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AMYANDS HERNIA A Rare case report

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Abstract : In 1735, Claudius Amyand, surgeon to King Georges II, performed the first recorded appendectomy for a perforated appendicitis within the inguinal canal thus Amyand's hernia became the term to describe appendicitis, an inflamed appendix or a non inflamed appendix within an inguinal hernia. The presence of the vermiform appendix contained in the hernia sac, or an Amyands hernia, is exceedingly rare, occurring in 1 of inguinal hernia patients. The incidence is estimated to be 1 of adult inguinal hernia repair, but the reported incidence of appendicitis in the inguinal sac is rarer and ranges between 0.08 to 0.13. we report the case of amyands hernia for its clinical presentation, management and rare entity. Mr.Boominathan, 56male, Admitted in emergency as suspected case of obstructed right inguinal hernia, patient had inguinal hernia for 7 years and pain over the hernia for past 1 month and not reducing for past 15 days, on examination an oblong shaped right inguinal swelling of size 20x15x10 cm, manually partially reducible with gurgling, cough impulse present, diagnosed as Irreducible right inguinal hernia with enterocele and posted for elective hernioplasty, pain over the hernia subsided after antibiotic therapy. During surgery patient was found to have appendix without macroscopic evidence of acute inflammation in hernial sac Amyands type 1, hence appendicectomy and hernioplasty done, post operative period was uneventful, discharged in stable clinical condition, post operative histopathological examination of appendix was acute appendicitis (Amyands type 2) .

The decision to perform an appendectomy orand use the mesh repair should always be individualized to the patient. The decision as to whether one should perform a simultaneous appendectomy and hernia repair is multifactorial. It is important to be aware of all clinical settings and an appropriate and individualized approach should be applied. The presence or absence of inflammation of the appendix is a very important determinant of appropriate treatment. In our case macroscopically no evidence of acute appendicitis hence mesh repair done, but microscopically proved as acute appendicitis which is in hernial sac is a rare entity.

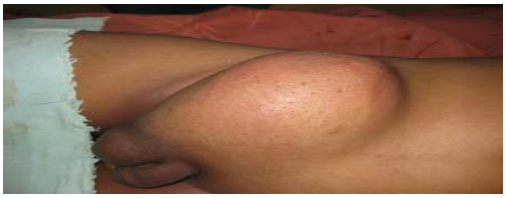
Keyword :AMYANDS HERNIA, APPENDICECTOMY, HERNIOPLASTY

INTRODUCTION

In 1735, Claudius Amyand, surgeon to King Georges II, performed the first recorded appendectomy for a perforated appendicitis within the inguinal canal thus Amyand's hernia became the term to describe appendicitis, an inflamed appendix or a non inflamed appendix within an inguinal hernia. The presence of the vermiform appendix contained in the hernia sac, or an Amyand's hernia, is exceedingly rare, occurring in 1% of inguinal hernia patients.The incidence is estimated to be 1% of adult inguinal hernia repair, but the reported incidence of appendicitis in the inguinal sac is rarer and ranges between 0.08 to 0.13%. we report the case of amyand's hernia for it's clinical presentation, management and rare entity

CASE PROFILE

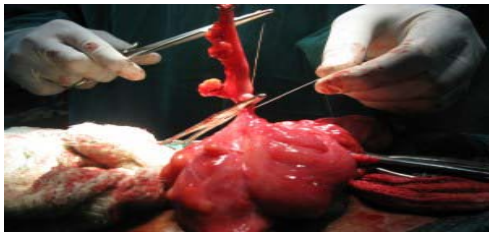
Mr.Boominathan, 56/male, Admitted in emergency as suspected case of obstructed right inguinal hernia, patient had inguinal hernia for 7 years and pain over the hernia for past 1 month and not reducing for past 15 days, on examination an oblong shaped right inguinal swelling of size 20x15x10 cm, manually partially reducible with gurgling, cough impulse present, diagnosed as irreducible right inguinal hernia with enterocele and Basic investigationsfor assessment for anaesthesia were normal, ultrasonagram abdomen / inguinal region showed right indirect hernia with bowel as a content. case posted for elective hernioplasty, pain over the hernia subsided after antibiotic therapy.



PREOPERATIVE IMAGE OF RIGHT INGUINAL HERNIA

During surgery patient was found to have appendix without macroscopic evidence of acute inflammation in hernial sac – Amyand's type 1,but appendix was found to be long with small palpable fecolith. hence appendicectomy and hernioplasty done, post operative period was uneventful, discharged in stable clinical condition, post operative histopathological examination of appendix was acute appendicitis(Amyand's type 2)

APPENDIX IN SAC



APPENDICECTOMY

HERNIOPLASTY

APPENDICECTOMY SPECIMEN

DISCUSSION

The probability of a person to have the disease of acute appendicitis in her/his life is 8%, and occurrence of an asymptomatic appendix within an hernia sac is a rare entity accounting for 1%. However, the incidence of an acute appendicitis in a sac of inguinal hernia is an even less common, it is about 0.13% . Many individuals having an inguinal hernia are reported as asymptomatic or minimally symptomatic. Ryan reported in 1937 that 11 of 8692 cases (0.13 %) of appendicitis were located in external hernia sacs. Thomas et al reported only 7 acute appendicitis occurring in an external hernia sac during 8 years. The average age was calculated as 69.4. The age of our case was also 56 . The incidence of acute appendicitis in an hernia sac is reported between 0.008% and 1% in the English-language literature. Classification of Amyand Hernias, after Losanoff and Basson

Classification	Description	Surgical management
Type 1	Normal appendix within an inguinal hernia	Hernia reduction, mesh repair, appendicectomy in young patients
Type 2	Acute appendicitis within an inguinal hernia, no abdominal sepsis	Appendicectomy through hernia, primary repair of hernia, no mesh
Type 3	Acute appendicitis within an inguinal hernia, abdominal wall, or peritoneal sepsis	Laparotomy, appendicectomy, primary repair of hernia, no mesh
Type 4	Acute appendicitis within an inguinal hernia, related or unrelated abdominal pathology	Manage as types 1 to 3 hernia, investigate or treat second pathology as appropriate

An inflamed appendix is an emergency condition. In the case of Amyand's hernia, diagnosis is almost always made intraoperatively. Nonetheless, to our knowledge, Weber is the unique surgeon who suggested that he was detected it preoperatively. In the evaluation of groins and scrotum, ultrasonography may not be enough alone. Similarly, ultrasound imaging did not give additional information preoperatively except for the exhibition of the sliding hernia in the present case. Strangulated hernia, strangulated omentocele, acute hydrocele, Richter's hernia, testicular tumor with hemorrhage, inguinal adenitis, and epidydimitis may be concerned in the differential diagnosis of Amyand's hernia. Appendectomy through the herniotomy with primary hernia repair using the same incision is used for the treatment of hernial appendicitis. In the presence of appendix vermiform in the sac of hernia, the mesh hernia repair without appendectomy is recommended by most authors. However, in case of inflamed appendix in the sac, appendectomy without mesh hernia repair is suggested by some authors. Nonetheless, some prefer to perform both appendectomy and mesh hernia repair in the treatment of inflamed appendix in the inguinal hernia sac, and they recommended the Intravenous broad-spectrum antibiotics for at least 3-5 days to prevent a possible mesh infection. Additionally, Torino et al irrigated the inguinal area with antibiotics.

In our case, even if the appendix was inflammed not congested inside the sac, the sac was not incarcerated and no any abscess was observed. Therefore, we performed an appendectomy with mesh hernia repair, did not irrigate the inguinal area with antibiotics, and postoperatively admitted an intravenous broad-spectrum antibiotic for 3 days The appendicitis within an Amyand's hernia is rare, but misdiagnosis is not seldom when it occurs. Although it can be treated by surgery only, surgical treatment is not standard except from appendectomy. In our opinion, application of mesh hernia repair should depend on the degree of inflammation of appendix and the presence of incarceration of hernia sac. Awareness of this condition

would be helpful in the preoperative diagnosis of both exigent and elective cases.

CONCLUSION

The decision to perform an appendectomy or/and use the mesh repair should always be individualized to the patient. The decision as to whether one should perform a simultaneous appendectomy and hernia repair is multifactorial. It is important to be aware of all clinical settings and an appropriate and individualized approach should be applied. The presence or absence of inflammation of the appendix is a very important determinant of appropriate treatment. In our case macroscopically no evidence of acute appendicitis hence mesh repair done, but microscopically proved as acute appendicitis which is in hernial sac is a rare entity.

KEY WORDS: AMYAND'S HERNIA, APPENDICECTOMY, HERNIOPLASTY.

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