

## Case Report

### Appendix in Inguinal Hernia

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Received: 22<sup>th</sup> June-2014 Accepted: 26<sup>th</sup> August-2014 Published: 30<sup>th</sup> September 2014

#### Abstract

Amyand's hernia is the presence of vermiform appendix in inguinal hernia. It is a rare entity. We report an Amyand's hernia, where the appendix was found in a right inguinal hernia.

**Key words:** Amyand's Hernia, Appendix; Inguinal hernia.

#### Introduction

Inguinal hernia repair is one of the most common operations in surgical practice. Despite that, hernias often pose technical dilemmas, even for the experienced Surgeon.<sup>(1)</sup> The surgeon may encounter unusual findings, such as a vermiform appendix partly or fully contained in the hernia sac, inflamed or non-inflamed, stretched or curved, and adhered or not adhered to the sac walls. Whether or not an appendectomy should be performed at the same times as the hernia repair is debatable.

The presence of vermiform appendix in inguinal hernia is rare and is known as Amyand's hernia. Claudius Amyand, a French surgeon performed the first successful appendectomy in 1735 on an 11-year-old boy who presented with an inflamed, perforated appendix in his inguinal hernia sac.<sup>(2)</sup> We present a 66 year old male who presented with appendix in inguinal hernia.

#### Case History

A 66-year-old man, presented with a painful irreducible right side complete inguinal hernia. Patient was posted for hernia repair. Intraoperatively upon opening the hernial sac long but inflamed appendix was found. This was fully contained and adhering to his inguinal sac wall, pulling the cecum up to the internal inguinal orifice (Figure 1 and 2). The patient underwent a simultaneous appendectomy and

conventional modified Bassini's hernia repair. The histopathology report was Features suggestive of chronic appendicitis.



Figure 1: Amyand's hernia



Figure 2: Appendectomy being performed

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## Discussion

The incidence of having a normal appendix within the hernial sac varies from 0.5% to 1%, whereas only 0.1% of all cases of appendicitis present in an inguinal hernia.<sup>(3,4)</sup> If appendicitis exists, the repair of the hernia should be performed with Bassini's or Shouldice techniques, without making use of synthetic meshes or plugs within the defect due to the high risk of infection of such materials. In our case also patient presented with painful irreducible inguinal hernia and intraoperatively amyand's hernia was found. Appendectomy was performed and hernia was repaired without using the mesh.

According to Losanoff and Basson<sup>(5,6)</sup> classification amyand's hernia is classified as Type 1 in which there is normal appendix within an inguinal hernia and managed by hernia reduction, mesh repair and appendectomy in young patients. In Type 2 there is acute appendicitis within an inguinal hernia with no abdominal sepsis and managed by Appendectomy and primary endogenous repair of hernia without mesh.

In Type 3 there is acute appendicitis within an inguinal hernia with abdominal wall or peritoneal sepsis and managed by Laparotomy, appendectomy and primary repair of hernia without mesh. In Type 4 there is acute appendicitis within an inguinal hernia with related or unrelated abdominal pathology and managed by as types 1 to 3 hernia and investigate or treat second pathology as appropriate. Our case falls into type 2 so we had taken decision to do appendectomy with hernia repair without mesh.

## Conclusion

It is multifactorial to decide whether appendectomy should be performed or not in a case of amyand's hernia and it is important to be aware of all clinical settings and an appropriate and individualized approach should be applied.

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