

## **Case Report:**

# **Amyand's Hernia: Case Report**

**Abdullah H. Alziyadi<sup>1</sup>; Turki F.Alharthi<sup>1</sup>; Abdulmajed G.Alharbi<sup>1</sup>**

**Budur T. Althubaiti\***

<sup>1</sup>Medical Intern, Taif University School of Medicine, Taif, Saudi Arabia. .

\* Senior general surgery resident, Alhada Armed Forces Hospital, Taif, Saudi Arabia.

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## **Abstract:**

A hernia is the protrusion of an organ or its fascia through the wall of a containing cavity, hen an organ is contained within a non-reducible hernia, it is termed an incarcerated hernia. A case of Fifty-year-old male with no history of chronic diseases presented to emergency department with bulging of right groin mass, this patient diagnosed as Amyand's Hernia. Appendectomy with simultaneous hernioplasty has been performed for this patient and the symptoms resolved.

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## **Introduction**

A hernia is the protrusion of an organ or its fascia through the wall of a containing cavity, hen an organ is contained within a non-reducible hernia, it is termed an incarcerated hernia. A strangulated hernia may result secondary to venous and lymphatic obstruction. Necrosis susceptible if we have strangulated hernia, with sequence of perforation, rupture, and spillage of bowel contents, and eventually peritonitis. Inguinal hernia is high frequent condition with prevalence of 1.2% of the population. Inguinal hernia has no preference for age group or sex, It has an incidence that varies from 0.19 to 1.7%. Appendicitis in this condition has an incidence of 0.07–0.13%, regardless presentation stage. Only 0.1% represent perforated appendix. with mortality range from 15 to 30% due to sever sepsis.(1,2)

## **Case presentation**

Fifty-year-old male with no history of chronic diseases presented to emergency department with bulging of right groin mass for 1 week. The condition associated with Constipation and obstipation for 3 days before admission. The pain was gradual in onset and constant course and localized not radiating. Nausea and vomiting was developed latterly. Patient had no history of specific disease such as diabetes, hypertension, chronic cough, inflammatory bowel disease or ischemic heart disease and he denies any prolonged use of any medication.

Patient's temperature was 36.4 C and normal rate and rhythm pulse. The abdomen was soft and lax with no tenderness but in the right groin there was a 3 x 4 cm irreducible to digital maneuvers with firm and tender bulging mass which was extended into right scrotum and was erythematous. The lab result showed leukocytosis of 11000 Wbcs/ dl, LDH: 439 U/dl, Amylase: 71 U/dl and ABGs showed pH: 7.5, PO<sub>2</sub>: 54 mmHg, PCO<sub>2</sub>: 41mmHg, bicarbonate: 23.8mEq/l, Base Excess: 2 mEq/l. Abdominal X-ray was done with no significant finding. Patient was diagnosed as incarcerated inguinal hernia. appendectomy with simultaneous hernioplasty has been performed. The erythematous and edematous spermatic cord and hernial sac appeared. About 15 ml of pus found inside the sac. Also, an inflamed and perforated appendix was seen at the distal end of the sac. Appendectomy was carried out followed by abdominal irrigation with normal saline. Herniorrhaphy was done and a vacuum drain was made in that area.

#### **Discussion:**

The incidence of an Amyand's Hernia is near to 1% of inguinal mostly occur in male. Commonly there are 1 located on the right side due to the location of the appendix. The appendix has also been found in obturator, umbilical and incisional hernias also. only 0.1% of inguinal hernia has an inflamed appendix(3). That may result inflammation of the appendix causing edema of the internal inguinal ring or incarceration of a normal appendix by abdominal wall musculature. Acute appendicitis occurs much less frequently, and perforated appendix and peri appendicular abscess formation within an inguinal hernia sac is an extremely rare clinical entity.(4)

The clinical presentation in Amyand's hernia is similar to that of a strangulated hernia with local peritonism. It is difficult to be able to diagnose Amyand's hernia pre-operatively. Only (CT scan) of the abdomen may be useful. CT scan provides only indirect clues and diagnosis is almost done intraoperatively(5). Preoperative ultrasound diagnosis of Amyand's hernia has rarely been reported in the literature. Preoperative diagnosis plays an important role in decision making and planning the repair procedure. Ultrasound is readily available, cheap and free from radiation. It is effective in identifying abnormal appendixes, especially in thin patients. color Doppler is another common finding in acute appendicitis(6).

hernia plus appendicitis, many years ago the use of prosthetic mesh in clean contaminated or contaminated wounds was contraindicated. This idea still being applied for many old school surgeons(7). There is worldwide investigation supports the use of prosthetic mesh in contaminated fields in multiple scenarios including strangulated hernias with bowel resection, trauma open abdomen or procedures including breaching gastrointestinal tract(8).

Amyand's hernia is a rare condition that has been frequently diagnosed accidentally during a hernioplasty, and especially an incarcerated inguinal hernia diagnosed in the emergency room. The proper treatment should involve appendectomy through the herniotomy with primary hernia repair without the use of any synthetic mesh.(9)

#### **Conflict of Interests:**

The authors declare that there is no conflict of interests to publish this paper.

Keywords: General surgery, Amyand's Hernia, Hernia, appendectomy

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