

Amyand's Hernia and Complicated Appendicitis Presenting as an Abdominal Wall Abscess

Tae David Kim MD¹, Carolina Torres Perez-Iglesias MD³, Marin Marinov MD^{1,2}

1. UIC – Metropolitan Group Hospitals, Chicago, IL 2. Advocate Illinois Masonic Medical Center, Section of General Surgery, Chicago, IL 3. Beth Israel Deaconess Medical Center, Boston, MA

Introduction

Amyand's hernia is defined as an inguinal hernia containing a portion of the appendix. The incidence is roughly 1% with most cases being diagnosed in children. Uncomplicated appendicitis within the hernia sac is even more rare with a reported incidence of 0.1%. We describe a case of a 84-year old female with perforated appendicitis in an Amyand's hernia presenting as an abdominal wall abscess. The literature is limited as to the optimal approach for this type of scenario with most cases reporting management with drainage of the abscess, open appendectomy and open repair of the hernia.

Case Report

The patient is an 84-year-old female with a past medical history of hypertension and dementia who presented initially with a course of progressive right lower quadrant tenderness. Physical exam demonstrated right lower quadrant abdominal tenderness, overlying skin erythema and fluctuance to palpation. A CT of the abdomen and pelvis showed an incarcerated and perforated appendix coursing into the right inguinal canal with an adjacent 6.9 x 4.5 x 7 cm abdominal wall abscess. She was admitted to the hospital and started on IV antibiotics. Percutaneous drainage of the abscess was completed by interventional radiology obtaining purulent material that grew *E. coli* and *S. anginosus*. She was eventually discharged to rehab on an oral course of Amoxicillin-Clavulanate. Once her clinical status improved, she was taken to the operating room for an interval laparoscopic appendectomy.

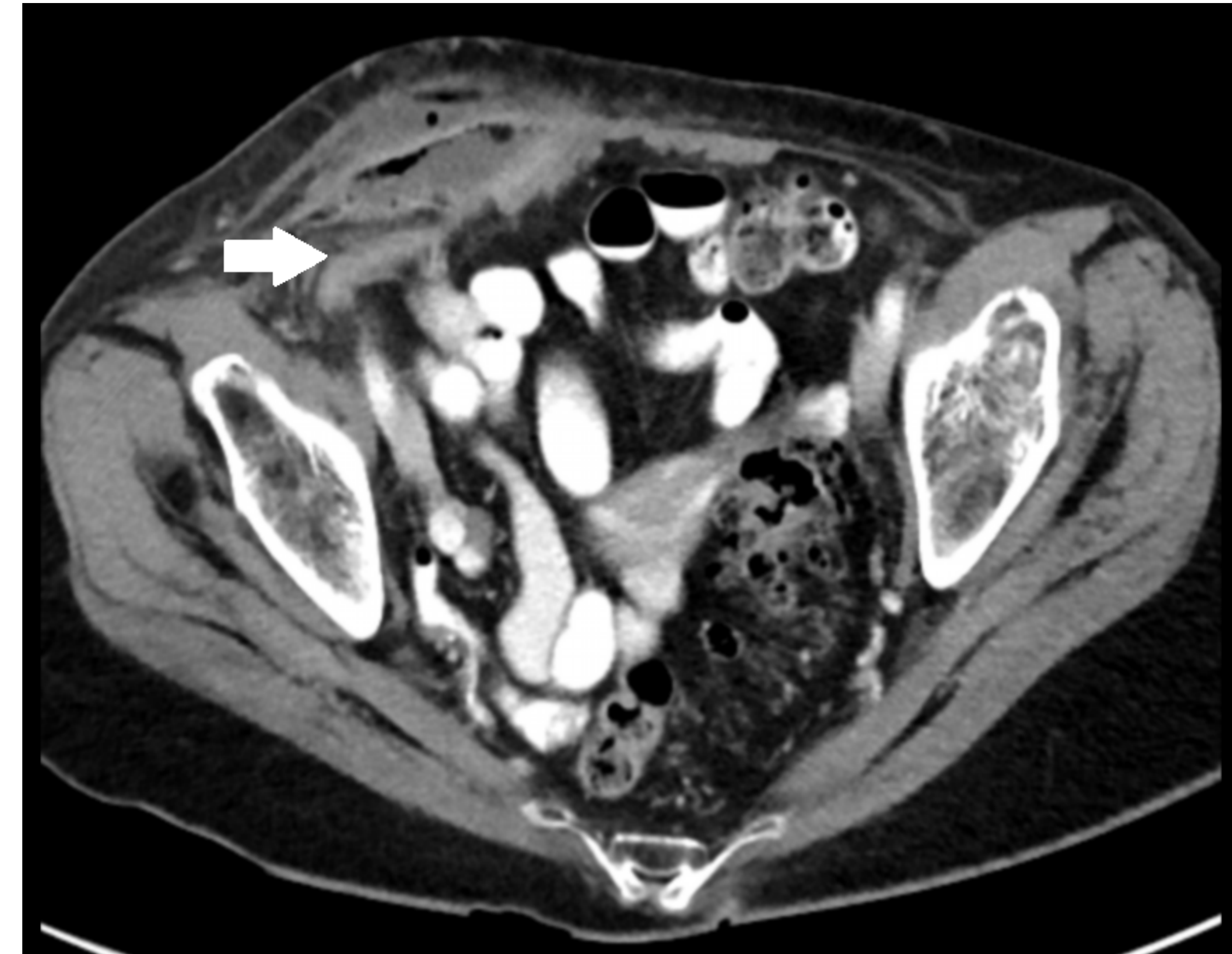


Figure 1 (top left): computed tomography showing an inflamed appendix with the tip inside a right inguinal hernia.

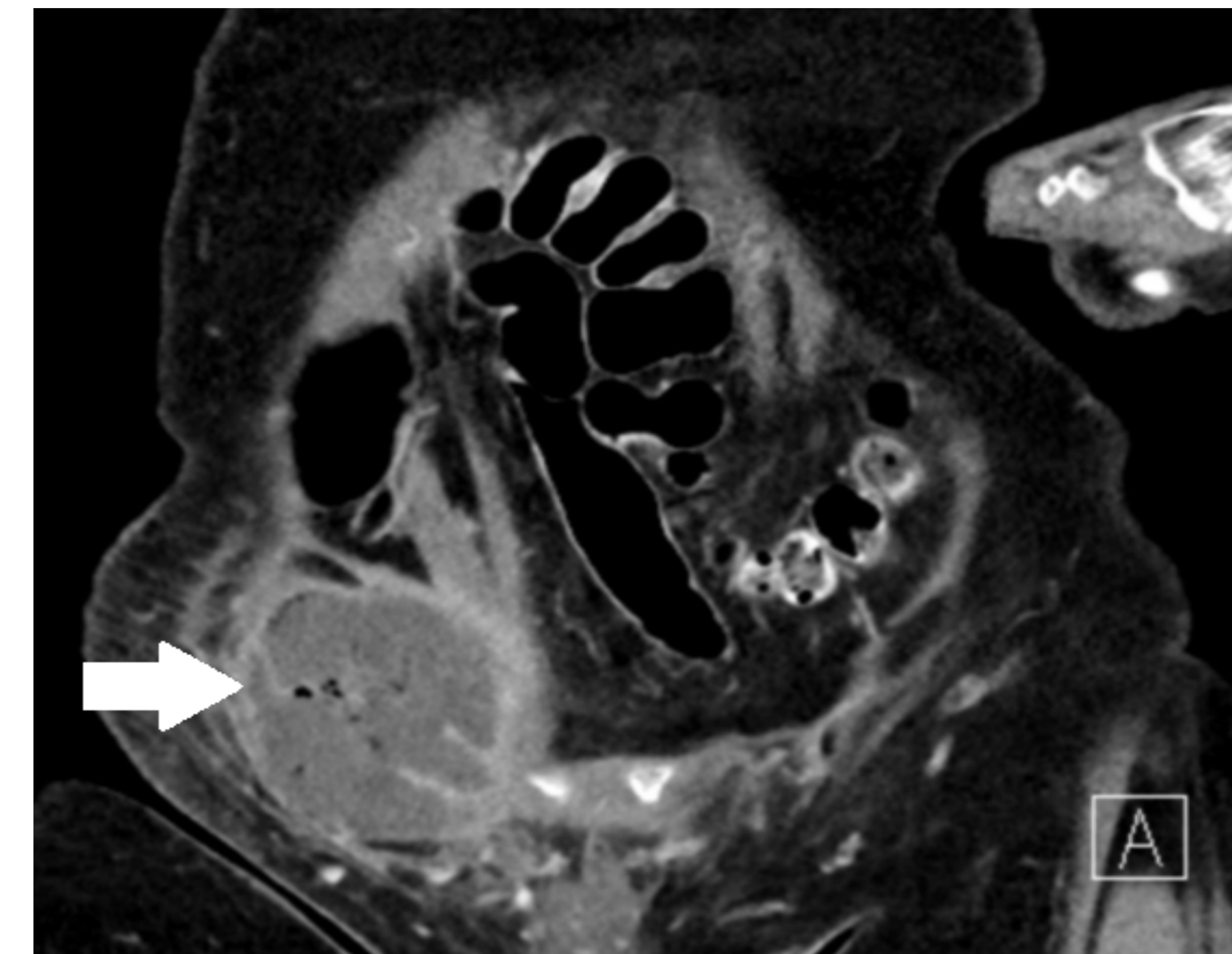


Figure 2 (top right): 6.9 x 4.5 x 7.0 cm abdominal wall abscess.

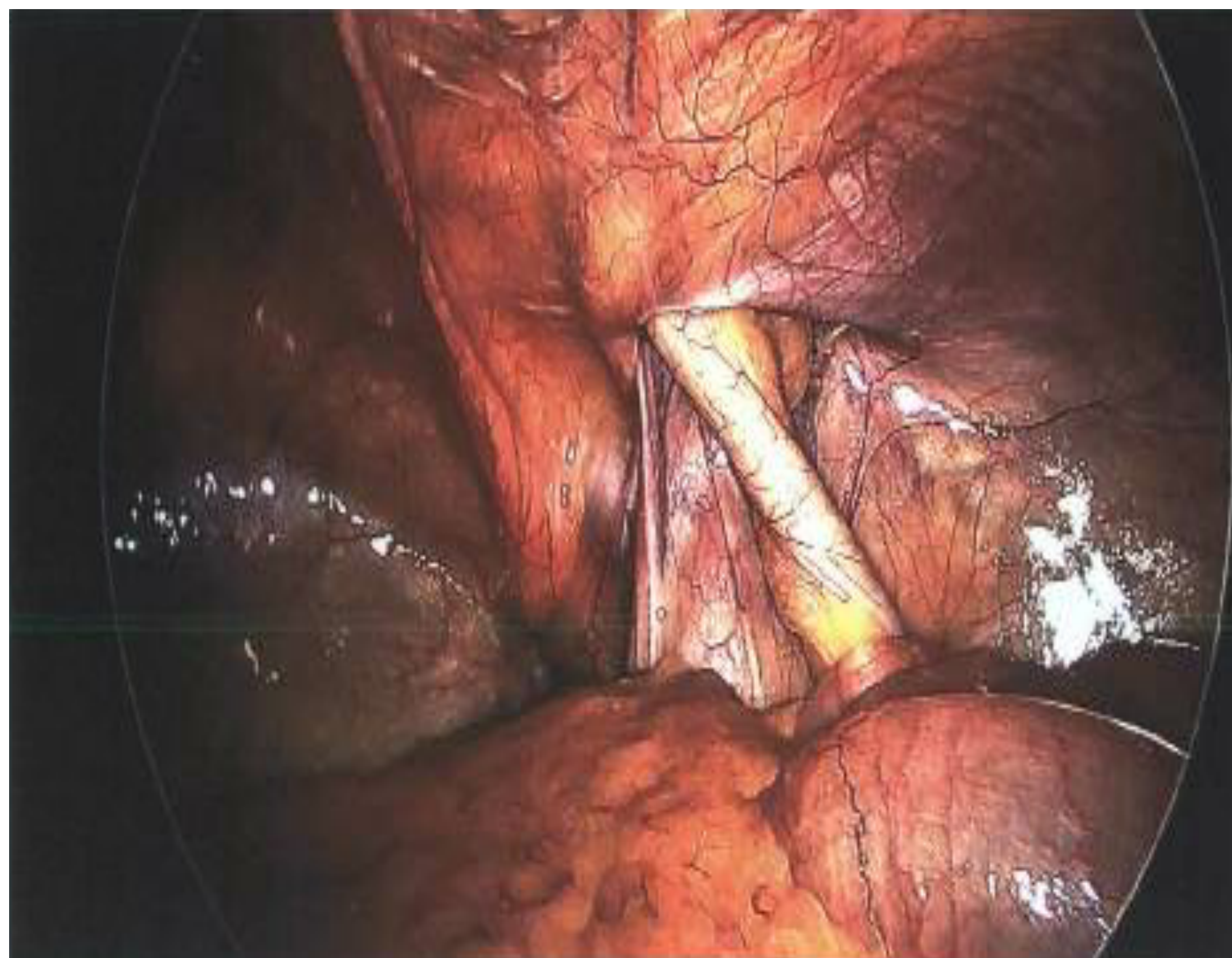


Figure 3 (bottom left): intraoperative image of incarcerated appendix within right inguinal hernia

Upon exploration of the abdomen, it was apparent that the appendix was incarcerated within the right inguinal hernia. Any surrounding adhesions were lysed and the appendix was successfully reduced laparoscopically. Once successfully reduced, a standard laparoscopic appendectomy was completed. The patient's post-operative course was uneventful and she was eventually discharged to a rehab facility. Subsequent follow up showed resolution of the abscess cavity with eventual plans for definitive repair of her hernia with mesh.

Conclusion

An inguinal/abdominal wall abscess is a unique presentation for complicated appendicitis within an Amyand's hernia. Although most reported cases describe an open approach, minimally invasive and laparoscopic techniques can safely be used in the management of similar clinical scenarios.