

# Série de Cas

# **Amyand Hernia: A Report of Five Cases**

Hernie d'Amyand: à propos de cinq cas

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# RÉSUMÉ

Amyand's hernia is defined as the incarceration of the vermicular appendage through the hernial sac. It's an uncommon pathology. The clinical presentation shows an irreducible inguino scrotal hernia. Management consists of an appendectomy, supplemented by parietoraphia in adults and closure of the peritoneovaginal canal in children. We report the first five cases of this disease in Gabon.

# ABSTRACT

La hernie de Claudius Amyand est une incarcération de l'appendice dans un sac herniaire en général inguinal. Cette pathologie rare se présente en règle comme une volumineuse hernie inguinoscrotale irréductible. Le traitement consiste en une appendicectomie associée à une hernioraphie chez l'adulte et à une fermeture du canal péritonéovaginal chez l'enfant. Nous reportons les cinq premiers au Gabon de cette pathologie

# **INTRODUCTION**

Amyand hernia is defined as the presence of the vermicular appendix in the inguinal hernia, whether the appendix is inflammatory or not. It was first described by Claudius Amyand in 1735 at St. George's Hospital in London in an 11-year-old child. We report five cases including two cases in children by persistence of the peritoneovaginal canal and three cases in adults by external oblique inguinal hernia. The treatment was an appendectomy, followed by closure of the inguinal canal.

# PATIENTS

#### Case 1

The patient was a 12-month-old infant who was admitted with right-sided inguinoscrotal pain that had been evolving for 3 days, with no significant past medical history. His weight was 15 kg. Physical examination showed a good general state, fever 38.5°C and an irreducible painful right inguino scrotal swelling. The scrotum was warm and shiny. Clinical diagnosis was strangulated right inguinal hernia due to persistence of the right peritoneal-vaginal canal. The biological results

Health Sci. Dis: Vol 23 (2) February 2022 pp 161-163 Available free at <u>www.hsd-fmsb.org</u> showed hyperleukocytosis (11000 white blood cells) and microcytic anemia. Chest X-ray was normal. A 10 cm phlegmonous appendicitis was found in the hernial sac, after right inguinal incision. A classical appendectomy was performed, with closure of the peritoneovaginal canal.



Figure 1: Right inguinoscrotal swelling



# Case 2

This was 53 years old patient who was admitted for right inguinal pain, vomiting for 2 days, with no significant past medical history. His weight was 62 kg, Physical examination showed asthenia, fever (38.5°c), irreducible painful right inguinoscrotal swelling. The clinical diagnosis was strangulated right inguinal hernia. Biological and radiological assessments were normal. Cecum and 12 cm long catarrhal appendix were found in the hernial sac. We did a classic appendectomy and a hernia cure according to Schouldice. The postoperative course was uneventful.



Figure 2: appendix and cecum

# Case 3

This 3-year-old patient was admitted for right inguinal pain, vomiting, cessation of stool and gas production, evolving for 2 days and fever (39°C). Clinical examination revealed lethargy and irreducible right inguinoscrotal swelling. Blood count showed neutrophilic hyperleukocytosis. The CRP titer was high. The surgical finding was a perforated phlegmonous appendicitis with fecal impaction. An appendectomy was performed, followed by parietoraphy after closure of the right peritoneovaginal canal. The postoperative course was uneventful.



Figure 3: Inguinal appendage

#### Case 4

This was a 40-year-old patient who was admitted with right scrotal inguinal pain, nausea and vomiting for 3 days, with a history of chronic alcohol and tobacco use. His weight was 72 kg Clinical examination showed poor general state with no fever, sweating and irreducible painful right inguinoscrotal swelling. The clinical diagnosis was a strangulated right inguinal hernia. Both biological and radiological assessments were normal. Dissection was difficult. Cecum and an 18 cm long inflammatory appendix were found in the hernia sac. A classical appendectomy was performed and a hernia cure according to Schouldice. Postoperative course was marked by scrotal haematoma.



Figure 4 : inguinoscrotal swelling



Figure 5 : appendectomy



# Case 5

This was a 33-year-old patient who was admitted with painful right inguinal swelling with no significant past medical history. His weight was 57 kg. Clinical examination showed a good general state with no fever, irreducible painful right inguinoscrotal swelling. The clinical diagnosis was a strangulated right inguinal hernia. Biological and radiological assessments were normal. A cecum and a 15 cm long catarrhal appendix were found in the hernial sac after inguinal incision. We did a classic appendectomy and a hernia cure according to Schouldice. The postoperative course was uneventful



Figure 6 : Appendix and cecum

# DISCUSSION

Claudius AMYAND hernia is a very rare pathology. It is most often the result of a strangulated hernia with or without febrile occlusive syndrome (1-3). The biological and radiological check-ups allow evaluation of the impact and investigation of complications. Medical and surgical management is necessary to avoid complications. The diagnosis is made during surgical procedure by identification of a vermicular appendix in the hernia sac, whether inflammatory or not. Appendectomy is the rule associated with the cure of the hernia (4-7). Out of a Turkish series in 2009 of 1090 children with inguinal hernia, 12 had a Claudius AMYAND hernia. They were boys and the mean age was 40 days (range: one day - 14 months)(8, 9). In this series of 12 Amyand hernias, the appendix was normal in two cases and inflammatory in ten cases.

# CONCLUSION

Amyand hernia is a rare disease. It presents as a strangulated hernia. The final diagnosis is operative and the treatment is surgical by an appendectomy, followed by resection and closure of the hernial sac.

# REFERENCES

 Sengul I, Sengul D, Aribas D. An elective detection of an Amyand's hernia with an adhesive caecum to the sac: report of a rare case. N Am J Med Sci. 2011; 3(8): 391393.
Ghafouri A, Anbara T, Foroutankia R. A rare case report of appendix and cecum in the sac of left inguinal hernia (left Amyand's hernia). Med J Islam Repub Iran. 2012; 26(2): 9495.

3. Quartey B, Uguchukwu O, Kuehn R, Ospina K. Incarcerated recurrent Amyand's hernia. J Emerg Trauma Shock. 2012; 5(4): 344-346.

4. Losanoff JE, Basson MD. Amyand hernia: a classification to improve management. Hernia. 2008; 12(3): 325326.

5. Torino G, Campisi C, Testa A, Baldassarre E, Valenti G. Prosthetic repair of a perforated Amyand's hernia: hazardous or feasible. Hernia. 2007; 11(6): 551-552.

6. Ryan WJ. Hernia of the vermiform appendix. Ann Surg. 1937; 106: 135-139.

7. Carey LC. Acute appendicitis occurring in hernias: a report of 10 cases. Surgery. 1967; 61(2): 236-238.

8. D'Alia C, Lo Schiavo MG, Tonante A, Taranto F, Gagliano E, Bonanno L et al. Amyand's hernia: case report and review of literature. Hernia. 2003; 7(2): 89-91. PubMed | Google Scholar

9. Luchs JS, Halpern D, Kats DS. Amyand's hernia: Prospective CT diagnosis. J Comput Assist Tomogr. 2000; 24(6): 884886. PubMed | Google Scholar

