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Clinically Normal Appendix in an Elective Right Inguinal Hernia Repair: Case report

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Abstract

Background: Small bowel and omentum are the most common structure seen in an inguinal hernia sac. Appendix as a content of an inguinal hernia sac is extremely rare. We report this clinical entity due to its rarity
Case report: We report a 56 year old man who was seen at the surgical outpatient department of our center with a history of simple symptomatic right inguinal hernia. He had an elective inguinal hernia repair. A clinically normal appendix was seen in the hernia sac. It was reduced during the surgery. He was discharged satisfactorily.
Conclusion: A clinically normal appendix may be a content of an inguinal hernia sac.

Key words: Inguinal hernia, herniorrhaphy, appendix

Introduction

Inguinal hernia is the protrusion whole or partly through the wall of the containing cavity within the groin region.[1] The factors that have been implicated in the development of an inguinal hernia have been categorized into two.[2] This includes etiological risk factors and precipitating factors. Etiological risk factors include family history, post-abdominal surgery, tobacco smoking, trauma and congenital factors such as Ehlers Danlos syndrome. The precipitating risk factors include chronic cough, obesity, abdominal mass and some lower urinary tract symptoms.[3] Patients with inguinal hernia may be asymptomatic or symptomatic.[4] Some of them may present with complication such as incarceration, obstruction, strangulation or perforation.[5] Mostly commonly seen content of an inguinal hernia are small bowel and omentum.[6] Appendix is an extremely rare content of an inguinal hernia let alone clinically normal appendix.[7] We report this clinical entity due to its rarity.

Case presentation

A 56 year old man who was seen at the surgical outpatient of our center with two years history of on and off right groin swelling which later descended into the scrotum two weeks prior presentation. There was no history of abdominal or groin pain. He had no history of trauma or surgery involving the groin. He neither smokes tobacco nor takes alcohol. No family history of similar problem. Clinical examination was remarkable for right indirect

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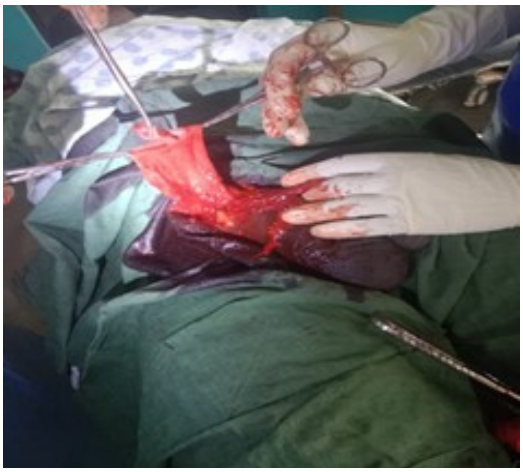

Figure 1: Showing the intraoperative finding of an appendix in inguinal hernia sac

reducible inguino-scrotal hernia. He was scheduled for hernia repair via groin incision an intra-operatively a clinically normal appendix was seen, (figure 1) the appendix was reduced and nylon darn repair of the posterior wall was done. His clinic follow-up was uneventful.

Discussion

Appendix as a content of inguinal hernia is a very rare clinical entity. It was first described by Claudius Amyand thus it is eponymously referred to as amyand's hernia.[8] We illustrated our experience on this clinical scenario. Although the first case of amyand's hernia was reported in a 11 year old boy, medical literature have suggested that it can occur in any age group. It was however reported that it is three times more common in children.[9] This index case is one of the rare cases seen in adult. No gender predilection has been reported in the case of amyand's hernia however it is seen commonly in men due to higher incidence of inguinal hernia in the men population.[10] This case was no exception. Amyand's hernia may be complicated by incarceration, appendicitis, abdominal abscess among others. Lyass et al has reported a case of amyand's hernia complicated by abdominal abscess[11] due to perforated appendix. Other similar series have reported complications orchitis, epididymo-orchitis and necrotizing fasciitis.[12,13] None of these complications was observed in our patient. This may be due to early presentation observed in our patient. Although he has been having the symptoms for two years he presented just two weeks after the hernia became complete inguinoscrotal hernia.

The diagnosis of simple inguinal hernia is generally clinical. There may not be any need for ancillary investigation except in the case of ambiguity. It is known that the diagnosis of an inguinal hernia with an appendix in situ pre-operatively is very challenging. It is commonly noted intra-operatively as seen in this case. A similar series has reported successful pre-operative diagnosis of amyand's hernia using computed tomographic scan.We observed that this pathology was on the right side which is the normal anatomical location of the appendix. It is however not uncommon to see the pathology on the left side in the case of mal-rotation of the bowel and situs inversus. Inta-operatively, a clinically normal appendix was seen, this necessitated reduction rather than appendectomy and then hernia repair. In the case of an inflamed appendix, the principle surgery indicates appendectomy. Some authorities have however recommended appendectomy even if the appendix is normal.[14] Others have argued against appendectomy in the face of clinically normal appendix because this may turn the procedure to contaminated surgery with its attendant high risk of surgical site infection. More so, a normal appendix may be used for billiary tract reconstruction, urinary diversion and anterogade bowel enema.[15]

Nylon darn repair was done as against the standard mesh hernia repair in an uncomplicated inguinal hernia. This is due to the patient inability to afford the cost of mesh. Some studies have shown no significant difference between nylon darn repair and mesh repair in terms of outcome and recurrence.[16] The uneventful clinic visit post-operatively has further given credence to this fact.

Conclusion

Although, complicated appendicitis has been reported to be the most common form of amyand's hernia, this case has illustrated the possibility of clinically normal appendix in this rare clinical entity.

Consent: obtained from the patient

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