AMYAND'S HERNIA IN AN ADULT MALE NIGERIAN: A CASE REPORT

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Abstract

Background: Amyand's hernia is a rare variant of inguinal hernia in which the sac content is the appendix. It is usually an intra-operative diagnosis. This pathology has been reported to be more common in children but our index patient is an elderly man.

Case presentation: An elderly man presented with clinical features consisted with strangulated recurrent right inguinal hernia. At surgery, he was found to have an inflamed appendix as the content of the hernia sac. He was offered appendicectomy and hernioplasty.

Conclusion: The surgeon should be aware of this pathology and the possibility of meeting the unexpected findings at surgery.

Keywords: Amyand's hernia, Elderly patient, Male, Nigeria

Introduction

By definition, a hernia occurs when an organ or a portion of an organ protrudes through a defect within the walls of its containing cavity.[1] By this, various types of hernia have been described based on the content of the sac. Amyand's hernia is an eponymous terminology used to describe a clinical condition in which the content of the hernia sac is the vermiform appendix.[2] Such an appendix may be inflamed or not and in either of the scenarios do present with groin pains and swelling just like any other form of groin hernias. The diagnosis of this is usually made intra-operatively after opening the hernia sac to inspect the content. In this study, we report a case of Amyand's hernia in which the appendix was inflamed and presented with features in keeping with obstructed inguinoscrotal hernia in an elderly patient.

Case presentation

I.I is a 75yr old gold miner who presented with recurrent right groin swelling of 2 years duration and sudden onset of colicky abdominal pain, three hours prior to presentation. The groin swelling which was initially reducible became irreducible few hours before presentation. He had right inguinal herniorrhaphy about 7 years prior to this current presentation. He does not take alcohol but has been smoking a pack of cigarettes per day for the past 5years.

Clinical examination reveals an elderly man, anxious, in painful distress, not pale, anicteric, afebrile, no pedal oedema, not dehydrated. Vital signs recorded: PR: 92b/min, RR: 18cycles/min, BP: 130/70mmHg. Right groin examination revealed an irreducible recurrent complete inguinal hernia. Digital rectal examination revealed a mildly enlarged prostate with benign features. No rectal masses palpable.

A clinical diagnosis of obstructed recurrent right inguinoscrotal hernia was made. He was admitted and optimized, counseled for surgery (hernioplasty) with an intra-operative finding of an 18cm long, inflammed appendix in the hernia sac. He subsequently had appendicectomy through the hernia incision and also had posterior inguinal wall repaired accordingly. He did well after surgery and was discharged on POD 5 to be seen at the follow up clinic.

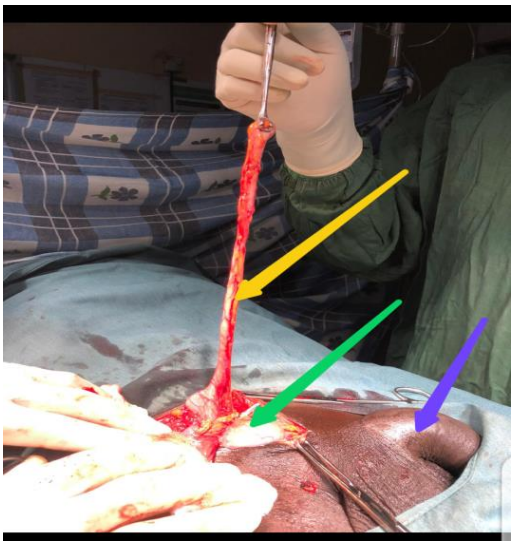

Figure1: Yellow arrow-Inflamed appendix; Green arrow- Hernia sac; Purple arrow- Root of penile shaft

Discussion

Groin hernia could be inguinal or femoral in nature and the clinical presentation of these categories of hernias depends on the underlying pathology and content of the hernia sac. Simple or strangulated obstruction could ensue if there is associated vascular compromise however, if unabated, this may proceed to gangrene and perforation. Amyand's variant of inguinal hernia is a rare surgical pathology in the adult population. Literature search on this pathology in adults in Nigeria is scanty as majority of them are encountered in the children.

Epidemiologically, the global incidence of Amyand's hernia is approximately 1.2% and this variant of hernia has been reported in patients between the neonatal period to the eight decade of life.[3] However, a large number has been reported in the paediatric population due to the persistence of processus vaginalis which permits the elongation and eventual free sliding of the appendix into the patent processus vaginalis.[4,5] With respect to sex

predilection, Amyand's hernia has been reported to occur more in males than females and observed to be present more on the right side than the left.[6]

Amyand's hernia historically was named after Claudius Amyand (1735) after successfully removing an appendix (with an impacted pin within the appendiceal lumen) through the hernia sac from an 11 year old boy who presented with right inguinal hernia. [7] The fate of the appendix in Amyand's hernia is not different from that of an appendix that is within the peritoneal cavity (inflammation, gangrene, rupture).[8] The appendix in our index patient was inflamed with clinical presentation of severe colicky pains and low grade fever resembling the pathology of strangulated inguinal hernia necessitating optimization and need for surgery.

The diagnosis of hernia is clinical and more so the diagnosis of Amyand's hernia is usually an incidental intra-operative event. [9,10] Such a patient will earn appendicectomy that will be carried out in usual manner after which ligation excision of the hernia sac (herniotomy) will be carried and posterior inguinal wall repair will be effected. This was the case in our index patient in which the hernia sac content was found to be an appendix and he had appendicectomy offered with herniotomy and repair of the weakened posterior inguinal wall. A big lesson to be learnt here is the fact that the surgeon should always endeavor to inspect the content of the hernia sac before excision as this may contain intra-peritoneal visceral like the appendix and such may also have attendant sliding hernia component.

In this index patient, who is elderly and presented with a recurrent inguinal hernia that ended up being an Amyand's variant (with just inflammation of the appendix without rupture, gangrene or abscess), the posterior inguinal wall repaired. Though opinions differ as to the method of choice for posterior wall repair in Amyand's hernia, Losanoff *et al* in their categorization have highlighted and stratified the treatment options as shown below.[11, 12]

Type I - Normal appendix, do reduction or appendicectomy + mesh hernioplasty
Type II – Acute appendicitis localized in hernia sac, appendicectomy + mesh hernioplasty
Type III- Acute appendicitis with peritonitis; appendicectomy via laparortomy; hernioplasty not advisable
Type IV – Acute appendicitis with other abnormal pathology; hernioplasty contraindicated.

Conclusion

Amyand's hernia though a rare variant of inguinal hernia can present to the surgeon like every other hernia. The surgeon should therefore arm himself with requisite knowledge in the management of such.

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