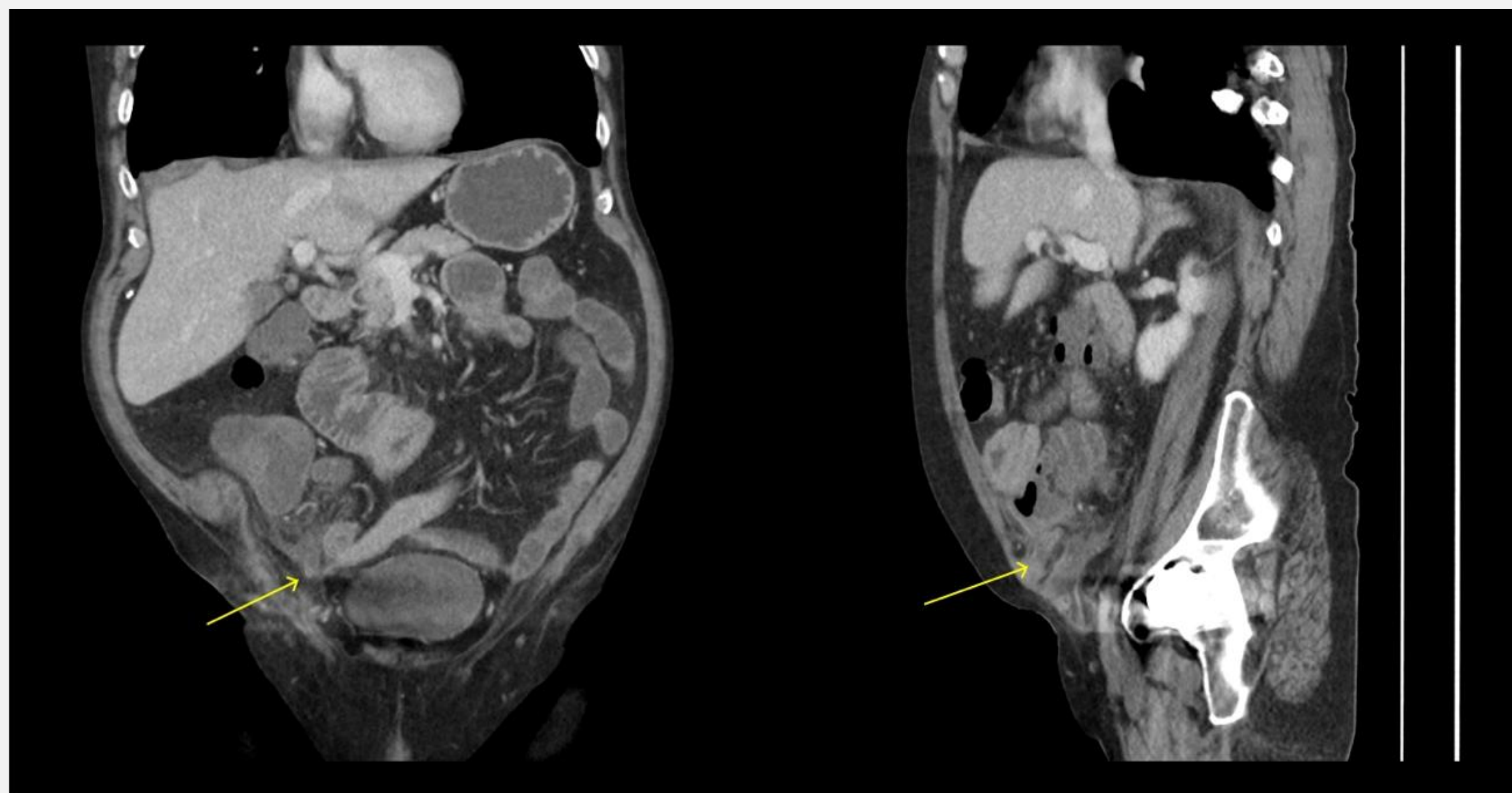


Figure 1: Inflammation and free fluid in the RLQ; without visualization of the appendix. Mild fluid distention of bowel suggestive of ileocolitis.

Management:

- Perforated appendicitis was not ruled out on CT scan.
- Diagnostic laparoscopy was performed and revealed appendicitis within the right inguinal hernia and ileocolitis.
- The appendix was reduced using a push-pull technique and noted to be perforated. Appendectomy and ileocolotomy were performed.

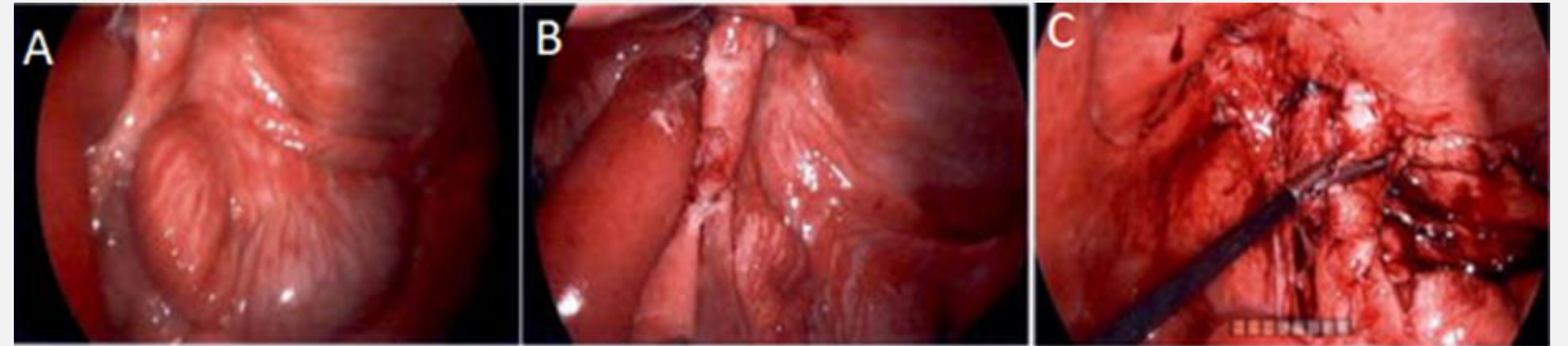


Figure 2: A and B: Appendix within indirect inguinal hernia. C: Perforated appendix within right inguinal defect.

Discussion

- Incidence of appendix within inguinal hernia: 1% of hernias.
- Incidence of appendicitis within inguinal hernia: 0.07-0.13%.
- Incidence of perforated appendicitis within inguinal hernia: 0.1% of appendicitis cases.
- Complications include but not limited to sepsis, retroperitoneal abscess, peri-appendicular abscess, spermatic and testicular ischemia required excision, hemorrhage, necrotizing fasciitis.
- Lower mortality rates associated with early diagnosis and intervention.
- Diagnostic laparoscopy saved this patient life.
- Patient underwent post-operative antibiotic treatment and routine wound care with no post-operative complications were seen.

Conclusion

- Amyand's hernias have a high mortality rate, 5.5%-30%.
- A high index of suspicion is crucial in early diagnosis and intervention especially in equivocal cases based on abdominal CT scan.
- Diagnostic and therapeutic laparoscopy is a cornerstone procedure and should be considered when in doubt.

References

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