

A normal appendix in a painful sliding hernia — an unusual case

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Abstract

An Amyand's hernia, with a frequency of 0.6% to 1%, is the rare finding of an appendix within an inguinal hernia. This term is applicable to both findings of inflamed as well as a non-inflamed appendix. The condition is commonly misdiagnosed as an incarcerated hernia and its diagnosis is almost always made intraoperative. A 63 years old male presented to the out patient department with a right inguinoscrotal swelling that had recently developed pain, radiating to the scrotum on the same side. A right inguinal herniotomy was planned and upon opening the sac a non-inflamed appendix was seen as a sliding component of the hernia. An appendectomy followed by a standard Lichtenstein tension free mesh repair was performed, and the patient was discharged on the second postoperative day without any complications.

Keywords: Amyand's hernia, Sliding hernia, Appendix in hernia.

Introduction

An appendix within a hernia sac was first described by Claudius Amyand an English surgeon to King George II, upon stumbling onto this finding when he performed the first known successful appendectomy on an 11 year old boy in 1735.¹ This was the first ever recorded appendectomy for a perforated appendix within an inguinal canal. Recently, any inguinal hernia containing an appendix, inflamed or not have been called Amyand's Hernia. The diagnosis of this affliction is almost always made intraoperatively, as the absence of specific clinical features precludes initial diagnosis and investigation.² Presented here is the case of one such sliding hernia with the incidental finding of an appendix upon dissection of the hernial sac.

Case Presentation

A 63-year-old male known diabetic presented to the OPD with classic complaints of bladder outflow obstruction and a right inguinal swelling which had a positive cough impulse test. This was associated with pain radiating to the scrotum on the right side. Examination revealed a right-sided reducible inguinal hernia with a tender right-sided testicle. The patient had normal blood counts and an

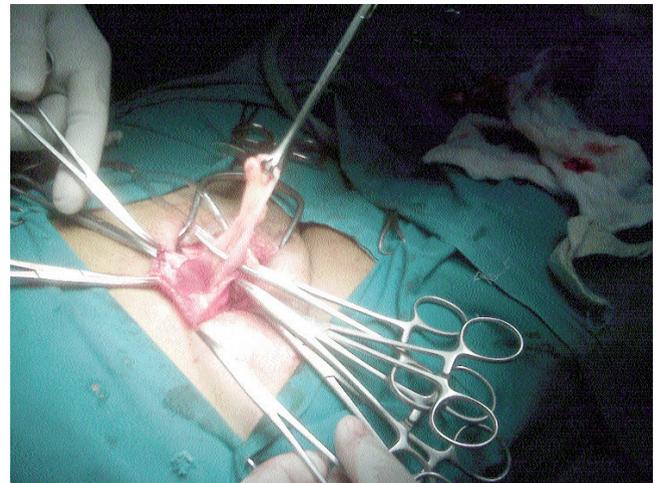


Figure: A non-inflamed appendix within an inguinal hernia.

ultrasound of the abdomen revealed an enlarged prostate but no specific findings pertaining to the hernia.

A Transurethral Resection of the Prostate (TURP), and right inguinal Hernioplasty was planned.

On the operating table, a sliding hernia was seen upon opening the hernial sac with an incidental finding of a non-inflamed appendix within it (Figure), the viscus and its mesentery were found to be making up the posterior wall of the sac itself (making it a true sliding hernia). The appendix was cut and buried and a standard tension free mesh repair was carried out with a drain left in. Post operatively, the patient remained vitally stable, the drain was removed and the patient was discharged on the second postoperative day. Histopathology confirmed a normal appendix. The patient was well on a one-month follow up in the out patient department, without any wound complications.

Discussion

A Sliding hernia is an uncommon type of an indirect inguinal hernia. Estimations of the frequency of an appendix being found in such a hernia, include a Turkish study in which medical records of 1,950 patients were retrospectively analyzed, with the vermiform appendix being found in 0.51% and acute appendicitis in only 0.1%

of groin hernia sacs.³ Other sources predict its incidence as 0.13%, as it was found in only 11 cases from a series of more than 8000 consecutive appendicitis cases.⁴

Sliding hernias are those in which typically the posterior part of the wall of the hernial sac is formed by a viscus and/or its mesentery. It is a rarity for a sliding hernia to present with symptoms of pain, as there are very little chances of it strangulating or becoming obstructed.

A sliding hernia is typically found in elderly males and, more often than not occurs on the left side, as the sigmoid colon (which is only partially invested in the peritoneum and more readily creates the bulging that is attributed to the hernia), resides there. Sliding hernia's maybe clinically divided into three types Type I, in which part of the sac is made up by the wall of a viscus, Type II, hernia with the presence of a retroperitoneal viscus and Type III, in which there is a protrusion of the viscus itself.

Inguinal hernias are generally well known to have some pelvic viscera or part of a viscera contained in them. Most commonly observed include; Meckel's diverticulum, part of the bladder, fallopian tubes and ovaries. Only rarely is an appendix found. Such a hernia, (an Amyand's hernia) is extremely difficult to diagnose preoperatively. Sometimes the presenting features of an inflamed appendix may alert the surgeon to this possibility but it is a rarity and, is almost always misdiagnosed as an incarcerated hernia with diagnosis confirmed upon opening of the hernial sac. In cases where the clinical picture is doubtful of acute appendicitis, computed tomography or ultrasound scanning may be used to preoperatively suggest the presence of an appendix. In the case presented the patient had pain attributable to pressure symptoms from the hernia radiating to the scrotum on the same side, without classical signs of inflammation. Radiological investigations were thus not done, as this is not routine for an inguinal hernia and is not known to alter the management in any significant manner. The patient was managed by an appendectomy and a Lichtenstein tension free mesh repair was carried out.

Finding a non-inflamed appendix in such a setting is a predicament to the surgeon. Previous cases have either

performed appendectomies or only reduced the appendix back into the abdomen, with just the repair of the hernial defect. Both groups have extensively justified their relevant approaches, some surgeons do not recommend removal unless the appendix is inflamed, while others argue that a non-inflamed appendix within an inguinal hernia is at a higher risk for suppuration and rupture due to the mechanical forces acting upon it and one should therefore proceed with an appendectomy.¹⁰ While numerous surgical methods exist to treat inguinal hernias, the Lichtenstein tension-free mesh-based repair still remains the criterion standard.¹¹ As this is a rare variant no standard protocols for the excision/repair of an Amyand's hernia exist, and for the time being the method used as well as whether to remove or conserve the appendix remains to be at the prerogative of the operating surgeon.

To the best of our knowledge only four such cases have been reported in literature in the past 10 years from Pakistan, three of which have been from large centers within Karachi.⁶⁻⁹ This could in part, be attributed to the general lack of a medical writing culture in the country.

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