A RARE CASE OF AMYAND’S HERNIA

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ABSTRACT

BACKGROUND
Amyand’s hernia is a rare disease seen in approximately 1% of all hernias. The presence of vermiform appendix in normal or inflamed in the inguinal hernia is referred to as Amyand’s hernia. Its treatment depends on the grade of inflammation of the appendix. In fact, it can range from the simple repair of the abdominal defect with a prosthetic mesh to appendectomy, small bowel resection and repair of the abdominal wall defect without a mesh.

Forty year old male patient presented with history of right inguinal mass, which was insidious in onset that progressively grew over six years with associated acute pain. Swelling size of 4 * 3 cm present on right inguinal region not extending to the scrotum, which is irreducible, expansible cough impulse present. The correct preoperative diagnosis is difficult and requires an awareness of this entity with findings of tender hernia without Radiological and Clinical signs of obstruction.

KEYWORDS
Amyand’s Hernia


BACKGROUND
Amyand’s hernia is a rare disease seen in approximately 1% of all hernias. Complications of it like acute appendicitis are even more rare, about 0.1%. Its diagnosis is difficult in the preoperative period. It is usually an incidental finding. Acute appendicitis within an “Amyand’s hernia” could be a life-threatening condition unless tackled immediately. This disease is often very difficult to diagnose and most of the time it can be confused with an incarcerated or strangulated inguinal hernia. Often, it requires an emergent surgical treatment.

The presence of vermiform appendix in normal or inflamed in the inguinal hernia is referred to as Amyand’s hernia. Acute appendicitis is the most common cause of pain in right iliac fossa. The eponym “Amyand hernia” was first suggested by Creese in 1953, then by Hiatt and Hiatt in 1988 followed by Hutchinson in 1993, in recognition of Claudius Amyand.

Claudius Amyand (1680 - 1740) was a French Huguenot in exile in Britain, a military surgeon, Sergeant in the British Army and a Surgeon to King George II, Fellow of the Royal Society, first Principal Surgeon to the Westminster Hospital, and the founder and first Principal Surgeon to St. George’s Hospital.

Its treatment depends on the grade of inflammation of the appendix. In fact, it can range from the simple repair of the abdominal defect with a prosthetic mesh to appendectomy, small bowel resection and repair of the abdominal wall defect without a mesh.

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Presentation of the Case
A forty-year-old male patient presented with history of right inguinal mass, which was insidious in onset that progressively grew over six years with associated acute pain. The patient was a known chronic smoker and was taking treatment from outside on and off.

O/E
INTRAOPERATIVE FINDING

We proceeded with a skin crease incision over the right inguinal region, incision deepened to external oblique aponeurosis. On opening the hernial sac, normal caecum and the inflamed appendix were found lying within along with adhesions to the sac. Appendicectomy was performed through the inguinal incision only. A thorough wash was given by normal saline and Bassini’s repair without using mesh. The sheath was closed with prolene 1-0. The patient recovered very well in the post-operative period. No immediate post-operative complications were seen.

DISCUSSION

Amyand’s hernia is a rare condition and frequency is more in males and almost exclusively on right side.

Appendicitis in this condition remains same, although triggering factor can vary from obstruction to direct trauma over the hernia, both causing a reducible vascular flow, ischaemia and infection.

Case Report

In the cases where an inflamed supportive or perforated appendicitis is encountered, no prosthetic material should be used because of the increased risk of surgical site infection and a possible fistula formation from appendicular stump.

An Amyand’s hernia is virtually always diagnosed intra-operatively. Computer tomography can be diagnostic; however, it is rarely used due to the fact that such a hernia usually mimics either a simple reducible or an incarcerated inguinal one and is therefore admitted for elective or emergency surgery respectively without using any prospective imaging techniques.

The correct preoperative diagnosis is difficult and requires an awareness of this entity with findings of tender hernia without Radiological and Clinical signs of obstruction.

Management should be individualised according to appendix’s inflammation stage, presence of abdominal sepsis and co-morbidity factors. The Losanoff-Basson classification presented offers a satisfactory guidance system.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
<th>Management</th>
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<tbody>
<tr>
<td>Type 1</td>
<td>Normal appendix in an inguinal hernia</td>
<td>Hernia reduction, mesh placement</td>
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<tr>
<td>Type 2</td>
<td>Acute appendicitis in an inguinal hernia with no abdominal sepsis</td>
<td>Appendectomy, primary, no prosthetics hernia repair</td>
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<tr>
<td>Type 3</td>
<td>Acute appendicitis in an inguinal hernia with abdominal and abdominal wall sepsis</td>
<td>Laparotomy, appendectomy, and primary no prosthetic hernia repair</td>
</tr>
<tr>
<td>Type 4</td>
<td>Acute appendicitis in an inguinal hernia with abdominal concomitant pathology</td>
<td>Same as type 3 plus management of concomitant disease</td>
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Table 1. Losanoff and Basson Classification of Amyand Hernia

Most surgeons agree that the presence of acute appendicitis (Losanoff – Basson, type 2 - 4) within a hernia should be a contraindication for the use of synthetic meshes or plugs.

However, a point of disagreement is whether or not to perform an appendectomy in a case of a Losanoff-Basson type 1 Amyand’s hernia (normal appendix within inguinal hernia). The decision should be based on factors like the patient’s age, the size and anatomy of the appendix, the side in which the hernia occurs and finally the extension of the intraoperative manipulations that can by themselves trigger an inflammatory process.

The mortality rate for Amyand’s hernia varies from 14 - 30% and it is associated with septic complications.

CONCLUSION

Appendicitis within an Amyand’s hernia is rare and when it occurs it is usually misdiagnosed as strangulated inguinal hernia which also represents as a surgical emergency. The proper treatment should involve appendectomy, though herniotomy with primary hernia repair.

Swelling size of 4 * 3 cm present on right inguinal region not extending to the scrotum which is irreducible, expansible cough impulse present, skin over the swelling normal, tenderness present. Scrotum examination was normal and testis could be felt separately. Bowel sounds were present. No rebound tenderness was revealed by the clinical examination of the abdomen.4,5
REFERENCES