

Strangulated epiplon in the inguinal canal as an atypical presentation of Amyand hernia

Krzysztof Akseǳowski^{1,B} , Andrzej L. Komorowski^{1,2,A,E-F} ,
Antoni Wiktor Bazieliǳ ^{1,B} , Peter Sielski^{1,D} 

1 Department of General Surgery, Edmund Biernacki Hospital, Mielec, Poland

2 Department of Surgery, College of Medicine, University of Rzeszów, Poland

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Abstract

An Amyand hernia is defined as a vermiform appendix located within the inguinal canal. It is a rarely seen condition with complications that are even more uncommon. We report the case of an Amyand hernia containing a strangulated epiplon and vermiform appendix.

Keywords: Amyand hernia, appendicitis, inguinal hernia

Case report

A 59-year-old female patient recently referred by a surgical outpatient center for acute appendicitis was admitted onto the surgical ward and prepped for an urgent appendectomy. Prior to admission, the day before she had been admitted to the emergency room for abdominal pain located in the lower right quadrant. Since the patient presented with an atypical history for appendicitis, no signs of peritoneal inflammation, and laboratory results within or close to normal range, she was prescribed antibiotics, painkillers and dismissed from the hospital. Upon admission to surgery the patient's vitals were normal, body temperature was non-febrile, she had an elevated CRP level 41 mg/l with a normal leukocyte count, and physical examination strongly indicated peritonitis. The patient was operated on using a laparoscopic approach. An orientational 360 degree revealed the greater omentum adhering to the anterior abdominal wall, which was freed revealing a small part of the greater omentum and appendix located within the inguinal canal (Fig. 1) which were reducible using standard laparoscopic instruments. The appendix was inflamed along the part located in the inguinal

✉ Corresponding author: Krzysztof Akseǳowski; email: aksedowski@gmail.com

canal but showed no signs of necrosis or perforation. It was noted that a part of the greater omentum within the canal was strangulated and necrotic. Both the appendix and necrotic element of the greater omentum were excised and removed through the main trocar. The postoperative course proceeded with no complications and the patient was dismissed on the second postoperative day.

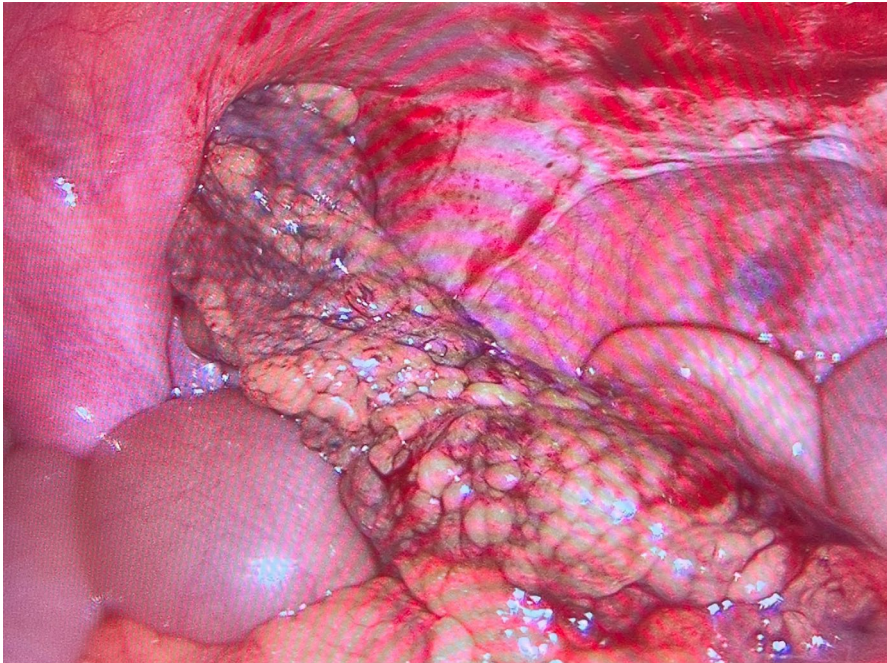


Fig. 1. Strangulated epiploon inside the right internal inguinal ring. The appendix can be seen on the right

Discussion

Various types of hernia, including abdominal, inguinal and femoral hernias, often contain a piece of omentum or a part of the bowel. A hernia of this type is seen in less than one percent of hernias, with complications seen in even fewer cases [1]. An incarcerated inguinal hernia is one of the most commonly performed surgical procedures, and acute appendicitis is one the most common causes of pain in the right iliac fossa [2,3]. When both cases are present, a proper diagnosis must be obtained to progress with the best treatment option in mind. Amyand hernias are classified into four types, and in this case the patient presented with a type two Amyand hernia: acute appendicitis within an inguinal hernia with no abdominal sepsis. Classification

type one is characterized by a lack of acute appendicitis and in types 3 and 4 sepsis and other related abdominal pathologies are present. In this case, the recommended treatment option would be to perform an appendectomy and repair the hernia with no mesh placement. It is the inflammatory status of the appendix that determines a favorable outcome of any mesh placement. In this case, no hernia repair was performed, but was planned for in the near future [3,4]. The internal inguinal ring with the round ligament of the uterus was clearly seen after reduction of the hernia [Fig. 2].



Fig. 2. Right internal inguinal ring after reposition of the epiploon. Round ligament of the uterus can be seen on the left

It is worth mentioning that Claudius Amyand was a French Huguenot in exile in England, working as a military surgeon at St. George's Hospital in Westminster, London. He operated on an 11-year-old boy for a right inguinal hernia complicated by a fecal fistula. The operation performed by Claudius Amyand is important for two reasons. First, it is the earliest description of a hernia involving the appendix. Second, it is the earliest documented appendectomy in the history of surgery. To commemorate Amyand's achievement, an inguinal hernia containing the appendix is referred to as Amyand's hernia [5].

Conclusion

Special consideration for surgeons when diagnosing inguinal hernia with a possible diagnosis of an Amyand hernia. When diagnosing an inguinal hernia, surgeons should consider the possibility of the presence of an Amyand hernia.

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