

Case Report

Left sided obstructed Amyand's hernia: a rare case report

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ABSTRACT

Amyand's hernia is a rare form of an inguinal hernia (less than 1% of inguinal hernias) which occurs when the appendix is a part of hernial sac. Because of anatomical position of the appendix, it is most commonly found in the right sided hernial sac and it can also be accompanied by the caecum and/or right colon. In rare case, Amyand's hernia can appear on the left side also. Here we report a case of left sided amyand's hernia with acute perforated appendicitis in a 58 years old male patient at GMERS hospital, Dharpur, Patan, Gujarat, India.

Keywords: Left Amyand's hernia, Perforated appendix, Obstructed hernia

INTRODUCTION

One of the rarest form of inguinal hernia (less than 1%) is Amyand's hernia. When appendix is a part of hernial sac and becomes incarcerated, then it is known as Amyand's Hernia. In this communication, we report a case of left sided obstructed Amyand's hernia with acute perforated appendicitis in an adult patient at G.M.E.R.S. Hospital, Dharpur, Patan, North Gujarat India.

Amongst general population, Amyand's hernia occurrence is 0.4–0.6% among inguinal hernias. In children, this occurrence is high, upto 1%.¹ Because of anatomical position of appendix, it is most commonly found in the right sided hernial sac. It can be accompanied by the caecum and/or right colon. In extremely rare situations, Amyand's hernia would appear on the left side and literature reports only 13 pediatric cases.²

CASE REPORT

A 58-year-old man presented with a history of vomiting for 3 to 4 times in last 24 hrs. He also had huge

inguinoscrotal swelling on left side (Figure 1). Patient also complained of not passing stool for 2 days along with dragging abdominal pain.



Figure 1: Left sided obstructed Amyand's hernia.

His physical examination revealed huge obstructed hernia on left side. His body temperature was normal, his pulse rate was 90 /minute and his blood pressure was 100/60 mmHg.

Laboratory investigations, including renal function test, liver function tests, serum electrolyte levels and complete blood count, were within normal limits, except for serology for HBsAg was reactive.

Plain X-ray chest was normal. Abdominal radiography showed dilated bowel loops.

SURGERY

On Surgical exploration, it was found that hernia sac was containing loops of ileum, caecum and appendix. Appendix was perforated at base (Figure 2).

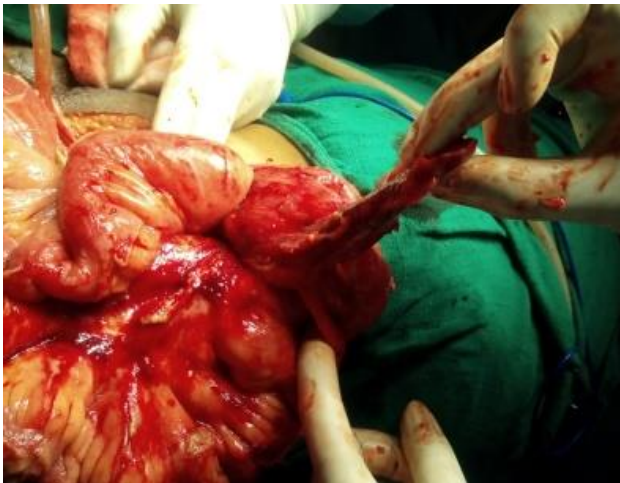


Figure 2: hernial sac containing perforated appendix, perforation at base.

Rest bowel loops were dilated maintained vascularity. Standard appendectomy was performed (Figure 3) along with left sided orchidectomy and herniorrhaphy was done.



Figure 3: Post appendectomy, viable bowels.

Histopathology report of specimen was suggestive of

- Changes of acute appendicitis
- Atrophied testis with absence of spermatogenesis.

DISCUSSION

The presence of the appendix within the hernial sac is referred as Amyand's hernia which involves either an inflamed or perforated appendix within an inguinal hernia, or presence of a non-inflamed appendix within an irreducible inguinal hernia. The occurrence of a normal appendix within an inguinal hernial sac is as low as 1%, and also only 0.1% of all cases of appendicitis present in an inguinal hernia. Amyand (sergeant surgeon to King George I and II) in 1735 reported an appendix in inguinal hernia for the first time. Amyand found a perforated appendix in a boy of age 11 who had right inguinal hernia and faecal fistula.¹

The frequency of acute appendicitis in hernial sac is much less. Furthermore in one of the clinically rarest condition, perforated appendix and peri-appendicular abscess formation is observed within an inguinal hernia sac.^{3,4}

The right sided Amyand's inguinal hernia is more frequent as compared with left sided due to normal anatomical position of the appendix. As a result of uncommon appearance, only 14 patients with left side inguinal hernias have been appeared up to 2013.¹

The pathophysiology of occurrence of appendicitis in Amyand's hernia is still unknown. In most of the cases of Amyand's hernia, appendix were seen incarcerated within a hernia. There is a hypothesis saying that inflammation of appendix can lead to incarceration and subsequent ischemia and overgrowth of bacteria was supported by several authors. Changes in abdominal pressure and muscle contraction can cause compression of appendix which causes decreased blood supply and secondary inflammation.^{5,6}

Left sided Amyand's hernia is rare entity but can be seen in association with (a) situs inversus, (b) intestinal malrotation or(c) a mobile caecum.

Preoperative diagnosis of amyand's hernia is usually uncommon because imaging is not routine. Left-sided hernias may require postoperative imaging to exclude situs inversus or intestinal malrotation. The decision to perform an appendectomy and type of repair depend on the clinical situation and are guided by Losanoff and Basson's criteria (Table 1).^{5,7}

Management of Amyand's hernia depends on the mode of presentation.

The presence of a normal appendix does not require appendectomy, whereas if there is acute appendicitis, appendectomy is mandatory.

Table 1: Losanoff and Basson's criteria: classification of Amyand's hernias and their plan of management.^{5,7}

Classification	Description	Surgical management
Type I	Normal appendix in inguinal hernia	Hernia reduction; mesh repair; appendectomy in young patients
Type II	Acute appendicitis within an inguinal hernia and no abdominal sepsis	Appendectomy through hernia; primary repair of hernia; no mesh
Type III	Acute appendicitis within an inguinal hernia or the abdominal wall or peritoneal sepsis	Laparotomy; appendectomy; primary repair of hernia; no mesh
Type IV	Acute appendicitis within an inguinal hernia with related or unrelated abdominal pathology	Management as detailed above for hernia type I–III and treat the second pathology as appropriate

Perforation of the appendix and the presence of pus, is an absolute contraindication for placement of a mesh for hernia repair.

Fernando and Leelaratra defined Amyand hernia as an inguinal hernia containing (a) a non-inflamed appendix, (b) an inflamed appendix, or (c) a perforated appendix^{8,9,10}

Classification and management of Amyand's hernia has been given by Losanoff and Basson (Table 1).^{5,7}

CONCLUSION

We have reported one of the rare cases of left sided obstructed Amyand's hernia. Except for serology HBsAg reactive and dilated bowel loops other investigations and vital parameters were found normal. After 3-4 hours of admission, this patient was operated upon with Herniorrhaphy with appendectomy and left orchidectomy.

Since the start of our hospital (GMERS Hospital, Dharpur, 2010), this is first case reported.

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