

## Amyand's Hernia: A Case Report

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### Abstract

### Case Report

Amyand's hernia refers to the presence of the vermiform appendix within the inguinal hernia sac, whether inflamed or not. We report a rare case involving a 72-year-old man presenting with a painful right inguinal hernia evolving over several days, for which surgical intervention was indicated. An inguinal approach allowed for both appendectomy and hernia repair, the latter being performed without the use of prosthetic mesh due to the potential infectious risk in such an unusual situation. This case highlights the importance of accurate intraoperative diagnosis and an appropriate surgical strategy when managing this rare entity.

**Keywords:** Amyand's hernia; Appendicitis; Inguinal hernia; Surgery; Appendectomy.

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## INTRODUCTION

Inguinal hernia is a common reason for consultation in surgical practice. Depending on the digestive content within the hernia sac, three types of hernias have been described: *Littre's hernia* (containing a Meckel's diverticulum), *Richter's hernia* (involving the antimesenteric portion of the small intestine), and *Amyand's hernia*, in which the hernia sac contains an inflamed appendix [1]. Preoperative diagnosis is often challenging. Surgical management typically involves classical hernia repair without the use of prosthetic material. We report a case of Amyand's hernia to highlight the specific features of its therapeutic management.

## CASE REPORT

A 72-year-old man presented with a progressively painful right inguinal hernia, associated with evening fevers over the past few days. Clinical examination revealed a painful right inguinal swelling (Figure 1), not fully reducible, and associated with digestive symptoms such as a coated tongue and nausea.

Abdominal ultrasound confirmed the presence of an inguinal hernia with digestive content. Blood tests showed leukocytosis at 13 G/L and a significantly elevated C-reactive protein (CRP).

A standard right oblique inguinal incision was performed for hernia repair. After careful dissection, a hernia sac containing digestive structures was identified (Figure 2).



Fig-1

The surgical procedure included an appendectomy, reintegration of the herniated cecum, and parietal reconstruction using the Bassini technique. Postoperative recovery was uneventful, with the return of bowel function after 24 hours. The patient received antibiotics for seven days. Histopathological examination of the appendectomy specimen confirmed acute appendicitis.



Fig-2

## DISCUSSION

Amyand's hernia (AH) is characterized by the presence of the vermiform appendix within an inguinal hernia sac, whether inflamed or not. It was first described in 1735 at St. George's Hospital in London by Claudius Amyand in an 11-year-old boy admitted for a right inguinal hernia complicated by a scrotal fecal fistula [2].

Right-sided inguinal and femoral hernias are the most common sites for Amyand's hernia, although it has also been reported on the left side [3]. Among all appendicitis cases, the occurrence within a hernia sac is estimated at 0.13% [4].

A non-reducible inguinal hernia without clear signs of bowel obstruction may suggest an Amyand's hernia. The presence of systemic inflammatory signs often points to acute appendicitis. Inguinal ultrasound usually indicates a hernia with digestive content, while contrast-enhanced CT scanning may occasionally help diagnose intra-hernial acute appendicitis.

In most cases, the diagnosis is made intraoperatively, upon discovering an appendix—often incarcerated within the hernia sac. Amyand's hernias have been classified by Fernando and Ceulemans into three types [5,6]:

- **Type A:** normal appendix with no signs of inflammation,
- **Type B:** inflamed but non-perforated appendix,
- **Type C:** perforated appendix within the hernia sac.

In cases of acute appendicitis, inguinal appendectomy is usually sufficient, avoiding the need for any additional surgical approach.

## CONCLUSION

A non-reducible incarcerated hernia is a surgical emergency. The presence of an appendix within the hernia sac requires immediate appendectomy to prevent complications related to appendicitis. Hernia repair through the same surgical approach, without the use of prosthetic material, is the standard management for all cases of Amyand's hernia.

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