

HERNIA OF THE APPENDIX- A CASE REPORT ON AMYAND'S HERNIA.**Dr. Cliffin Mathai Kattoor¹, Dr. Akansha Singh*², Dr. Abhinav Kumar¹**¹Junior Resident, Department of General Surgery, IGMC, Shimla.²Junior Resident, Department of Anaesthesia and Critical Care, IGMC, Shimla.***Corresponding Author: Dr. Akansha Singh**

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ABSTRACT

Amyand's hernia (AH) is a very rare form of inguinal hernia and this type of hernia occurs in up to 1% of all inguinal hernia cases. The existence of a vermiform appendix in an inguinal hernia was first described by Claudius Amyand, the eponym of Amyand's hernia. The name "Amyand's hernia" is used irrespective of the vermiform appendix's situation (normal, inflamed, perforated, or gangrenous). Most patient with AH often remains asymptomatic and are diagnosed intraoperatively. The diagnosis is challenging, since it needs a high index of suspicion and imaging is key. Surgery is the mainstay of management. We report a case of Amyand's hernia that was managed operatively in our institution.

KEYWORDS: Amyand hernia (AH), Appendicitis.**CASE REPORT**

A 55 year old gentleman who had a history of right-sided reducible incomplete inguinal swelling for 6 years, was admitted with complaints of pain over the swelling with anorexia and vomiting since 2 days. There was no history of fever or migratory pain. On per abdominal examination, there was tenderness over the inguinal swelling but there was no rebound tenderness. The swelling was reducible and cough impulse was positive. Bowel sounds were present normally and a per rectal examination revealed normal findings. Rest of the systemic examination was within normal limits. Ultrasound of the abdomen reported normal findings. Laboratory parameters were within normal limits. Abdominal X-ray demonstrated no air fluid levels. Hence, with a diagnosis of right sided, incomplete, indirect inguinal hernia with suspected incarceration, patient was taken up for emergency surgery. Intra operatively there were dense adhesions within the sac, adhesions were released which revealed herniation of appendix into the inguinal canal. Appendix was congested with evidence of inflammation. Hence, in view of inflamed appendix, appendicectomy followed by Bassini herniorrhaphy was done. Postoperative period was uneventful and patient was discharged on the third day.

**Fig. 1: Visualising the indirect inguinal hernia sac.**

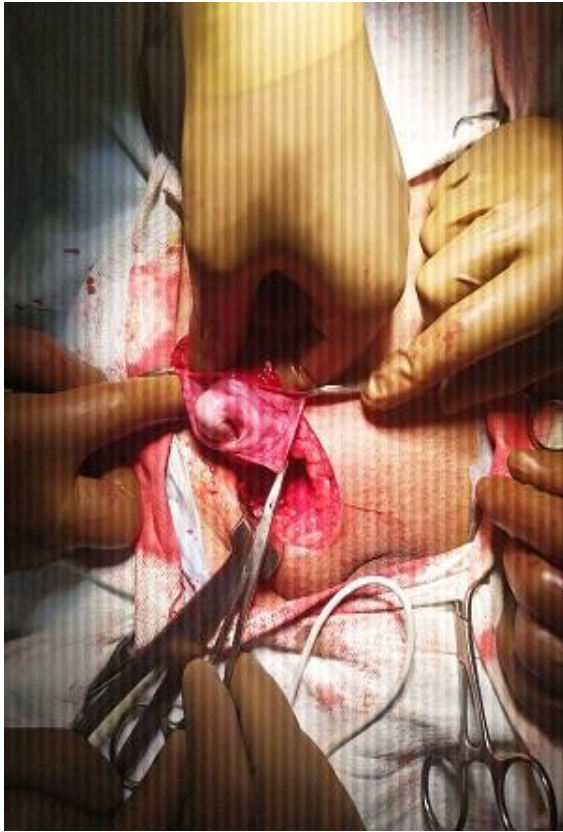


Fig. 2: Opening of the sac revealed an inflamed appendix as the content with adhesion to the wall of the sac.



Fig.3: Ligation of the meso-appendix to perform appendectomy.

DISCUSSION

Amyand's hernia is a rare presentation of inguinal hernias. Definitive preoperative diagnosis of Amyand's hernia poses a challenge due to indistinct clinical signs and symptoms.^[1,2] In the clinical setting of an incarcerated complicated or strangulated inguinal hernia, the initial approach should consider imaging studies; USG or CT can guide the surgical plan^[3] and enables the possibility of identifying involved intra-abdominal organs. While CT scan may help in making a preoperative diagnosis in those cases that present with an acute abdomen, the diagnosis of Amyand hernia is usually made intraoperatively. In case of clinical suspicion of Amyand hernia, diagnostic laparoscopy is a useful approach in all forms of incarcerated hernias to assess contents and avoid unnecessary laparotomy. The Losanoff and Basson's classification offer satisfactory guidance system for management of Amyand's hernia.^[4] A normal looking appendix in the hernial sac does not always require appendectomy.^[2] Appendectomy adds the risk of infection to an otherwise clean procedure.^[1] Whether to remove or leave behind a normal appendix is a clinical dilemma because no evidence-based information exists.^[2] The decision should be based on common sense, taking into account the patient's age, life expectancy, life-long risk of developing acute appendicitis, and the size and overall anatomy of the appendix.^[5,6,7] In cases where an inflamed, suppurative or perforated appendix is encountered, appendectomy is done^[8] and prosthetic material should not be used because of the increased risk of surgical site infection.^{[1][9]}

CONCLUSION

Definitive preoperative diagnosis of Amyand hernia poses a challenge due to indistinct clinical signs and symptoms and a high index of suspicion is needed to reach a diagnosis.^[5] The use of modern investigation tools like CT scan^[6] and diagnostic laparoscopy may provide a pre operative diagnosis but a review of literature affirms that it is still largely an intra operative diagnosis. The Losanoff and Basson's classification offer satisfactory guidance system for management of Amyand's hernia.^[4] Appendectomy may be recommended in Amyand's hernia even for a normal appearing appendix in view of future risk of appendicitis.^[10] However we are still conservative about the application of mesh in hernia sac with acute appendicitis, which requires additional large-scale study to determine whether mesh repair will increase the risk of infection or not.

REFERENCES

1. D'Alia C, Lo Schiavo MG, Tonante A, Taranto F, Gagliano E, Bonanno L, Di Giuseppe G, Pagano D, Sturniolo G. Amyand's hernia: case report and review of the literature. *Hernia*, 2003 Jun; 7(2): 89-91.
2. Hutchinson R. Amyand's hernia. *Journal of the Royal Society of Medicine*, 1993 Feb; 86(2): 104.

3. Michalinos A, Moris D, Vernadakis S. Amyand's hernia: a review. *The American Journal of Surgery*, 2014 Jun 1; 207(6): 989-95.
4. Losanoff JE, Basson MD. Amyand hernia: a classification to improve management. *Hernia*, 2008 Jun; 12(3): 325-6.
5. Inan I, Myers PO, Hagen ME, Gonzalez M, Morel P. Amyand's hernia: 10 years' experience. *The Surgeon*, 2009 Aug 1; 7(4): 198-202.
6. Luchs JS, Halpern D, Katz DS. Amyand's hernia: prospective CT diagnosis. *Journal of computer assisted tomography*, 2000 Nov 1; 24(6): 884-6.
7. Sharma H, Gupta A, Shekhawat NS, Memon B, Memon MA. Amyand's hernia: a report of 18 consecutive patients over a 15-year period. *Hernia*, 2007 Feb; 11(1): 31-5.
8. Morales-Cárdenas A, Ploneda-Valencia CF, Sainz-Escárrega VH, Hernández-Campos AC, Navarro-Muniz E, López-Lizarraga CR, Bautista-López CA. Amyand hernia: Case report and review of the literature. *Annals of medicine and surgery*, 2015 Jun 1; 4(2): 113-5.
9. Solecki R, Matyja A, Milanowski W. Amyand's hernia: a report of two cases. *Hernia*, 2003 Mar; 7(1): 50-1.
10. Cigsar EB, Karadag CA, Dokucu AI. Amyand's hernia: 11 years of experience. *Journal of pediatric surgery*, 2016 Aug 1; 51(8): 1327-9.