



COMPLICATED ACUTE APPENDICITIS WITHIN A RIGHT INGUINAL HERNIA SAC (AMYAND'S HERNIA): REPORT OF A CASE

Healthcare

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ABSTRACT

The term Amyand's hernia refers to a rare clinical situation characterized by the presence of a normal or inflamed appendix within the sac of an inguinal hernia. The situation may be asymptomatic or may present as an incarcerated hernia in case of strangulation or acute appendicitis occurring inside the hernia sac.

KEYWORDS

INTRODUCTION

A normal or inflamed vermiform appendix found inside an inguinal hernia sac is called Amyand's hernia, in honour of the surgeon Claudius Amyand who first reported this interesting entity in 1735¹. Amyand's hernias usually present on the right side due to the normal anatomic position of the appendix. In rare cases that can be associated with situs inversus, malrotations of the intestines and mobile caecum, an Amyand's hernia may appear on the left side². The clinical presentation of an Amyand's hernia usually mimics a strangulated inguinal hernia and therefore the vast majority of these cases are not diagnosed preoperatively. In fact there are very few cases of preoperatively diagnosed Amyand's hernias in literature³.

The management of Amyand's hernias is still a subject of debate and should be individualized depending on the operative findings and comorbidity factors. The most widely accepted classification that epitomizes operative findings and management is the one by Losanoff and Basson which describes 4 distinct types. In type 1, a normal appendix is found within an inguinal hernia. In this case hernia reduction with mesh repair and appendectomy (unless contraindicated) is the treatment of choice. Type 2 includes an inflamed appendix within an inguinal hernia, without signs of peritonitis and abdominal sepsis. Appendectomy through herniotomy with primary repair of hernia with Bassini or Shouldice technique (no mesh) is proposed. In type 3 where peritonitis and abdominal sepsis co-exist, a laparotomy, appendectomy and peritoneal lavage and subsequent hernia repair without mesh is indicated. Finally in type 4, some other abdominal pathology exists simultaneously. A laparotomy in terms of identification and treatment of this pathology should be performed. Appendectomy and hernia repair without mesh should follow⁴.

Case History

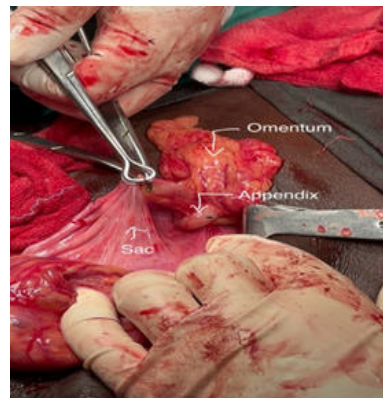
A 54 year male presented in surgery casualty with complaints of pain in right iliac region & scrotal region pain since 15 days. Patient also had history of dyspepsia and vomit on having fatty/oily food. Patient had no significant past history. On clinical examination: patient was vitally normal with tenderness over right iliac region & scrotal swelling & tenderness present. Routine blood investigations were done in which were within normal limit. Patient was clinically diagnosed as a case right inguinal hernia and was advised an ultrasound abdomen & inguinal scrotal region.

Ultrasound abdomen findings : 1) Right inguinoscrotal hernia containing small bowel & free fluid. 2) bilateral likely infective

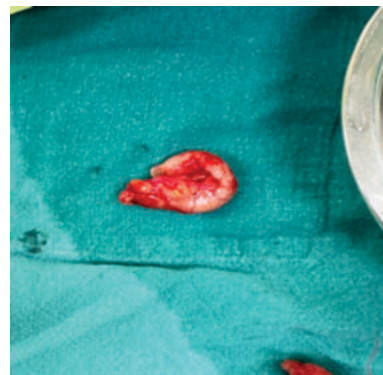
The histopathology report confirmed the presence of acute appendicitis as well as periappendicitis. No evidence of perforation or malignant pathology, such as a carcinoid tumour, was identified. The patient was closely monitored in the post-operative period in a high dependency bed. The patient was recovering well thereafter, he was discharged on post-operative day 10 after his pain had eventually settled.



Pre-operative Image



Intra-operative finding: inflamed appendix with a mesoappendix



Specimen: inflamed appendix with a mesoappendix

DISCUSSION

A classification was put forward by Losanoff and Basson for Amyand's Hernia, which set to provide a therapeutic framework. Type 1 describes a non-inflamed appendix situated in an inguinal hernia. Type 2 includes acute appendicitis within an inguinal hernia without the presence of abdominal sepsis. Type 3 includes acute appendicitis into an inguinal hernia along with the presence of intra-abdominal and abdominal wall sepsis. Lastly, type 4 is described as acute appendicitis in an inguinal hernia accompanying an associated abdominal pathology.

The case presented encounters a Type 3 Amyand Hernia, and the recommended management of this presentation involves an appendectomy with a primary hernia repair without the use of prosthetics, such as a surgical mesh. [4-8] The herniorrhaphy technique utilized in this case was the Shouldice Technique. Other modalities considered were the Bassini, and McVay Repair techniques; however, The Shouldice technique was the technique of choice due to its favourably low recurrence rates (0.6-1.4% in specialised centres). [9-11] The anatomy of the transversalis fascia, internal oblique, conjoint tendon, and inguinal ligament were also easily identifiable and within appropriate proximity after sufficient excision of the redundant hernial sac.

CONCLUSION

In conclusion, Amyand's hernia is a rare type of inguinal hernia that can sometimes lead to serious and life-threatening complications due to peritoneal spread of the septic process and should therefore be faced with utmost vigilance.

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