

## Case Report

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## Incarcerated Left Amyand's Hernia in a Child of 2 Years Old: Unusual Presentation

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### Abstract

An inguinal hernia who's sac contains an acute appendicitis is defined as "Amyand's hernia". Left Amyand's hernia is a rare form of inguinal hernia especially in children. The presentation is commonly as an incarcerated inguinal hernia and is usually found intra-operatively. We report a case of an incarcerated left Amyand's hernia in a 2 years old patient. We performed a trans hernia appendectomy and the treatment of hernia.

**Keywords:** Amyand's hernia; Appendix; Left sided; Mobile caecum

### Clinical Image

A 2 years old male patient presented to the Emergency Unit with inguino-scrotal pain, nausea, vomiting, abdominal distension, and no bowel transit since 8 hours. The medical history reveals an inguino-scrotal mass present since birth with multiples episode of incarceration and spontaneous resolution. The abdominal auscultation revealed the presence of borborygmus. On physical examination, the abdomen was distended with no rebound or guarding. In the left inguinal area the patient presented a mass with scrotal extension, painful, non-impulsive to coughing and non-reducible. The rectal ampulla was empty on the digital rectal examination.

The diagnosis was a left strangulated inguino-scrotal hernia. We performed a surgical exploration by laparotomy in emergency who found a very mobile and dilated caecum with a non-inflammatory appendix of 8 cm in the hernia's sac. A trans-hernial appendectomy was performed followed by herniotomy with high

ligation of the sac. The postoperative course was uneventful. The patient was discharged at the 3th postoperative day. The follow up was of 3 months without complications.



**Figure 1:** Left Amyand's Hernia.



**Figure 2:** Trans-hernial appendicectomy.

## Discussion

An inguinal hernia who's sac contains an acute appendicitis is defined as "Amyand's hernia", in homage to Claudius Amyand, an English surgeon of the 18<sup>th</sup> century, who was the first to describe a case of acute appendicitis in a hernia sac in a 11 years old patient [1]. The incidence of Amyand's hernia is between and 0.6%, which is lower than the classical incidence of 1% which was based on older research [2,3]. Papaconstantinou D et al. in a review of literature on 162 patients, found a total of 149 cases on right-sided while 12 cases were left-sided and all were male patients and all the diagnosis were made per operatively [4]. A left sided Amyand's hernia occurs as a result of situs inversus, malrotation of the intestine or a very large mobile caecum or appendix. In our case, the patient presented a large and mobile caecum with a long appendix, but no intestinal malrotation [5,6]. The clinical image of Amyand's hernia present itself like an incarcerated hernia, and it is difficult to diagnose clinically. It is commonly an indirect hernia as for our patient, although direct Amyand's hernias have been also described. The hernia sac can contain the appendix but also the cecum or the right colon [7-9].

There are 4 types of this condition and their treatment: the absence of inflammatory changes in type 1 approximates elective hernioplasty, type 2 Amyand's hernias are those in which the septic changes are confined to the hernia, type 3 represents a scenario where the sepsis has spread beyond the hernia sac and requires more extensive surgery, type 4 of Amyand's hernia includes all cases where a serious, complicating pathology exists outside of the hernia sac [10-13]. Most authors believe that if the appendix is incidentally found and shows no signs of inflammation, prophylactic appendectomy is not necessary, whereas others

choose to perform the appendectomy for all the Patients [14-16]. In our case we performed an appendicectomy, and the hernia treatment with high ligation of the hernia sac and suture of the different parietal plans after isolation of the spermatic cord and its elements. Johari, et al. suggest routine appendicectomy for left side hernias regardless of the condition of the appendix, as future appendicitis may cause a diagnostic dilemma due to the unusual position of the appendix [17].

## Conclusion

Left Amyand's hernia is a rare condition in inguino-scrotal hernias. The diagnostic is usually per operative. In our case the diagnosis was made intra-operatively and managed by a trans-hernia appendicectomy with the cure of the hernia by a simple reduction, high ligation and of the hernia sac.

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