Rare contents of Inguinal Hernia: A Rare Case Report

Dr. Lokesh Gupta, Dr. Rajesh Vaswani, Dr. Vivek Labana, Dr. Ashok Meena Dept. of General Surgery Govt. Medical College, Kota

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ABSTRACT

Introduction

The presence of ovary and fallopian tube as a content of inguinal hernia are rarely encountered in surgical practice. Herein this we are reporting a rare content as ovarian and fallopian tube in indirect inguinal hernia sac in female.

Presentation

A 22 years old married female came to surgical OPD with complain of swelling & pain in left inguinal region that was about 4 × 3 cm on inspection for last 2 years. Abdominal ultrasound (USG) was suggestive of left ovarian and fallopian tube in hernial sac with preserved internal follicles and intact vasculature.

Discussion

Inguinal hernia having ovary & fallopian tube as content of sac is very rare finding. It is very important to early diagnosis of such cases to avoid complications like ectopic pregnancy, haemorrhage & rupture.

Conclusion

Atypical contents of inguinal hernia sac are rare, but surgeons still encounter such possibilities. Surgeon should be aware of atypical presentation and its appropriate management to deliver best results.

I. INTRODUCTION

Inguinal hernia is a rare entity in females accounting for 5 % of the cases ^[1]. Though it's very less frequent in females, but it should be investigated in order to rule out hernia obstruction, strangulation (loss of blood supply). Inguinal hernia surgery is the most commonly Performed surgery on surgical floors. The symptoms severity is of variable spectrum ranging from asymptomatic to severe abdominal pain due to strangulation ^[2].

Incomplete closure of canal of nuck causes development of inguinal hernia in females [3].

The usual contents of inguinal hernia are small bowel along with omentum, however surgeons also come across some unusual contents like sigmoid colon, cecum, appendix, urinary bladder and uterus. The presence of ovary, fallopian tube and uterus as contents of inguinal hernia is a rare happening [4]. Herein we have reported a rare case of ovarian inguinal hernia in a reproductive age group female.

Presentation of Case

A Patient 22-year-old female with no known comorbidities reported to the New Medical College Hospital Associated with Govt. Medical college, Kota with a complaint of a swelling in the left inguinal region for 2 years. Upon visual inspection, the swelling measured approximately 4 × 3 cm. The patient also complaint of pain in the area of the swelling which was gradual in onset. Interestingly, the pain was frequently associated with menstruation, with no other accompanying symptoms reported. Additionally, the size of swelling was varying with the menstrual cycle. The hemodynamically patient remained otherwise. The details of the observed swelling in the left inguinal region are documented herein Fig 1.





Fig 1: Swelling in Left Inguinal Region

During the examination, the patient exhibited overall stability in vital signs. On

Inspection of the inguinal region revealed a 4×3 cm swelling that proved non tender upon touch. The swelling appeared reducible with cough impulse. Notably, no changes in skin colour or temperature were observed at the site of the swelling. Laboratory investigations yielded results within the normal reference range. The patient's past medical and surgical history was deemed insignificant.

An **Abdominal ultrasound (USG)** was conducted, revealing the presence of a left inguinal hernia containing the left ovary along with internal follicles and vascularity.

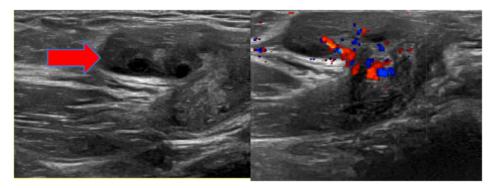


Fig 2: Red arrow showing follicles of ovary arranged at periphery

CT scan finding:



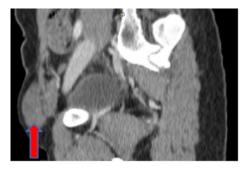


Fig 3: Left ovary herniating in inguinal canal

MRI Finding:





Fig 4: Left sided ovary in inguinal

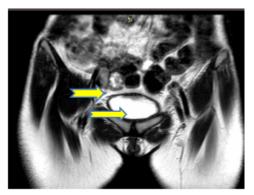
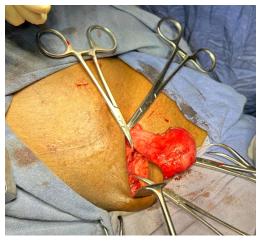


Fig 5: Right ovary at its normal location.

Herniating sac with T2 hyperintense follicle arranged at periphery

The diagnosis of an inguinal hernia with adnexa as content was established, for which surgery was planned. Following complete anaesthesia clearance, the patient was transferred to the operating room where left-sided hernioplasty

was performed. The ovary was returned to the abdominal cavity. A mesh was placed over the hernial orifice, and no complications were noted. Upon retrieval from the inguinal canal, the left ovary and fallopian tube were found to be healthy on follow up USG.





II. DISCUSSION

An inguinal hernia is defined as the protrusion of abdominal viscera and preperitoneal fat into the inguinal canal. Among benign surgical conditions, inguinal hernias are the most common, representing approximately 75% of abdominal hernia cases. They predominantly affect males, comprising 27% to 43% of cases, while females are less commonly affected, with percentages ranging from 3% to 6%. Inguinal hernias containing ovaries and fallopian tubes are rare in females, with the

most common structures encountered being the peritoneum, colon, and preperitoneal fat.

While ovarian inguinal hernias are typically observed in neonates and infants due to associated congenital anomalies, their occurrence in reproductive-age females is rare but clinically significant. Early diagnosis is crucial, especially in reproductive-age women, necessitating a high level of clinical suspicion to ensure fertility and identify potential genital anomalies.

Diagnosis of inguinal hernias primarily relies on clinical examination, with patient signs

and symptoms aiding in diagnosis. Strangulated and obstructed inguinal hernias can be differentiated based on the nature and severity of pain. Radiological investigations, such as ultrasound and color Doppler ultrasound, serve as valuable adjuncts in diagnosing ovarian inguinal hernias. In the presented case, ultrasound examination revealed the presence of the left ovary and fallopian tube in the inguinal hernia, with intact blood supply, indicating an uncomplicated ovarian inguinal hernia.

Treatment typically involves repositioning the affected ovary and fallopian tube and primary repair of the inguinal hernia.

This case underscores the rarity of ovarian inguinal hernias in females, emphasizing the delicate nature of such cases concerning female fertility and hernia-related complications. Furthermore, it highlights the potential association with genetically or congenitally triggered anomalies that require attention.

III. CONCLUSION

This is a rare presentation of inguinal hernia in a female, where the contents of the inguinal canal included the left ovary, fallopian tube. Such instances of adnexal contents in the inguinal canal are exceptionally uncommon, comprising only 1-2% of inguinal hernia cases and this is the first case of our institute in last 10 years. Cases of ovarian inguinal hernias necessitate special attention to prevent complications such as ovarian torsion, strangulation, and potential loss of fertility in females.