An incarcerated Amyand’s Hernia: Shall we Apply Appendectomy Routinely?

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ABSTRACT
Amyand’s hernia is a very rare clinical condition characterized by the presence of a normal or inflamed appendix within the inguinal hernia sac. It may be present as an acute appendicitis inside the sac or incarcerated hernia. Sometimes it may be asymptomatic. We report a case of 70-year-old male patient that was presented to our emergency service with a huge right inguinal mass that was diagnosed as an incarcerated inguinal hernia and underwent operation. The intraoperative findings included small intestinal segment, large omental tissue and mobile cecum with healthy appendix inside the sac. There was no sign of strangulation. Lichtenstein herniorrhaphy was done without appendectomy.

Key Words: Amyand’s hernia, incarceration, appendix vermiformis

INTRODUCTION
An appendix vermiformis in an inguinal hernia sac, with or without appendicitis, is called Amyand’s hernia [1]. Claudius Amyand in the year 1735 performed appendiceal resection in treatment of this case [2]. In his honor, inguinal hernia containing appendix vermiformis has been named after him. It is an extremely rare condition, non-inflamed appendix in the hernia sac can be seen up to 1% of all inguinal hernias [3]. In this study we aim to present a 70-year-old incarcerated Amyand’s hernia patient.

Case Report
A 70-year-old male patient was presented to our clinic with a huge right inguinal mass which had been protruding for 5 years prior to hospital admission. He stated that the mass increased in size when standing and before defecation but decreased in size after stool passage or lying down. Severe tenderness had been noted for 3 days and the mass was not reducible recently. Additionally, he had experienced urinary frequency and nocturia. In his medical history, hypertension with regular drug control was found out. The patient was interned for surgical intervention with the diagnosis of incarcerated inguinal hernia.

Laboratory tests were within normal limits. Blood pressure was controlled. Patient was taken to the operating room for emergent surgery and underwent a general anesthesia. A right oblique inguinal incision was used. The surrounding adhesions were rigorously dissected and hernia sac was opened. Small intestine, large omental tissue, mobilized cecum with ascending colon and a normal appendix (Figure 1) were explored within the indirect incarcerated hernia sac arising from a narrow internal inguinal ring. There was no sign of strangulation. All the component reducted to abdominal cavity. Herniorrhaphy was done by Lichtenstein method with polypropylene mesh. Appendectomy wasn’t done. Postoperatively patient’s condition was uneventful and he was discharged on the next day with normal intestinal activity. He was followed up at our clinic without any further complication.
Incarcerated Amyand’s Hernia

Incarcerated Amyand’s Hernia

Within an inguinal hernia, without signs of peritonitis and abdominal sepsis. Appendectomy through herniotomy with primary repair of hernia with Bassini or Shouldice technique (no mesh) is proposed. In type 3, peritonitis with abdominal sepsis exists. Laparotomy, appendectomy and peritoneal lavage and subsequent hernia repair without mesh are indicated. Finally, in type 4, some other related or unrelated abdominal pathology exists. A laparotomy in terms of identification and treatment of this pathology should be performed. Appendectomy and hernia repair without mesh should follow [11]. Most surgeons agree that the presence of acute appendicitis (Losanoff-Basson type 2,3,4) within a hernia should be a contraindication for the use of synthetic meshes or plugs. However, there is a conflict among surgeons whether or not to perform an appendectomy in type 1 [8,9]. In our case, a type 1 Amyand’s hernia, there was no sign of appendicitis and we applied mesh hernioplasty without appendectomy.

Preoperative diagnosis in this unusual condition is very difficult. Computed tomography may be useful in diagnosis but are not performed routinely. Although our patient was presented as an emergency case and strangulation was considered during the preoperative period, we did not order abdominal CT scanning [6]. As in our case almost all surgeons make the diagnosis intraoperatively. Strangulated hernia, strangulated omentocele, Richter’s hernia, testicular tumor with hemorrhage, acute hydrocele, inguinal adenitis, and epididymitis should be thought on differential diagnosis [6,14].

In conclusion, Amyand’s hernia is a very rare unexpected situation that may be diagnosed incidentally during an inguinal hernia operation and every surgeon should consider the possibility of coping with Amyand’s hernia. The decision as to whether surgeon should perform appendectomy or only hernioplasty is case relevant. As a result, we suggest that the decision to apply appendectomy and/or use prosthetic mesh material should be decided according to the intraoperative surgical findings.

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Incarcerated Amyand’s Hernia

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