Original Research Paper

Volume - 13 | Issue - 04 | April - 2023 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

General Surgery

# A RARE CASE OF AMYAND HERNIA IN KVGMCH, SULLIA

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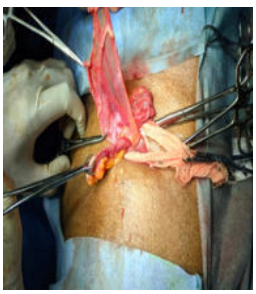
**ABSTRACT** **INTRODUCTION:** Amyand's hernia (AH) is a form of inguinal hernia which is consider as very rare and this type of hernia occurred up to 1% of all inguinal hernia cases. In this type of hernia, the content of hernia sac is appendix. Most patient with Amyand Hernia often remains asymptomatic and diagnosed intraoperatively. **CASE REPORT:** A 82-year-old male patient presented with the swelling in the right groin region since 2 weeks that progressively increased in size with a past history of chronic cough, on clinical examination revealed right inguinal swelling extending up to the root of the scrotum measuring 7×5 cm with cough impulse positive. The ultrasonogram was suggestive of right indirect inguinal hernia. The patient was posted for surgery where the inguinal canal was explored, sac was opened and the content was found to be appendix, the appendix was not inflamed hence only hernioplasty was done. **CONCLUSION:** Amyand's hernia (AH) makes up only a small proportion of most inguinal hernia cases, and its diagnosis is usually based on incidental finding intra-operatively and the management of which should be based according to the inflammation or the non-inflammatory changes of the vermiform appendix.

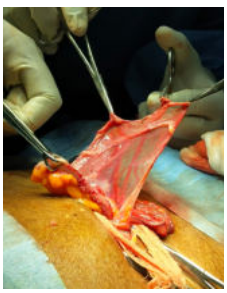
**KEYWORDS :** amyand hernia, appendix, inguinal hernia

## INTRODUCTION

Hernia is derived from latin word for rupture, hernia is defined as the abnormal protrusion of an organ or tissue through a defect in its surrounding walls. Inguinal hernia being the most common in both male and female gender, commonly the content of which is either bowel or omentum. Vermiform appendix being the content of inguinal hernia is found to be a rare entity. Claudius Amyand described it first in 1736 as Amyand hernia.He performed the first appendicectomy, removing the appendix from the inguinal hernia sac of an 11 year old boy1.The incidence of this rare hernia is about 1% and is complicated by acute appendicitis in 0.08% 2 .Most cases with Amyand hernia often remains asymptomatic and are diagnosed intraoperatively.

**CASE REPORT:** A 82 year old male patient presented with the swelling in the right groin region since 2 weeks that progressively increased in size with a past history of chronic cough (Aspergillosis pneumonia), on clinical examination revealed right inguinal swelling extending up to the root of the scrotum measuring 7×5 cm with cough impulse positive. The ultrasonogram was suggestive of right indirect inguinal hernia. The patient was posted for surgery where the inguinal canal was explored, sac was opened and the content was found to be appendix, the appendix was not inflamed hence only hernioplasty was done.





## DISCUSSSION:

Amyand's hernia is a rare entity, it is 0.4-1% of all inguinal hernia cases, whereas only 0.08% of cases complicate into acute appendicitis due to late presentation and missed diagnosis. It is most commonly seen in men, mostly present on the right side due to usual anatomical position of the appendix, there have been reports of left sided amyand hernia in such cases it is due to the intestinal malrotation or mobile caecum or associated with situs inversus.[3]

It is thought that the appendix of Amyand's hernia is more likely to become inflamed, compared to an anatomically normal appendix, given that it is retained in that location by adhesions and becomes vulnerable to trauma [4]. There is no consensus whether appendicitis is the primary pathological mechanism or whether the primary event is its herniation making it more vulnerable to trauma, coupled with changes in abdominal pressure due to muscle contraction which compresses the appendix, thereby decreasing blood supply and encouraging bacterial overgrowth and inflammation.[5]

| TYPES | LOSANOFF AND BASSON CLASSIFICATION9 | ATHENA 'S MODIFICATION |
|---|---|---|
| TYPE 1 | NORMAL APPENDIX WITHIN AN INGUINAL HERNIA -hernia reduction, mesh repair, appendicectomy in young | INCIDENTALLY FOUND HEALTHY APPENDIX IN HERNIA SAC |
| TYPE 2 | ACUTE APPENDICITIS WITHIN AN INGUINAL HERNIA, NO ABDOMINAL SEPSIS -appendicectomy through hernia, primary repair of hernia, no mesh | HERNIAL APPENDICITIS WITH EXCLUSIVE INGUINOSCROTAL MANIFESTATION |
| TYPE 3 | ACUTE APPENDICITIS WITHIN AN INGUINAL HERNIA, ABDOMINAL WALL, OR PERITONEAL SEPSIS -laparotomy, appendicectomy , primary repair of hernia , no mesh. | HERNIAL APPENDICITIS WITH EXCLUSIVE INGUINOSCROTAL AND ABDOMINAL MANIFESTATION |
| TYPE 4 | ACUTE APPENDICITIS WITHIN AN INGUINAL HERNIA, RELATED AND UNRELATED ABDOMINAL PATHOLOGY -manage as types 1 to 3 hernia, investigate or treat second pathology as appropriate | HERNIAL APPENDICITIS WITH ASSOCIATED ILEOCOLIC MORBIDITY LIKE HIRSCHSPRUNG'S DISEASE |
| TYPE 0 | | HERNIAL APPENDICITIS MANIFESTING PRIMARILY AS OCCULT SEPSIS |

Modified losanoff and bassoon (Rikki's classification)

**Type 5 was added and subdivided as follows.[10]**

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|---|---|---|
| TYPE 5a | NORMAL APPENDIX WITHIN AND INCISIONAL HERNIA | APPENDICECTOMY THROUGH HERNIA, PRIMARY REPAIR OF HERNIA INCLUDING MESH |
| TYPE 5b | ACUTE APPENDICITIS WITHIN AN INCISIONAL HERNIA, NO ABDOMINAL SEPSIS | APPENDICECTOMY THROUGH HERNIA, PRIMARY REPAIR OF HERNIA |
| TYPE 5c | ACUTE APPENDICITIS WITHIN AN INCISIONAL HERNIA, ABDOMINAL WALL, OR PERITONEAL SEPSIS OR IN RELATION TO PREVIOUS SURGERY | TREAT SECOND PATHOLOGY AS APPROPRIATE |

Treatment of Amyand's hernia depends on the inflammatory state of the appendix. In an uncomplicated case, appendicectomy is advocated followed by simple repair of the hernia using the same incision.7 In the presence of contamination there is an absolute contraindication to the use of synthetic mesh.6 Laparoscopic reduction has also been described in the literature.8 There was a general consensus by most authors that a normal appendix in the hernial sac does not require appendicectomy, given that such an organ containing faeces increases the risk of septic complications.[7]

**Conflicts of interest:**
The authors declare that they have no conflicts of interest.

**Acknowledgements:**
The authors declare that they have no competing interest.

## CONCLUSIONS

Amyand's hernia (AH) makes up only a small proportion of most inguinal hernia cases, and its diagnosis is usually based on incidental finding intra-operatively. This condition may remain asymptomatic and behave like a normal inguinal hernia. Management of this type of hernia should be individualized according to appendix's inflammation, presence of abdominal sepsis and co-morbidity. With this approach it enables surgeons to manage more variations of Amyand's hernia.

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