

AMYAND'S INGUINOSCROTAL TYPE 2 HERNIA WITH ACUTE APPENDICITIS: A CASE REPORT

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Abstract: Amyand's hernia was first described by Claudius Amyand, in 1786. It is defined as the presence of the ileocecal appendix, inflamed or not, inside an inguinal hernia. The incidence of this pathology associated with acute appendicitis is rare and ranges from 0.13 to 0.07% among inguinal hernias. This report describes the case of a patient who was admitted to the emergency room with a picture suggestive of acute scrotum, with complaints of severe pain in the inguinal region, associated with difficulty in mobilizing the ipsilateral lower limb, volumetric increase in the right testicle. After performing an imaging exam, which indicated the presence of the ileocecal appendix inside the hernial sac in the inguino-scrotal region, a rare condition called Amyand's Hernia was diagnosed. The patient underwent infraumbilical median laparotomy, and it was possible to identify the inguino-scrotal hernia and the inflammation of the vermiform appendix. Appendectomy was performed, followed by closure of the hernia sac. Lower midline laparotomy is the choice for diagnosis and treatment, but imaging tests can help identify the presence of such pathology. Physical examination is also an important ally, but has limitations, since the presentation of appendicitis is atypical, as there may be no presence of painful sensitivity at McBurney's point and the abdomen may be free of alterations associated with peritoneal irritation. In general, the main finding is the presence of irreducible bulging in the inguinal or testicular region. The objective of this report is to present a case report of Amyand's Hernia, associated with acute appendicitis and to demonstrate the importance of early diagnosis and adequate treatment of this condition, in order to avoid serious complications in the patient's life, such as peritonitis, acute abdomen and sepsis.

Keywords: Amyand's hernia; Acute Appendicitis; Inguino-scrotal hernia;

INTRODUCTION

This report describes the case of a patient who was admitted to the emergency room with a picture suggestive of acute scrotum, with complaints of severe pain in the inguinal region, associated with difficulty in mobilizing the ipsilateral lower limb and increased volume of the right testicle. After performing an imaging exam, which indicated the presence of the ileocecal appendix inside the hernial sac, a rare condition was diagnosed, called Amyand's Hernia. The patient underwent infraumbilical median laparotomy, and it was possible to identify the inguino-scrotal hernia and the inflammation of the vermiform appendix. Appendectomy was performed, followed by closure of the hernia sac.

Hernia is defined as the protrusion of an intra-abdominal content due to abnormalities present in the abdominal walls, in places where the aponeurosis and fascia are not covered by striated muscle. The most common type is the inguinal hernia, mainly on the right side. There is a prevalence among males and the indirect type is the most predominant.

In 1786, Claudius Amyand first described a case of acute appendicitis inside an inguinal hernia sac, a condition that received the eponym of "Amyand's Hernia". Conditions in which the appendix is not inflamed may also receive the aforementioned nomenclature. The incidence of inguinal hernia associated with acute appendicitis varies from 0.13 to 0.07%, being an extremely rare condition.

Most diagnoses are made intraoperatively. On physical examination, the patient may present irreducible bulging of the inguinal region, suggestive of an acute scrotum, cellulitis or abscess in the inguinal region. Appendicitis has an atypical presentation, as there is no painful sensitivity at McBurney's point. Despite the diagnosis of inguinal hernia and appendicitis being clinical, imaging

tests can help. Lower midline laparotomy is an important diagnostic method and the advocated therapy for the treatment of this pathology.

CASE REPORT

Male patient, 81 years old, retired, with heart disease undergoing treatment, was admitted to the emergency room at ``Hospital Geral de Guarus``, in Campos dos Goytacazes - RJ, reporting severe pain in the right inguinal region for 12 hours, associated with difficulty in mobilizing the right lower limb and testicular pain. He denied thoracoabdominal trauma, lumbar trauma, fever or vomiting. He referred preserved physiological functions and without alterations. On physical examination, the patient was in good general condition and hemodynamically stable, with a flaccid, depressible and painless abdomen on superficial and deep palpation. Negative Blumberg sign. The right inguinal region was painful on palpation and without bulging, even during the Valsalva maneuver, right

scrotum with increased volume, suggesting inguinoscrotal hernia with irreducible content and painful on palpation.

Complementary exams showed leukocytosis above 19,000 and Computed Tomography (CT) of the abdomen, performed without the use of venous and/or oral contrast, showed an inguino-scrotal hernia on the right, with a narrow neck, containing an ileocecal appendix with increased dimensions and densification adjacent fat inside the hernial sac (Figure 1). In view of the findings, the patient underwent infraumbilical median laparotomy, in which an inguino-scrotal hernia was identified containing the cecal appendix with an edematous and hyperemic appearance, without signs of perforation, ischemia or necrosis.

Appendectomy was performed, followed by closure of the hernia sac. The patient evolved uneventfully and was discharged 3 days after surgery. Histopathological analysis showed acute appendicitis.

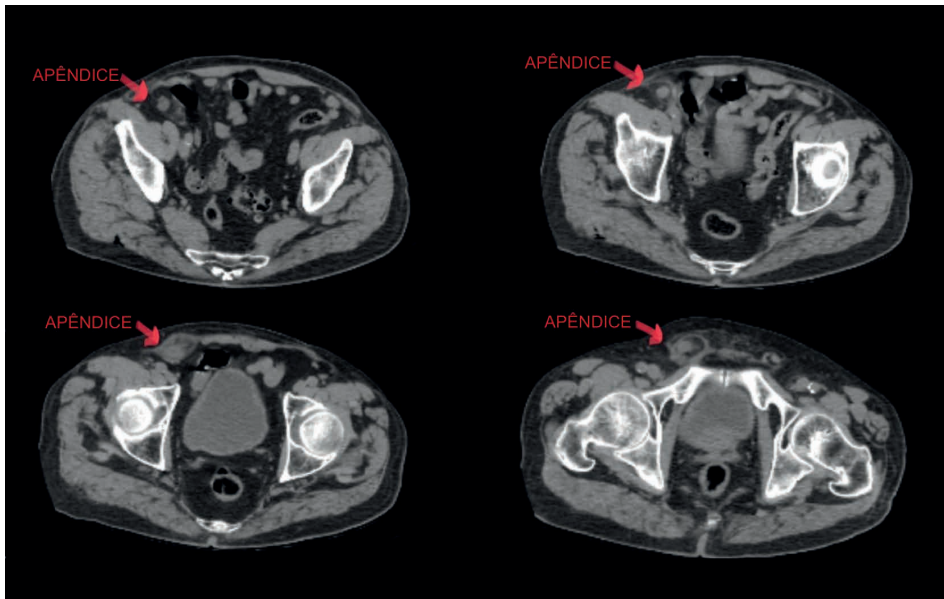


Figure 1: Abdominal Computed Tomography

DISCUSSION

Amyand's hernia is a rare condition, defined by the protrusion of the vermiform appendix into the inguinal hernia sac and represents only 1% of cases of inguinal hernias. When associated with appendicitis, it becomes an even rarer condition, corresponding to 0.1% of abdominal wall hernias.

This pathology can be subclassified according to the symptomatology and state of the ileocecal appendix, according to the classification of Losanoff and Basson:

Type 1: It does not show signs of inflammation

Type 2: It presents with acute appendicitis with inflammation confined to the hernia sac

Type 3: It presents with acute appendicitis and septic signs in addition to the hernial sac, which may course with peritonitis.

Type 4: It presents a picture of acute appendicitis, concomitant with other acute abdominal pictures.

The diagnosis of this pathology depends on a clinical picture compatible with inguinoscrotal hernia, associated or not with peritonitis and other abdominal conditions, in addition to complementary laboratory and radiological tests, such as Ultrasonography or Computed Tomography (CT) of the abdomen. Therefore, the patient in question presented a clinical picture compatible with inguinoscrotal hernia, despite the absence of bulging in the inguinal region, as well as suggestive CT images, in which it was possible to obtain the radiological diagnosis of Amyand's Hernia.

The classification of Lasonoff and Bason type 2 was suggested by the imaging exam, but subject to confirmation during surgery, in which the ileocecal appendix presented with inflammatory signs, however contained within the hernial sac and without involvement of adjacent tissues.

The prognosis of Amyand's Hernia is favorable in most cases, being more benign

than the acute appendicitis itself, since the inflammation can remain confined by the hernial sac. However, there may be complications such as peritonitis, abdominal abscesses, necrotizing fasciitis and sepsis.

In the reported case, the patient evolved well, without further complications, highlighting the importance of identifying the pathology early.

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