

# Spontaneous rupture of left inguinal abscess as a manifestation of Amyand's hernia with acute appendicitis. A case report

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## Case Report

General Surgery



**Background:** Amyand's hernia is defined as the presence of the vermiform appendix within an inguinal hernia sac. It is a rare entity, with an incidence ranging from 0.2% to 2% of inguinal hernias, and even more uncommon when located on the left side. Left-sided cases are usually associated with mobile cecum, intestinal malrotation, or situs inversus, making diagnosis particularly challenging.

We report the case of a 62-year-old male presenting with a three-week history of left inguinal pain and spontaneous drainage of foul-smelling purulent material from the scrotal region. Physical examination revealed bilateral inguinal hernias, with inflammatory signs and fistulous drainage on the left side. Computed tomography demonstrated intra-abdominal collections extending to the left inguinal region, suggestive of acute appendicitis within a hernia sac.

Intraoperative findings confirmed a left-sided Amyand's hernia with phase II acute appendicitis. Appendectomy and hernia repair without mesh were performed due to contamination risk.

Given its rarity and atypical presentation, left-sided Amyand's hernia represents a diagnostic challenge and is often identified intraoperatively. Knowledge of its classification, particularly the Losanoff and Basson system, is essential to guide appropriate surgical management.

**Keywords:** Appendix, Amyand's hernia.

**I**nguinal hernias have a lifetime risk of 27% to 43% in men and 3% to 6% in women. The protrusion of the cecal appendix within the inguinal hernia sac is termed Amyand's hernia, named after Claudius Amyand, who is credited with performing the first documented appendectomy within an inguinal hernia sac. (2)

Amyand's hernia is more common in childhood, as inguinal hernias in this population are frequently associated with a persistent processus vaginalis. Amyand's hernia accounts for approximately 2% of appendectomies performed in pediatric patients. It is more frequently found on the right side; left-sided cases are usually associated with mobile cecum syndrome, although they may also occur in cases of situs inversus or intestinal malrotation. (3)

Left-sided Amyand's hernia has been described in association with intestinal malrotation, mobile cecum, or situs inversus. Although extremely rare, this presentation further complicates diagnosis.

Due to the rarity of this condition and the nonspecific clinical presentation, diagnosis is often made intraoperatively. Currently, controversy still exists regarding the optimal surgical management, particularly whether prophylactic appendectomy

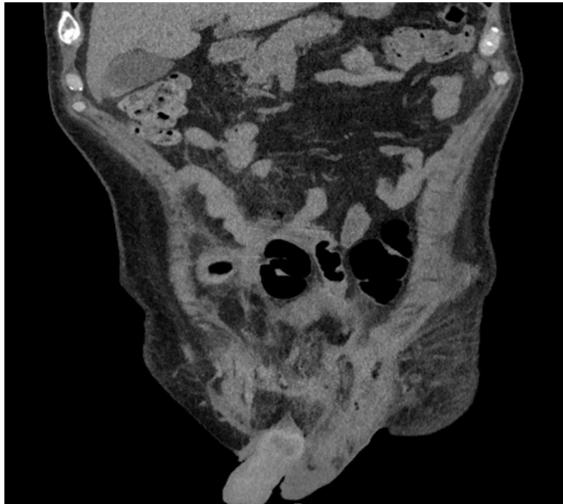
should be performed in cases of type I Amyand's hernia. (4)

## Case report

A 62-year-old male with no significant chronic-degenerative comorbidities and a history of severe chronic alcohol use since the age of 25, discontinued seven months prior to presentation, was admitted to Hospital General Regional 58 with a three-week history of left inguinal pain. The pain was localized and rated 4/10 in intensity, subsequently associated with spontaneous drainage of foul-smelling sanguinopurulent material from the scrotal region. No additional accompanying symptoms were reported.

On physical examination, the right inguinal region revealed a 2 cm reducible inguinal hernia without signs of complication. Examination of the left inguinal region demonstrated an approximately 2 cm reducible hernia with mild tenderness on palpation. The left scrotal region showed increased volume and a fistulous opening with active drainage of foul-smelling purulent material.

Contrast-enhanced computed tomography (CT) was performed as part of the diagnostic workup. Imaging revealed multiple intra-abdominal collections within the pelvic cavity, extending toward the left



**Figure 1.** Coronal CT scan showing air densities in the left inguinal region with intra-abdominal abscess extension.



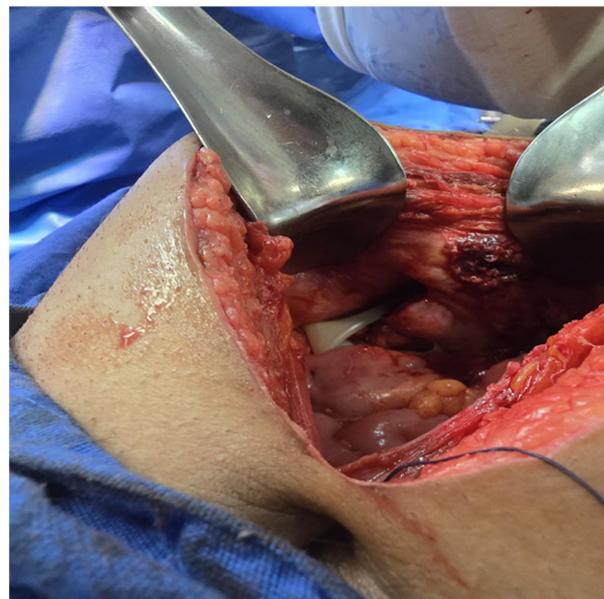
**Figure 2.** Axial CT scan showing left inguino-scrotal abscess.



**Figure 3.** Spontaneous drainage site of left inguinal abscess.



**Figure 4.** Intraoperative image showing inflamed appendix within left inguinal hernia sac (phase II appendicitis).



**Figure 5.** Left internal inguinal ring with inflammatory changes and protruding appendix.

inguinal region, where a 22 cc collection with a tract extending to the cutaneous plane was identified. Associated findings were suggestive of acute appendicitis. A right inguinal hernia was also noted, without evidence of complication at the time of imaging.

### Discussion

Amyand's hernia is rare, particularly on the left side. The Losanoff and Basson classification divides management into four types depending on the inflammatory status of the appendix and presence of sepsis.

- Type I: normal appendix, mesh repair recommended without appendectomy.
- Type II: acute appendicitis without sepsis, appendectomy and primary repair without mesh.
- Type III: appendicitis with sepsis, laparotomy, appendectomy, and hernia repair without mesh.
- Type IV: appendicitis with additional pathology, managed as type III plus treatment of associated disease.

Our patient corresponded to Type II.

### Conclusion

Left-sided Amyand's hernia is an uncommon condition and may present with atypical manifestations such as spontaneous abscess drainage. Surgeons must be familiar with its classification and treatment strategies to ensure appropriate management.

### Conflicts of interests

The authors declare that there are no financial, personal, or institutional conflicts of interest that could have influenced the work reported in this manuscript.

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