

Case Report

Amyand's hernia-an unusual presentation of mucocele of appendix within inguinal hernia

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ABSTRACT

Presence of an appendix within an inguinal hernial sac is a rare form of inguinal hernia with an appendix involved and may become incarcerated. The incidence of a normal appendix in hernial sac varies from 0.5% to 1%. Only in 0.13% of the cases, appendicitis was reported. We present a rare variant of Amyand's hernia containing mucocele of the appendix, which has not yet been reported in literature. An appendectomy was done under spinal anaesthesia. An Onlay mesh repair was performed. Patient made an uneventful recovery.

Keywords: Amyand's hernia, Appendectomy, Onlay mesh repair

INTRODUCTION

Presence of an appendix within an inguinal hernial sac has been referred to as Amyand's hernia, in honor of Claudius Amyand, surgeon to King George II, who performed and reported vermiform appendectomy in an inguinal hernial sac in 1735.¹⁻⁵ This condition is a rare form of inguinal hernia with an appendix involved and may become incarcerated. The incidence of a normal appendix in hernial sac varies from 0.5% to 1%. Only in 0.13% of cases, appendicitis was reported. Hence, it is rare condition.⁶ We present a rare variant of Amyand's hernia containing mucocele of the appendix, which has not yet been reported in literature.

CASE REPORT

A 64-year-old male presented with a large, right inguino-scrotal swelling. On examination, the swelling was non tender but irreducible (Figure 1).

The ultrasonography showed bowel loops within a large sac. Computed tomography (CT) scan also confirmed bowel loops within a large sac. All the laboratory investigations were within normal limits. With the diagnosis of a right sided irreducible inguinal hernia, patient was taken up for surgery. Under spinal anaesthesia, a right inguino-scrotal incision was taken. On isolating and opening the sac, a hernia containing ileum, ileo-cecal junction, appendix and cecum was observed, with multiple adhesions of small bowel to the sac wall. Intra-operative vision is depicted in Figure 2. The appendix was swollen and appeared like a mucocele. An appendectomy was done. The specimen of the appendix is shown in Figure 3.

Sac was reduced by plication and closed. An Onlay mesh repair was performed. Drain was kept in the depths and was removed on the third post-operative day. Patient made an uneventful recovery. High power examination confirmed it to be mucocele of the appendix.



Figure 1: Right inguino-scrotal swelling.



Figure 2: Intra-operative vision.



Figure 3: The specimen of the appendix.

DISCUSSION

Term Amyand's hernia is used for depicting the condition of inflamed appendix, non-inflamed appendix/perforated appendix within inguinal hernia.⁷ Its accurate diagnosis can be substantiated with high clinical suspicion. The inguinal hernia sac may contain bladder, Meckel diverticulum, portion of intestine or vermiform appendix

in some instances.⁵ Various authors have described variants of Amyand's hernia wherein appendix was inflamed, gangrenous, ruptured, or malignant.^{4,6,8,9} In most cases, the diagnosis is intraoperative.^{1,2,5,8} CT scan may diagnose this condition pre-operatively.⁴ Majority of reported cases present with the feature of obstructed or strangulated hernia. It is very difficult to reach a clinical diagnosis of Amyand's hernia pre-operatively. A pre-op CT scan could be helpful for the diagnosis. The occurrence of Amyand's hernia is generally reported in right inguinal hernial sac as a consequence of the normal anatomical position of the appendix and also because right sided hernias are more common than left sided hernias.¹⁰ In this case, patient underwent surgery through an inguinal incision and since field was uncontaminated, it was decided to perform a mesh reinforced repair. Awareness of this condition would be useful in pre-op evaluation of patient with hydrocoele, non-reducible/incarcerated inguinal hernias.

CONCLUSION

Finding an appendix in a hernial sac is a rare event. A mucocele was found and appendectomy was performed. Use of mesh to repair the defect in a minimally contaminated field was successful in this situation.

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