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AMYAND'S HERNIA: A RARE CASE PRESENTATION.

General Surgery

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ABSTRACT

Inguinal hernia is common condition in surgical practice. Presence of vermiform appendix as a content of inguinal hernia is called as "Amyand's hernia". Amyand's hernia occurs, approximately 1% of all hernias. Preoperative clinical diagnosis of Amyand's hernia is difficult, unless it is complicated by acute or perforated appendicitis. We report a case of a 65 year-old male presented to our outpatient department with right sided inguinal hernia. Intra-operatively we found normal appendix as content of hernia. Patient underwent hernia repair with meshplasty.

KEYWORDS

Appendix, Inguinal Hernia, Amyand's Hernia.

INTRODUCTION:

Amyand's hernia is a clinical condition which is characterized by presence of appendix, whether inflamed or not as content of an inguinal hernia. [1] It is more common in male and frequently report on right side. [2] Amyand's hernia is usually incidental intra-operative finding, unless use of abdominal ultrasonography or computed tomography. [3] Its management mainly depends on intraoperative findings and surgeons preference.

Case report:

A 65 year old male patient presented to our outpatient department with right sided inguinal swelling since last 6 years. This swelling was irreducible since last 1month. On examination approximately 3x 3 cm size swelling was present in right inguinal region which was partially reducible with positive cough impulse. No scar, dilated veins or signs of inflammation were present over swelling. Other hernial orifices were normal. Preoperative blood parameters of the patient were within normal limit. With pre-operative preparation and anesthesia fitness, patient posted for elective surgery. Intra-operatively, indirect inguinal hernia sac was detected. On opening the sac, we discovered appendix within sac. On gross examination appendix was normal, without signs of inflammation. [Fig 1] Hernia content reduced and right inguinal hernioplasty performed using mesh. Post operative course of patient uneventful and patient was discharged on second post-operative day. Patient followed up after 1 week for suture removal and after 6 month reveals no fresh complaints.

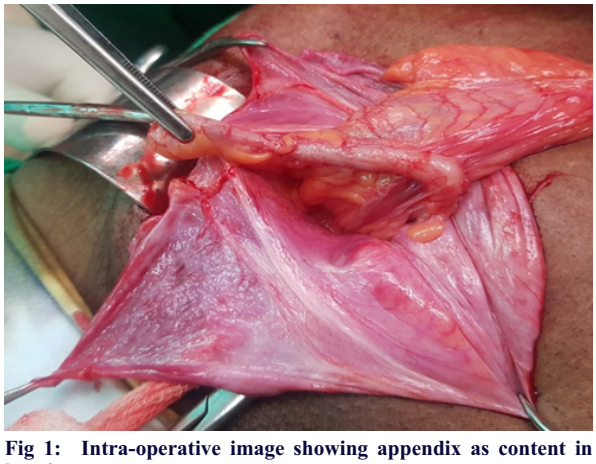

Fig 1: Intra-operative image showing appendix as content in hernia sac

DISCUSSION:

Hernia is common pathology of inguinal region with an estimated prevalence of 1.2% of the population. [4] Claudius Amyand's, in 1735 performed an appendectomy, on an eleven-year-old boy, for a perforated appendix in an inguinal sac. [5] Incidence of Amyand's hernia is estimated between 0.4% to 1% of all inguinal hernias. [6] Incidence of appendicitis in Amyands hernia is up to 0.1%, with mortality is currently estimated up to 5.5%. [6] Though Amyand's hernias occur mostly on the right side, left sided Amyands hernia is also reported in case of malrotation, situs- inversus, long appendix and mobile caecum. [7]

Clinical presentation of Amyand's hernia is variable and depends on severity of appendicitis. It ranges from normal or inflamed appendix, perforated or gangrenous appendix and or abdominal sepsis. Although rare it may present as necrosing soft tissue infection of groin. [8] Amyand's hernia commonly present as obstructed or strangulated inguinal hernia however, inguinal bubo, acute epididymo-orchitis, necrotizing fasciitis and undescended testis are rare differential diagnosis. [9] Pre-operative diagnosis is difficult, but can be possible by radiological investigations. In majority of cases it is diagnosed intraoperatively. [10]

Losanoff and Basson classified Amyand's hernia in four types. Type 1, normal appendix in inguinal hernia. Type 2, acute appendicitis in an inguinal hernia, no abdominal sepsis. Type 3, acute appendicitis in an inguinal hernia, with peritoneal sepsis. Type 4, acute appendicitis in an inguinal hernia and related or unrelated to abdominal sepsis. [11] Intraoperative findings and condition of appendix are important determinant of management. In type 1 Amyand's hernia as appendix is normal and no abdominal sepsis, hernia repair with meshplasty is acceptable. [12, 13] An exception to above condition is left sided Amyand's hernia, in these cases appendectomy is justified even if appendix is normal to prevent future atypical presentation and complications of appendicitis. [14] In case of inflamed or perforated appendix such as Type 2, 3 and 4 Amyand's hernia, appendectomy with anatomical repair of hernia is preferred. If appendectomy is performed it increases risk of prosthetic material infection, wound infection, sinus formation and hernia recurrence. [2] However there are reports which suggestive of use of biological mesh in appendicitis without any post –operative infection. [15]

In conclusion, Amyand's hernia is a rare presentation. Preoperative clinical diagnosis is difficult, but can possible with help of ultrasonography and computed tomography. However, in majority of cases surgical management depends on intraoperative findings which consist of hernia repair with or without appendectomy.

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