Amyand's hernia presenting as an unusual inguinal mass: a case report

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Abstract: Accounting for approximately 0.4–0.6% of all inguinal hernias, Amyand's hernia is a rare condition in which a vermiform appendix is found in an inguinal hernia sac. It is most commonly found in males and in the pediatric population. Since Claudius Amyand's first reported case in 1736, there have only been a total of 228 documented cases of the Amyand's hernia. Due to its rarity, the pathophysiology and risk factors of the condition are still unclear. Some theorize that it is secondary to a patent processus vaginalis or perhaps the presence of a fibrous band between the hernia sac and testes. Amyand's hernia usually presents as an incarcerated or strangulated hernia, but its presentation can be quite variable. We report an unusual case of an Amyand's hernia presenting as an enlarging painful mass on the right lateral edge of the mons pubis, resembling an abscess.

Keywords: Amyand's hernia; inguinal mass; hernia

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Introduction

Accounting for approximately 0.4–0.6% of all inguinal hernias, an Amyand's hernia is a rare condition in which a vermiform appendix is found in an inguinal hernia sac. It is most commonly found in males and in the pediatric population. Since Amyand's first reported case in 1736, there have only been a total of 228 documented cases of the Amyand's hernia. Due to its rarity, the pathophysiology and risk factors of the condition are still unclear. Some theorize that it is secondary to a patent processus vaginalis or perhaps the presence of a fibrous band between the hernia sac and testes. An Amyand's hernia usually presents as an incarcerated or strangulated hernia, but its presentation can be quite variable. We report an unusual case of an Amyand's hernia presenting as an enlarging painful mass on the right lateral edge of the mons pubis, resembling an abscess.

Case presentation

A 61-year-old Hispanic female presented to the emergency department complaining of a one-week history of an enlarging painful mass in the right groin. On physical exam, she was found to have a 2 cm × 3 cm non-fluctuant, non-erythematous mass in the right groin, which was fixed and mildly tender to palpation. All laboratory values were within normal limits. Ultrasonography revealed a complex cystic mass consistent with an epidermoid cyst (*Figure 1*). The patient was discharged home on cephalexin but returned to the emergency department 11 days later with complaints of increase in size of the mass to 7 cm × 3 cm. The patient was referred to general surgery for evaluation. After 10 weeks, the patient was taken to the operating room for excision of the right inguinal mass. Postoperatively, pathology results revealed colonic-type tissue. The patient was asked to return to the emergency department for evaluation. At this time, the surgical site was found to be erythematous and tender. CT scan of the abdomen and pelvis showed a right-sided inguinal hernia with a tip of the appendix likely extending into it (*Figure 2A,B*). The patient was subsequently taken to the operating room for laparoscopic

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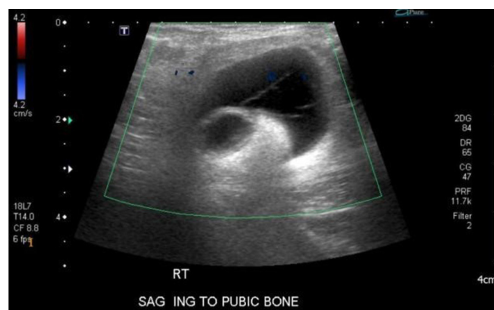

Figure 1 Ultrasound of the inguinal mass revealed a complex cystic mass consistent with an epidermoid cyst.

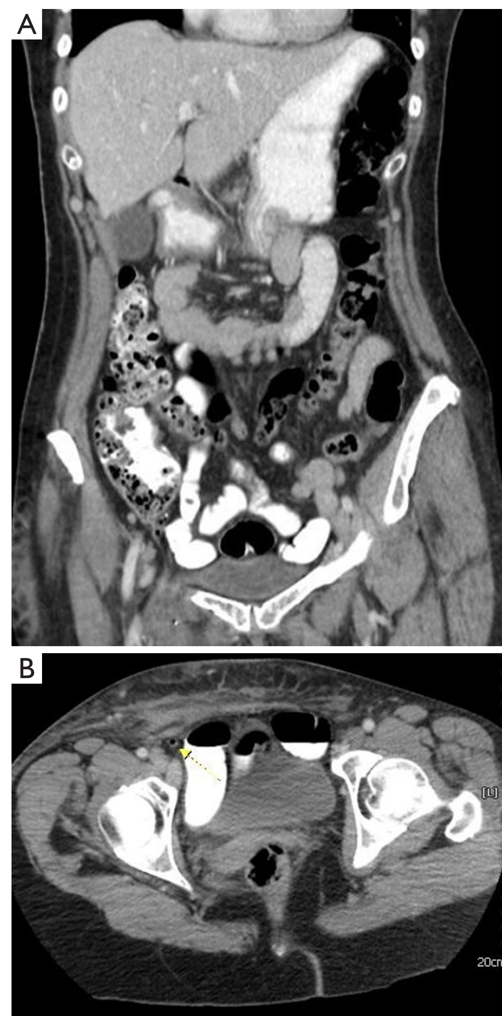

Figure 2 (A,B) CT scan of the abdomen/pelvis demonstrated a right-sided inguinal hernia with a tip of the appendix likely extending into it (yellow arrow).

reduction of the Amyand's hernia, appendectomy, and incision and drainage of the right groin wound infection (*Figure 3A-D*). The erythema and pain improved within days after the surgery. She was discharged from the hospital two days after the operation with instructions for follow-up and inguinal hernia repair once the wound infection clears.

Discussion

Although rare, the Amyand's hernia is worthy of discussion. Its variability in presentation makes it difficult to diagnose clinically. For this reason, most are identified intra-operatively. Misdiagnosis can often lead to further complications in these patients. The first case in 1736 presented with a right inguinal enterocutaneous fistula discharging fecal matter into the groin. Since then, the most common presentation is that of a painful scrotal inguinoscrotal mass, usually representative of an incarcerated or strangulated hernia (1). Of note, in addition to an enterocutaneous fistula and a painful mass, the condition has also been seen to present with a small bowel obstruction, scrotal abscess, epididymitis or even an acute scrotum (2-4). Amyand's hernia has also been described in cadavers, suggesting that it can be asymptomatic (5). It is theorized that the wide range of presentations is dependent on the status of the appendix as well as whether there is cecal involvement within the hernia. We present this case in an effort to demonstrate the diverse presentation of an Amyand's hernia in order to prevent morbidity and mortality in this patient population. We review the current published literature on Amyand's hernia and discuss recommended management.

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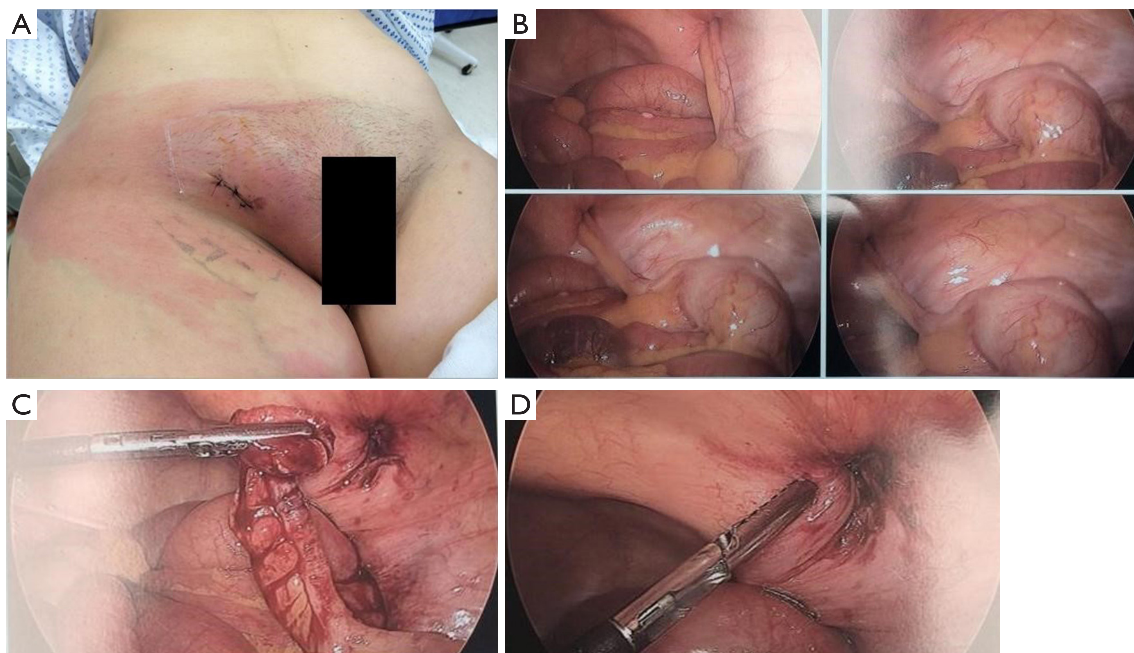

Figure 3 (A-D) Laparoscopic reduction of the Amyand's hernia, appendectomy, and incision and drainage of right groin wound infection.

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None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Informed Consent: Written informed consent was obtained from the patient for publication of this manuscript and any accompanying images.

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