

## Left Sided Amyand's Hernia

Khalid Hussain, Aurangzeb, Maqbool Ahmed and Jovaria Masood

### ABSTRACT

The finding of an appendix in the hernial sac is a rare entity known as Amyand's hernia. It is even more rare when it occurs on the left side. We report a rare presentation of Amyand's hernia, where the appendix was found inflamed during surgery for a left sided obstructed inguinal hernia in a 40 years old male. The patient underwent appendicectomy and repair of the hernial sac and had an uneventful recovery. The possibility of the presence of a situs inversus or malrotation, as an underlying cause for the observed pathology, was excluded by X-ray examination.

**Key Words:** *Amyand's hernia. Appendix. Appendicitis. Inguinal hernia.*

### INTRODUCTION

The incidence of having a normal appendix within the hernial sac varies from 0.5% to 1%, and is complicated by acute appendicitis in 0.08% of cases, underscoring the rarity of the condition.<sup>1,2</sup> Correct pre-operative diagnosis is nearly impossible and is largely based on clinical suspicion.<sup>3</sup> Treatment consists of appendicectomy and repair of hernia without placement of mesh for fear of chronic wound infection, mesh sepsis, extrusion and fistulae.<sup>4</sup>

This case report describes the uncommon condition in an adult male.

### CASE REPORT

A 40 years old man presented with a long history of left sided inguinal mass irreducible for the last one day together with the sudden onset of pain in the left groin. He was afebrile with unremarkable abdominal examination. A tender swelling was present in the left groin, but the skin showed no signs of inflammation (Figure 1). The white blood count was  $8.4 \times 10^9/L$  with 79% neutrophils. Ultrasound examination confirmed the clinical diagnosis of a left-sided obstructed inguinal hernia. Cefuroxime 750 mg was given intravenously before the operation. The operation was performed through left inguinal incision and indirect hernia was found. The hernial sac was opened to reveal parts of the caecum and the vermiform appendix. The appendix showed signs of inflammation (Figure 2). However, no pus was seen and the appendix had not yet perforated. Appendicectomy using the standard left herniotomy incision was carried out. Due to the risk of infection

following appendicectomy, the initial plan to implant a mesh graft was aborted, and a Shouldice repair of the hernia was carried out after copious lavage of the area.

Histopathological examination confirmed the diagnosis of acute appendicitis. Situs inversus, or malrotation, as an underlying cause of the observed condition was excluded by an X-ray examination of the chest and abdomen. Postoperative recovery was uncomplicated, the wound healed well, and the patient was discharged 3 days after admission to the hospital.



**Figure 1:** Left sided complete inguinal hernia.



**Figure 2:** Caecum, appendix and terminal ileum in left sided inguinal hernial wound.

### DISCUSSION

A hernia is an abnormal protrusion of viscus or part of a viscus through a normal or abnormal opening, from the cavity which contains it. The term Amyand's hernia refers to presence of appendix within inguinal hernia, to honour Claudius Amyand, surgeon to King George II. He had first performed a transherniotomy appendicectomy on an 11-year-old boy with a perforated appendix within an inguinal hernia in 1736.<sup>3</sup>

There are four conditions responsible for left sided Amyand's hernia: situs inversus, mobile caecum, malrotation of intestine, and excessively long appendix.<sup>3</sup>

In this case, a mobile caecum was probably the cause, as other conditions were ruled out by X-ray examination of the thorax and abdomen. The presentation of an Amyand's hernia can vary and is often that of a strangulated or obstructed inguinal hernia. The diagnosis is

*Department of General Surgery, Combined Military Hospital, Rawalpindi.*

*Correspondence: Dr. Khalid Hussain, House No. 73-A, Lane 4, Sherzaman Colony, Talsa Road, Lala Zar, Rawalpindi.  
E-mail: khalid2170@yahoo.com*

*Received: July 27, 2011; Accepted: February 27, 2013.*

unlikely to be made pre-operatively and is frequently an unexpected intraoperative finding. Although pre-operative computed tomography (CT) of the abdomen may be helpful in reaching the correct diagnosis,<sup>5</sup> it is not a routine practice to subject the patient to CT scan after making a diagnosis of a complicated hernia. Therefore, the diagnosis could only be made intra-operatively, after opening the hernial sac.

The surgical options for tackling the appendix in an Amyand's hernia depend on the mode of presentation. The presence of a normal appendix does not require appendectomy, whereas acute appendicitis necessitates appendectomy within the hernial sac.<sup>6</sup> Johari *et al.* suggested appendectomy in case of left sided Amyand's hernia irrespective of the condition of appendix.<sup>7</sup> The reason for appendectomy in normal looking appendix on left side is that any future appendicitis will have an atypical presentation and can cause diagnostic confusion. Prosthesis should not be used in the repair of contaminated abdominal wall defects because it can increase the inflammatory

response and result in surgical site infection and possibly increased recurrence rate.<sup>4</sup>

## REFERENCES

1. Logan MT, Nottingham JM. Amyand's hernia: a case report of an incarcerated and perforated appendix within an inguinal hernia and review of the literature. *Am Surg* 2001; **67**:628-9.
2. Flood L, Chang KH, McAnena OJ. A rare case of Amyand's hernia presenting as an enterocutaneous fistula. *JSCR* 2010; **7**:6.
3. Breitenstein S, Eisenbach C, Wille G, Decurtins M. Incarcerated vermiform appendix in a left sided inguinal hernia. *Hernia* 2005; **9**:100-2.
4. Sharma H, Gupta A, Shekhawat N, Memon B, Memon M. Amyand's hernia: a report of 18 consecutive patients over a 15-year period. *Hernia* 2007; **11**:31-5.
5. Luch JS, Halpern D, Katz DS. Amyand's hernia: prospective CT diagnosis. *J Comput Assist Tomogr* 2000; **24**:884-6.
6. Franko J, Raftopoulos I, Sulkowski R. A rare variation of Amyand's hernia. *Am J Gastroenterol* 2002; **97**:2684-5.
7. Johari HG, Paydar S, Davani SZ, Eskandari S, Johari MG. Left-sided Amyand hernia. *Ann Saudi Med* 2009; **29**:321-2.

