

Acute Appendicitis on Claudius Amyand's Hernia in a 05-year-old Child: A Case Report

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Abstract

Case Report

Claudius Amyand's hernia is defined by the incarceration of the vermicular appendix through the hernial sac. The first appendectomy was performed in 1735. It is a very rare condition in children. As a result, the frequency of this condition has not yet been established. We report the case of a 05-year-old child with an inguinal hernia admitted to the emergency department for the management of a painful and inflammatory inguinal-scrotal swelling that had been evolving for less than 6 hours. Management consisted of a conditioning and pre-anaesthetic assessment. Intraoperative exploration revealed a catarrhal appendix in the distal portion, and the surgical procedure consisted of appendectomy with reintegration of the herniated colon and closure of the hernia sac. The postoperative course was straightforward and the clinical outcome was satisfactory after 03 months.

Keywords: Amyand's hernia, Intra hernial appendicitis, Child.

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INTRODUCTION

Claudius Amyand's hernia is characterised by the presence of the vermicular appendix in the inguinal hernia. It was described for the 1st time by Claudius Amyand in 1735 in an 11-year-old child who was admitted for a right inguinal hernia complicated by a right scrotal stercoral fistula.

PATIENT AND OBSERVATION

This 05-year-old male child with a known inguinal hernia was admitted to the emergency department for the management of a painful and inflammatory inguinal and scrotal swelling that had been present for less than 6 hours. On admission, the child was conscious and haemodynamically and respiratorily stable.

Abdominal examination revealed a soft abdomen with a painful and inflamed right inguinoscrotal swelling. The transillumination test was negative on the right. The left testicle was in place.

The preoperative blood test showed haemoglobin = 12g/dl, white blood cell count 7 ele/mm³, ionogram and renal function were correct.

The child was admitted to the operating theatre, positioned supine. An incision was made in the right lower abdominal fold and the hernia sac was dissected. On opening, the distal portion of the appendix with a catarrhal appearance was revealed.

Surgery consisted of appendectomy with reintegration of the herniated colon and closure of the hernia sac. Post-operative follow-up was straightforward. The clinical evolution was satisfactory after 03 months.

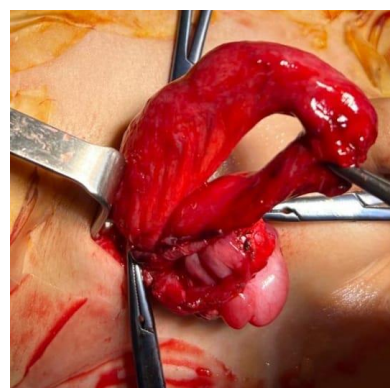


Figure 1: Intraoperative appearance of intrahernial appendicitis

DISCUSSION

Claudius Amyand's hernia is a very rare entity in children.

Right inguinal and femoral hernias are the most common sites for the development of an Amyand hernia, but this entity has also been described on the left side [1].

Among incarcerated hernias containing viscera, the presence of the appendix is estimated at 1% [2, 3].

The development of acute appendicitis within a hernial sac (Amyand's hernia) is estimated to be 0.13% of all appendicitis [2].

The clinical presentation is most often that of a strangulated hernia, i.e. the development of a non-reducible inguinal tuck, but without digestive obstruction. An inflammatory syndrome may appear depending on the course of the acute appendicitis [4-7].

Biological and radiological tests are carried out to assess the hydro-electrolytic impact and to look for any complications.

Prompt, appropriate management is essential, and surgery should be performed as soon as possible after the child has been properly prepared.

A positive diagnosis is most often made intraoperatively when a vermicular appendix is found within the hernia sac, whether inflamed or not. Delay or failure to treat can be fatal.

The operation consists of appendectomy, resection, and closure of the hernia sac [8-11].

A non-reducible incarcerated hernia is a surgical emergency and must be operated on as soon as possible. In the event of an unavoidable delay, an attempt to reduce the hernia sac must be a carefully considered procedure. Indeed, it is possible to reduce the hernia en bloc with its hernia ring, allowing intestinal suffering to continue intra-abdominally, with the risk of perforation and peritonitis. Any attempt to do this should be carried out by an experienced surgeon, with the possibility of close clinical monitoring and, if necessary, emergency surgery.

CONCLUSION

The emergence of the appendix through the hernia sac defines Claudius Amyand's hernia. This condition is still very rare in children, and the diagnosis is most often made in the setting of a strangulated hernia.

Management involves surgical treatment as far as possible. The procedure consists of an appendectomy with closure of the hernia sac via the inguinal route.

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