Case Report

SLIDING INDIRECT INGUINAL HERNIA IN AN ADULT FEMALE NIGERIAN IN A RURAL SETTING: A CASE REPORT.

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Abstract

Background: Sliding hernia is a protrusion of a retroperitoneal organ alongside an adjacent peritoneal sac. Sliding hernias are rare occurrences in our environment and are often associated with long standing history of herniation, widened internal ring, recorded only in female children and adult males. The aim is to report a rare occurrence of a sliding indirect inguinal hernia in an adult female.

Case Presentation: We report a case of 40-year-old female Nigerian rural dweller that presented with left sided sliding indirect inguinal hernia involving the colon with co-existing right sided indirect inguinal hernia for which, she had Lichtenstein's hernioplasty bilaterally.

Conclusion: A good knowledge of the surgical anatomy of the inguinal region is key in the timely identification of unusual intra-operative findings and make decision accordingly to avoid surgical mishap.

Keywords: Sliding hernia, Rural, Retroperitoneal organ, Hernia sac, Anatomy.

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INTRODUCTION

Hernias still remain one of the commonest causes of surgical intervention in a rural setting.[1] A hernia is a protrusion of a viscus through an abnormal opening of the wall that covers its cavity.[2] There are different types of abdominal wall hernias. Among these, sliding indirect inguinal hernias are few, about 3-8% of all elective hernias.[3] A sliding hernia is usually a protrusion of a retroperitoneal organ alongside an adjacent peritoneal sac. This may occur with or without its mesentery. Bendavid described three types of sliding inguinal hernias depending on the proportion of the sac occupied by the sliding organ. A type I is the one in which part of the peritoneal sac is made up by the wall of a retroperitoneal viscus, a type II is the one in which the retroperitoneal viscus and its mesentery forms part of the peritoneal sac and a type III is the one in which the sliding hernia occurs as a result of protrusion of a viscus itself, and the peritoneal sac is very small or even absent.[4,5] However, a good knowledge of clinical anatomy is the key to making correct diagnosis of a true sliding hernia as opposed to an adherent visceral content in the sac.

CASE PRESENTATION

A 40-year-old female presented to the surgical out-patient clinic at Otuoke Hospital (Federal Medical Centre, Yenagoa rural posting centre) with an over 30 years history of bilateral groin swelling (left bigger than right) and recently diagnosed hypertension not on medication. She was examined and diagnosis of bilateral indirect reducible inguinal hernia was made. She eventually had surgery a week later. However, intraoperatively on the left side, the posterior-medial wall of the sac of the hernia was the wall of a retroperitoneal organ with taenia coli which we identified as a sliding sigmoid colon through a widened internal ring (Figure 1). Further dissection and ligation of the sac was suspended to avoid

devascularization and subsequent perforation of the viscus, as the discovery was made after the sac was opened. The opened sac and the viscus were pushed back into the peritoneal cavity and the transversalis fascia plicated with nylon sutures. Patient subsequently had mesh tension free hernia repair by Lichtenstein technique (figure 2). Skin closure was subcuticular with nylon 1 (figure 3). She was monitored post-operatively on our ward for 24hrs before discharge.

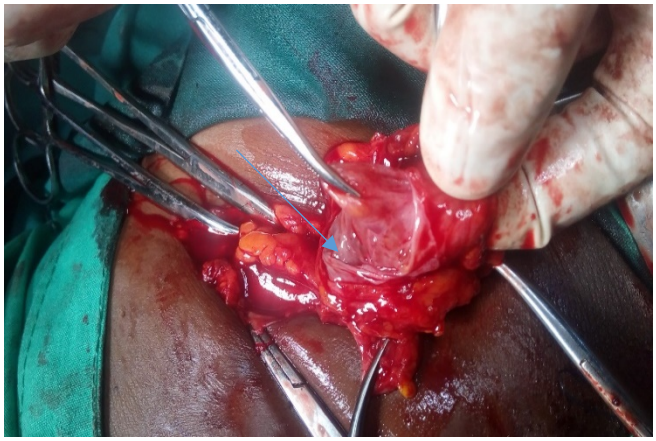

Figure 1: Sliding hernia (arrow) at the posterior-medial wall of sac.

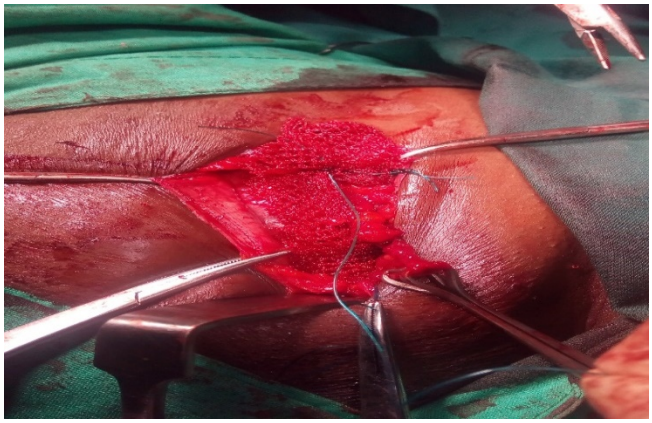

Figure 2: Mesh repair done.

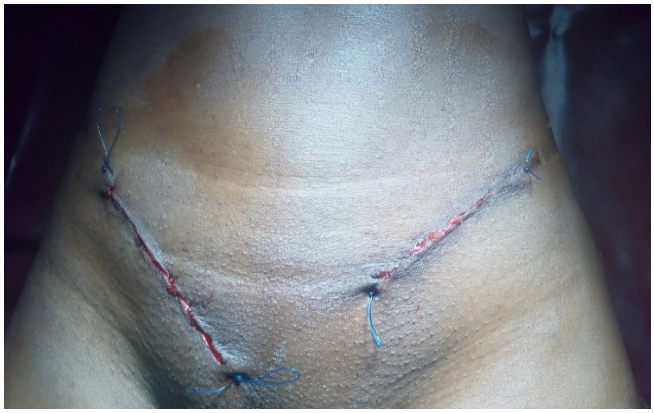

Figure 3: Skin closure.

DISCUSSION

Sliding indirect inguinal hernias are rare occurrences in adult females. They are reported to almost exclusively occur in female infants and adult males only.[6] And in these instances, fallopian tube, ovaries are the sliding organs in females, while in the males the colon or bladder.[5] In our literature search, no case of a sliding bowel in an adult female was found. In literature, sliding hernias were reported of a 66-year-old man with a sliding colon[7] and another 65-year-old man with sliding bladder in Nigeria.[8] Amynad's hernia reported in Nigeria was in a 7-month-old boy.[9] There was also a reported case of bilateral sliding hernias.[10] A review article on hernias including their epidemiology using PubMed database showed men to have more hernias than women and even lesser chances of bowel sliding hernias in women.[11] Our index case was an adult female with bilateral indirect reducible inguinal hernia, in which one (left side) was sliding. This was a true type II sliding hernia. Although hernias generally occur more on the right side, sliding hernias are more frequently recorded on the left.[6,12]

The cause of this rare slide (sliding hernia) could be due to the long-standing nature of herniation leading to widening of internal ring[4] or an occurrence by chance. The diagnosis of a sliding hernia is usually made on table intra-operatively. This is mostly a test of the surgeon's knowledge of surgical anatomy and can be challenging even to the most experienced.[13,14] The surgical technique in handling sliding hernias have been described by Bendavid.[4] Tension free mesh repair with reconstruction of the internal ring still remains the gold standard for sliding hernias as it offers the least recurrence.[15, 16] This is what we also offered our patient. The need to avoid complications arising from dissection of a sac whose parts include the wall of viscus is paramount.

Our hospital is a rural centre in a modern village, where attendees are mainly rural dwellers from surrounding communities from where our patient came. Patients do not usually present for operations unless there is some form of sponsorship or life-threatening event associated with the pathology. The general bulk of herniorrhaphies done here are few compared to our mother centre in the nearby city of Yenagoa. However, report of a similar case has never been documented or published from any of the centres in the state.

CONCLUSION

This is a rare occurrence from our literature search. Therefore, care should be taken by the surgeon to always appreciate the anatomy of the inguinal region[14] of each case before dissection of tissues to avoid complications as every case is different from the previous.[17] We also believe further recruitment (with sponsorship) of such rural dwellers with long standing history of groin swellings are necessary to elaborate on timely and effective patient care and case studies that would improve surgical outcome in the rural environment.

COMPETING INTEREST/DECLARATION

The authors declare they have no conflict of interest.

ETHICAL APPROVAL/CONSENT

Consent was obtained from patient involved for surgery, and permission was also granted to take and publish photographs for academic/clinical purposes.

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