Open Journal of
Clinical & Medical
Case Reports

Volume 6 (2020)
Issue 2

ISSN: 2379-1039

Amyand's hernia: Inguinal incision or laparoscopic approach

Montuori Mauro*; Pinotti Enrico; Andretta Michele; Pirovano Riccardo; Brescacin Alessandra; Mauri Giammaria; Pozzi Roberto; Cirelli Bruno; Michele Vasino Ciocca; Zago Mauro

***Corresponding Author(s): Montuori Mauro**
Department of Surgery, Policlinico San Pietro, Ponte San Pietro (BG), Italy
Email: mauro.montuori@hotmail.it

Abstract

Amyand's hernia is a very rare condition. We present a case admitted to our department with ultrasonographic and CT scan image. This case can help clinicians in identification and manegement of this rare pathology.

Keywords

amyand's hernia; inguinal hernia; acute appendicitis; appendix

Introduction

Inguinal hernia is one of the most common surgical operation. In approximately between 0.08% and 1% of adult inguinal hernia [1,2], the content of the hernial sac is the appendix. This condition is called Amyand's hernia in honor to surgeon who published the first case. Amyand, in that occasion, perform the first appendectomy in history [3].

The presence of the appendix inside a crural hernia is sometimes confused with Amyand's hernia, but the correct name of this condition is DeGarengeot [4].

Case Presentation

A 84-year-old female with a positive history for hypertension and atrial fibrillation was admitted to our emergency department, with a 2 days history of abdominal pain in the right iliac fossa, without nausea or vomiting.

The patient underwent blood investigations which showed a total white blood cell count (WBC) of 10.9 × 109/L, and a serum C-reactive protein (CRP) level of 10.7 mg/dL. The rest of the haematological investigations were normal.

Physical examination of the abdomen evoked moderate pain on deep palpation in the right iliac fossa with a negative blumberg maneuver. There was a right inguinal swelling, hot, with redness of the skin, painful to touch. The physical examination of the inguinal region also showed the presence of a bilateral inguinal hernia. Ultrasonography (Figure 1) showed the presence of an elongated structure within the inguinal canal, surrounded by corpuscular fluid. Given the strange ultrasound finding, the patient underwent a CT scan which showed the inflamed cecal appendix involved inside the right inguinal hernia (Figure 2).

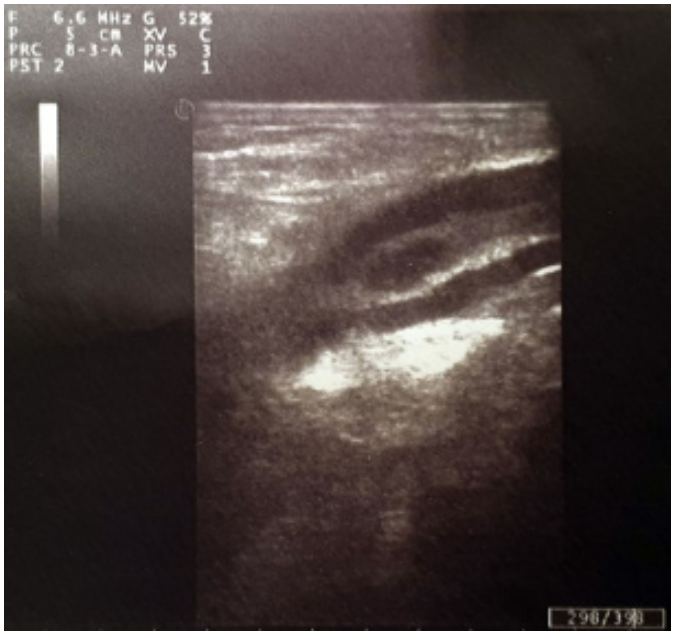

Figure 1: Ultrasonography of the inflamed appendix within the inguinal canal

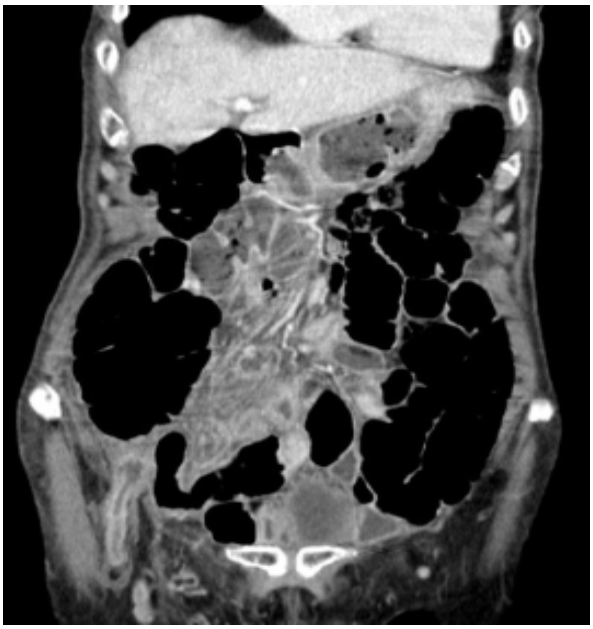

Figure 2: CT Scan that show the inflamed appendix through the inguinal ligament.

After informed consent, the patient was operated under general anaesthesia. We treated our patient with a laparoscopic approach. At the laparoscopic exploration of the abdominal cavity we founded a turbid abdominal effusion near the caecum and in the pelvis. The appendix was effectively involved in the inguinal hernial sac, as supposed, it has a perforation at its base that appeared necrotic, the rest of the appendix was inflamed.

We performed appendectomy by using an Echelon 40mm blue charge stapler (Ethicon, Johnson & Johnson, New Brunswick, NJ). We did not perform a concomitant hernioplasty in consideration of the appendiceal inflammation and of the presence of corpuscular material inside the hernial sac.

The patient received 24 hours antibiotic therapy with cefoxitin 2g. The postoperative course was uneventful and the patient was discharged 5 days after surgery. Histology confirmed necrotic appendicitis.

Discussion

Inguinal hernia repair is one of the most common operations. Different organs can be found in the hernial sac, including small or large intestine, Meckel's diverticulum, tubes, ovaries, bladder, and in approximately between 0.08% and 1% of adult inguinal hernia [1,2] the appendix.

This rare condition is called Amyand's hernia [3] from the name of the surgeon who described it in the 1735. There is no specific clinical features, clinical presentation could include irreducible painful hernia, right iliac fossa tenderness and cutaneous erythema.

The management is still debated. In incidental Amyand's hernia, the suggested approach in literature include hernioplasty without appendectomy in order to avoid contaminating a sterile surgical field for a theoretically increased risk of surgical site infection. The size of this risk is unknown.

However the manipulation of the appendix may stimulate an inflammation of the appendix [5]. The management in not inflamed appendix depend than on the personal belief about the balance between surgical site infection e future risk of appendicitis.

The inflammation of the appendix in Amyand's hernia is a rare complication, that occurs in 0.13% possible due to the compression of the appendix into the hernial sac from an increased intra abdominal pressure [6] and the management of this rare condition is not standardized.

The presence of a recurrent hernia with acute appendicitis is an extremely rare event. [6] There is the possibility to perform a totally extraperitoneal (TEP) or trans-abdominal pre-peritoneal (TAPP) procedures, but we have excluded this approach due to the excessive risk of infection, also considering a risk of mortality between 14 and 30% in most of the perforated appendicitis cases.

Conclusion

In case of incarcerated inguinal hernia, with local inflammatory signs, the Amyand's hernia must be considered in differential diagnosis. Ultrasonography could help in the diagnosis, but CT scans should be used in doubt cases to achieve correct preoperative diagnosis.

References

1. Carey LC. Acute appendicitis occurring in hernias: a report of 10 cases. Surgery. 1967; 61: 236–238.

2. D'Alia C, Lo Schiavo MG, Tonante A, Taranto F, Gagliano E, Bonanno L, et al. Amyand's hernia: case report and review of the literature [Internet]. Hernia. 2003. pp. 89–91.

3. VIII. Of an inguinal rupture, with a pin in the appendix coeci, incrusted with stone; and some observations on wounds in the guts [Internet]. Philosophical Transactions of the Royal Society of London. 1735. pp. 329–342.

4. Akopian G, Alexander M. De Garengeot hernia: appendicitis within a femoral hernia. Am Surg. 2005;71: 526–527.

5. Hutchinson R. Amyand's hernia. J R Soc Med. 1993;86: 104–105.

6. Ranganathan G, Kouchupapy R, Dias S. An approach to the management of Amyand's hernia and presentation of an interesting case report. Hernia. 2011; 15: 79–82.

Manuscript Information: Received: December 11, 2019; Accepted: January 27, 2020; Published: January 31, 2020

Authors Information: Montuori Mauro*; Pinotti Enrico; Andretta Michele; Pirovano Riccardo; Brescacin Alessandra; Mauri Giammaria; Pozzi Roberto; Cirelli Bruno; Michele Vasino Ciocca; Zago Mauro
Department of Surgery, Policlinico San Pietro, Ponte San Pietro (BG), Italy

Citation: Montuori M, Pinotti E, Andretta M, Pirovano R, Brescacin A, Mauri G, Pozzi R, Cirelli B, Ciocca Vasino M, Zago M. Amyand's hernia: Inguinal incision or laparoscopic approach. Open J Clin Med Case Rep. 2020; 1623.

About the Journal: Open Journal of Clinical and Medical Case Reports is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.
Visit the journal website at www.jclinmedcasereports.com
For reprints and other information, contact info@jclinmedcasereports.com