

A Content Inflamed Appendix Within Right Inguinal Hernia Sac: A Case Report

Anuja S¹, Amrutha P B¹, Dhanya Dharman², Shaiju S Dharan³

¹Pharm D Interns, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India

²Associate Professor, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India

³Principal/HOD, Department of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Marayamuttom, Thiruvananthapuram, Kerala, India

Corresponding Author: Anuja S

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ABSTRACT

Content inflamed within right inguinal hernia is also known as Amyand's hernia, is a rare clinical condition characterized by the similar complaints of an appendicitis. In case of strangulation or acute appendicitis occurring inside the hernia sac, the condition may be asymptomatic or manifest as an incarcerated hernia. Every surgeon should be ready to handle such an unforeseen event because the majority of these unusual instances are treated by urgent surgery without a preoperative diagnosis which makes this report informative.

Keywords: Inguinal hernia, content inflamed, laparoscopic appendicectomy, hernia repair

INTRODUCTION

An inguinal hernia is a protrusion of the abdominal contents through a weak spot in the lower abdomen wall. There are two opening through the lower abdominal wall, one on either side of the groin, where inguinal hernia can develop. Content inflamed appendix within infected right inguinal hernia (Amyand Hernias) are a rare form of inguinal Hernia in which the appendix is located within the hernia sac. This type usually present on the right position due the normal anatomic position of the appendix.^[1]

The great majority of these instances do not receive a preoperative diagnosis because an

Amyand's hernia typically mimics a strangulated inguinal hernia in terms of clinical presentation. In reality, there are very few examples of Amyand's hernias with preoperative diagnoses in the literature.^[2] The aim of this report is to present a rare and very interesting case of an Appendicitis inside in an inguinal hernia which is proved to be intraoperatively an Amyand's hernia with purulent fluid and a inflamed appendix within it.

CASE REPORT

A 57 years old male patient was admitted in General Surgery department in a tertiary care hospital presenting with the complaints of pain and swelling on right inguinal region. He had a medical history of bilateral inguinal Hernia repaired on 2011, Type 2 Diabetes Mellitus for last 8 years and Dyslipidemia for 20 years and was on Tab. Metformin 500mg TID, Tab. Atorvastatin 5mg HS. The patient was conscious and oriented with vitals stable. On physical examination a tenderness swelling on right inguinal region were noted. The USG Abdomen scan revealed finding that were suggestive of a infected right inguinal hernia with content inflamed appendix. Despite the fact that right inguinal region tenderness swelling, patient's ESR, CRP, FBS and HbA1C were raised with the

rest being normal. Hence the case was diagnosed as infected right inguinal hernia with content inflamed appendix.

Emergency surgery was conducted on the same day of admission. After cardiology and anesthesia clearance, he underwent right inguinal hernia repair. During the Laparotomic procedure a condition of content inflamed appendix was noted by the physician and thus underwent Appendicectomy with RIH repair under SA. During surgery Appendix base was not approachable through inguinal wound, so lower midline Laparotomy done. Mesoappendix divided using bipolar. Base of appendix ligated with 2-0 vicryl and divided. Haemostasis present, Laparotomy wound closed, deep ring tightened using to prolene. (figure 1a, 1b)



Figure 1a



Figure 1b

On the first day of admission the patient was treated with InjCefuday (Cefuroxime, 750mg, BD), Inj.Pantop (Pantoprazole, 40mg, OD), Inf.Pactiv (Paracetamol, 1g, Q8H), Tab Metformin (500mg, TDS), Tab.Atorva (Atorvastatin, 5mg, HS). Next day Inj.Cefuday was changed to Inj.Baryzone (Cefaperazone + Sulbactam, 1.5g, BD). Infection was managed with Cefuroxime on the first day then changed to Cefaperzone + Sulbactam combination, on the next day. Pain management was done by the administration of infusion Paracetamol. The medication was continued till the third day. Inj Pantoprazole was switched to Tab Pantoprazole from the fourth day. Infusion Paracetamol was changed to Tab Ultrase (Acetaminophen + Tramadol, TDS) on the fourth day. Tab Pruwel (Prucalopride, 2mg, HS) was added on the fourth day for softening stools. The above said

medications was continued till the sixth day. Patient was better at the time of discharge along with the following medications: Tab Zeropod (Cefpodoximeproxetil, 200mg, 1-0-1, 5 days), Tab rabimond (Rabeprazole, 20mg, 1-0-1, 5 days), Tab Chymoral forte (Trypsin chymotrypsin, 10000U, 1-0-1, 5 days), Tab Reduace DS (Diclofenac + Serratiopeptidase, 1-0-1, 2 days), Tab Ultrase (Acetaminophen + Tramadol, ½-½ - ½, 3 days), Tab Metformin (Metformin, 500mg, TDS), Tab Atorva (Atorvastatin, 10mg, HS), Inj Lantus (Insulin glargin, 0-0-10U), Enzoheal ointment (Mupirocin + Bromelian, L/A).

DISCUSSION

Hernia affects between 5% and 7% of people in the modern world, making it a widespread issue. Hernias are much more common in developing countries like India, which places a significant load on the healthcare system. Inguinal hernias make up about 75% of all groin hernias. As a result, repairing groin hernias is a procedure that often gets carried out all over the world. Content inflamed appendix within inguinal hernia is a rare condition in which appendix is lodged with food or fecal matter and cause blockage, this blockage becomes infected with bacteria leading to inflammation. Appendicular inflammation conduces to swelling and ultimately results in appendicular obstruction. Adult cases of an inflamed, perforated appendix or periappendicular abscess within an inguinal hernia tend to be profoundly less common and vary between 0.13% and 1%.^[3,4]

Many people with inguinal hernias are described as being asymptomatic or barely symptomatic.^[5] The underlying causes that might cause acute appendicitis within an inguinal hernia include compression in the external ring resulting from increases in intra-abdominal pressure and loss of the appendix's blood supply due to adhesions that may cause the hernia to be irreducible. Recurrent inflammation and bacterial proliferation are caused by these elements.^[6] Ultrasonography has a sensitivity of more

than 90% and a specificity of 82% to 86% for detecting groin hernias.^[7,8] Computed tomography and Magnetic resonance imaging can be diagnostic, however it is rarely used.

Treatment measures include surgical removal of protruded area and this is done by laparoscopic procedure and inflamed appendix can be treated by performing laparoscopic appendectomy. In our case content inflamed appendix within inguinal hernia and no signs of abdominal sepsis. The physician proceeded with an appendectomy through the herniotomy and a primary repair of the hernia. The outcome was excellent and the patient was discharged after completing the post operative period without any complication. Along with the surgery, the patient was also treated with antibiotics.

CONCLUSION

We present a case report of a rare condition, inguinal hernia within content inflamed appendix that can occasionally result in serious and life-threatening complications because of the peritoneal spread of the septic process. It is often difficult to diagnose and becoming a surgical challenge. In this case it was intraoperatively diagnosed about the inflamed appendix that was subsequently treated with an Appendectomy followed by hernial repair. This report will provide an awareness regarding the unusual instances during hernia repair and also reduce the medical emergency. However, more reports are needed to the surgeons for dealing with this rare situation to ensure optimal patient outcome.

Declaration by Authors

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