

Amyand's Hernia: Case Report

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Abstract

Amyand's hernia is vermiform appendix in inguinal hernia. This usually presents as an unexpected intraoperative finding.

Case Report: A 21 year old male had right inguinal hernia. Diagnosis of Amyand's hernia was made intraoperatively. Appendix was entering through deep ring lying outside hernia sac. Appendectomy with herniorrhaphy done

Conclusion: Appendix lying outside sac in Amyand's hernia is rare. Adhesions of appendix with hernia sac leads to incarceration.

Keywords: Amyand's; Hernia; Extrasacal; Indirect

Introduction

An Amyand's hernia has vermiform appendix seen inside inguinal canal and is rare to see [1]. Clinically it mimics incarcerated inguinal hernia [2]. Incidence of Amyand's hernia is 1% of all inguinal hernias [3]. Most of the times diagnosis is made intraoperatively and present on right or left side [4]. Appendix is mostly inside hernia sac, but very rarely comes in canal through internal ring lying outside sac. In Amyand's hernia, appendix could be inflamed or non-inflamed. Surgery can be both diagnostic and therapeutic. Most often, hernia repair is completed during primary surgery. In a few cases, hernia repair is delayed due to complications and inflammation [5].

Case report

A 21 year old male presented with right groin swelling and mild

intermittent episodes of pain. He was diagnosed as a case of right inguinal hernia. Local examination revealed an expansile swelling with cough impulse positive. Left side was normal. Laboratory parameters were normal. Ultrasonography abdomen was normal and the scrotal ultrasonography confirmed the diagnosis of inguinal hernia. Patient was planned for hernia repair. Intraoperative findings were an indirect hernia with the vermiform appendix lying outside sac in inguinal canal after entering through deep ring. A portion of appendix with tip was seen adhered to sac. No gross signs of inflammation were present. Sac was identified with omentum as a content, and sac easily stripped of appendix and repositioned back into peritoneal cavity. Transfixation of sac and repair of posterior wall with prolene was done. Follow up periods were normal.

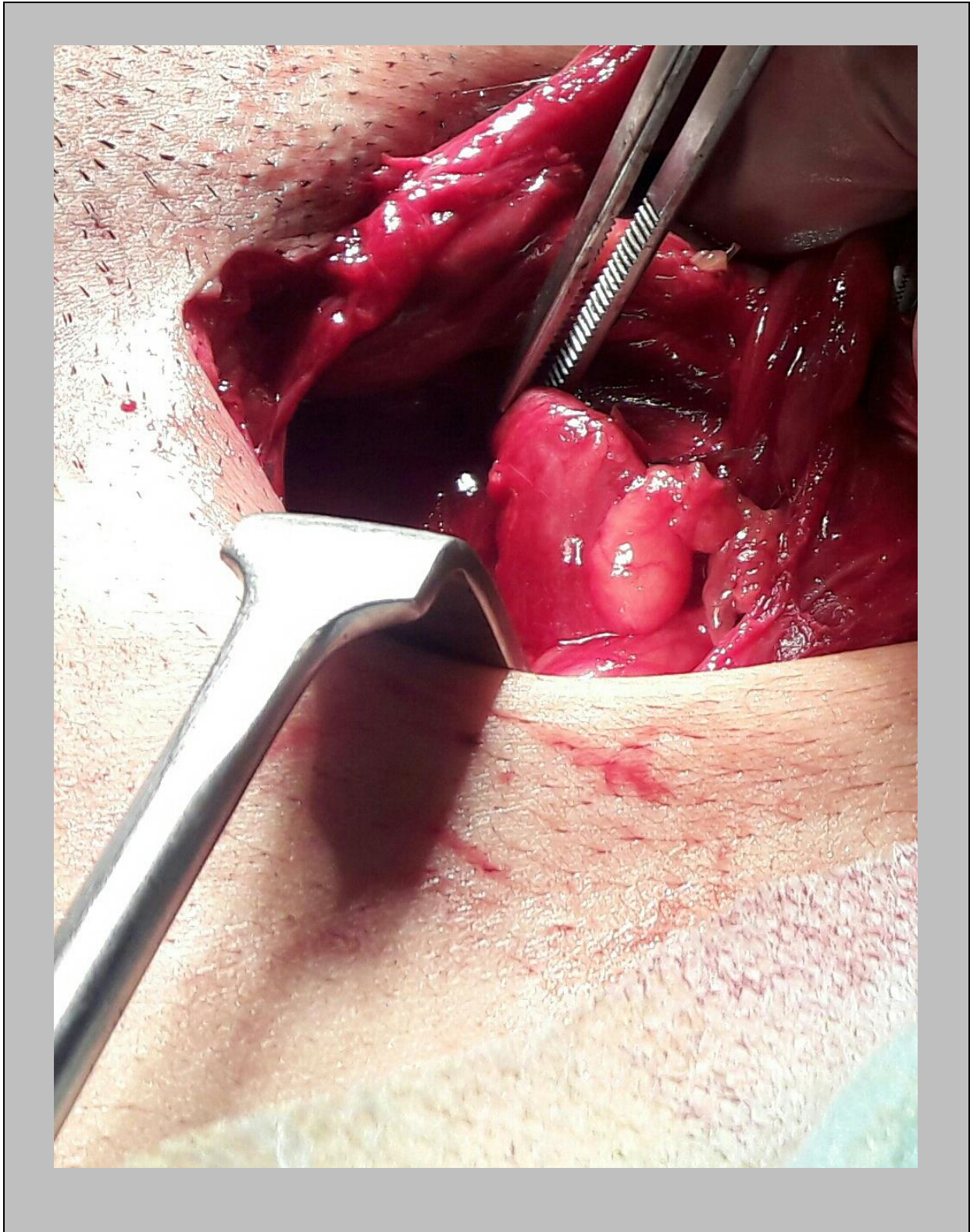


Figure 1: Sshowing Appendix lying outside sac coming out of deep ring

Discussion

A vermiform appendix in an inguinal hernia sac, with or without appendicitis, is called Amyand's hernia.[6] Claudius Amyand (1660-1740), a French surgeon working at St George's and Westminster hospitals in London, 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. [7]

An incidence of Amyands hernia ranges from 0.19% to 1.7% of reported hernia cases with age of occurrence ranges from 3 weeks to 92 years [8] There is three times more frequency of Amyands Hernia seen in children than in adults as occurrence of patent processus vaginalis is more in pediatric age group [9] There is predominance of right side Amyands hernia than left because of location of vermiform appendix on right side. (10) Presence of Appendix is either in indirect or direct type inguinal hernia in Amyands hernia. The surgeon may encounter unusual findings, such as a vermiform appendix partly or fully contained in the hernia sac, as sliding hernia, inflamed or non-inflamed, stretched or curved, and adhered or not adhered to the sac walls. [4] In this case, appendix was outside sac with adherence to it, leading its incarceration. Stripping of sac from appendix was suffice for release and entry of appendix back into peritoneal cavity

Appendix in Amyands hernia may show signs of appendicitis or it may remain non-inflamed with an estimated rate at 0.07–0.13% [11]. of acute appendicitis. Within this incidence of perforation ranges at 0.1% of all cases of appendicitis [12] from in Amyands hernia. There is a female preponderance with post-menopausal group showing increased perforative appendicitis in Amyands hernia. Appendix showing features of inflammation, may be primary or its incarceration in abdominal wall musculature. Incarceration may lead to strangulation or perforation of appendix in Amyands hernia.

Preoperative diagnosis of AH is rare; [13] Ultraonography and computed tomography abdomen are useful in diagnosis [7].

Perforated appendicitis, periappendicular abscess, abdominal sepsis, testicular ischemia, strangulated hernia, necrotising fasciitis of inguinal area and Ritchers hernia of foreign body lodges in Appendix simultaneous appendicitis and cecal perforation within an Amyand's hernia. are complications reported to occur in Amyands hernia. [6,14] There is report that Amyand's hernia presented with appendiceal adenocarcinoid tumor [15].

The most common choice of treatment for Amyand's hernia is appendectomy via herniotomy, with primary hernia repair [16]. Lower midline laparotomy is recommended for cases of suspected perforation or pelvic abscess, as this approach provides excellent control and technical ease [17] Vermillion et al. reported the first instance of laparoscopic appendectomy in a case of Amyand's hernia with appendicitis. [18] Extraperitoneal management of Amyand's hernia has become more common [19].

Conclusion

Amyands hernia is rare. These usually diagnosed intraoperatively. Appendix lying outside sac in an inguinal hernia is very rare to see. Appendix adhered to hernia sac leads its incarceration.

Conflict Of Interest: No conflict of interest Present

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