



LEIOMYOMA OF OVARY PRESENTING AS RIGHT INGUINAL HERNIA

General Surgery

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ABSTRACT

An inguinal hernia is a protrusion of abdominal-cavity contents through the inguinal canal. The incidence of inguinal hernia in females is 1.9%. The content of inguinal hernia sac usually contains small bowel, colon and omentum, but other organs like fallopian tube and ovary may also be found in some cases. Here we report a case of a 48 year old female whose right ovary was the content of her right inguinal hernia. After all required investigations patient was operated Laparoscopic converted to open procedure as intraoperatively the ovarian content appeared as malignancy. The histopathology examination revealed leiomyoma of the ovary. A brief case report & review of literature is presented.

KEYWORDS

Hernia, Ovary, Leiomyoma

INTRODUCTION

An inguinal hernia is a protrusion of abdominal-cavity contents through the inguinal canal. Inguinal hernia in females is relatively uncommon as compared to males. It is interesting to note that 1 male in 5 and 1 female in 50 will eventually develop inguinal hernia in lifetime. The incidence of inguinal hernia in females is 1.9%, the ratio of boys to girls being 6:19¹. The inguinal hernia sac usually contains small bowel, colon and omentum, but other organs may also be found. In 2.9% of all cases it contains fallopian tube and ovary.² The condition affects predominantly children under 5 years (71%), whereas in adult women, it occurs in only 29%.³

Females undergoing Hysterectomy may have altered anatomy which may contribute towards prolapsing of ovaries into the hernial sac. Present case is to highlight presence of pathological ovary in an hernial sac & its intraoperative management

CASE DESCRIPTION

A 48-years old woman was admitted with an irreducible painless swelling in the right inguinal region. There were no bladder or bowel complaints. Patient had history of laparoscopic hysterectomy done 6 years back. Ultrasonography of abdomen and pelvis revealed it to be right ovary in right inguinal hernial sac. This finding was confirmed on Magnetic Resonance Imaging (MRI) [Fig1]. A laparoscopic repair Transabdominal preperitoneal (TAPP) repair was attempted. It showed indirect hernia with enlarged ovary being the component of sac. On haptic sensation ovary was hard in consistency & adherent to surrounding structures. [Fig2]. Laparoscopy was converted to open, as hard and enlarged ovary with dense adhesions to surroundings raised suspicion of malignancy. A right oophorectomy was done, followed by Lichtenstein repair of the defect. Grossly, the tumor was around 6 x 5 x 4 cm in size and had a pale and lobulated cut surface. The histopathological examination showed a leiomyoma of the ovary [Fig3]. Patient recovered uneventfully. Follow up after 6 months has shown her to be symptom and disease-free.

DISCUSSION

The inguinal canal in the female is not well demarcated as compared to the inguinal canal in males. Normally, different structures pass through it including the round ligament of the uterus, a vein, an artery from the uterus that forms a cruciate anastomosis with the labial arteries, and extra peritoneal fat.⁴

It is reported in literature that ovarian hernias are extremely rare in premenopausal women. On the contrary, most cases of gonadal hernias were reported in the pediatric age group in association with other genital tract anomalies.⁵ One of the hypotheses to explain its mechanism given by T. Okada *et al.* speculates that weakness of the broad ligaments or ovarian suspensory ligaments can contribute to ovarian herniation into the inguinal ring.⁶ This can be augmented by high intra-abdominal pressure as a result of carrying heavy things, or due to a chronic cough secondary to respiratory disease. In present case, the patient had undergone laparoscopic hysterectomy 6 years back. This may have contributed by disturbing the normal anatomy.

A hyperechoic portion of the mass surrounded by an arterial flow can be observed on colour Doppler ultrasonography consistent with the presence of a corpus luteum. Furthermore, transabdominal sonographic scans of the pelvis may reveal the absence of one ovary in the lower pelvis on the same side as the inguinal hernia.⁷ In present case, MRI was done as sonography raised a suspicion of ovary in the hernial sac.

Ovarian torsion and infarction have been encountered in 2–33% of these patients, which necessitates treating all cases, even when asymptomatic.⁸ As this patient was symptomatic, laparoscopy was attempted, which confirmed the diagnosis. However, previous surgery in present case had resulted in dense adhesions. Moreover, leiomyoma of ovary resulted in enlarged & hard ovary. Due to both these features, there was suspicion of malignancy. Hence, conversion to open surgery was done in order to avoid spillage.

CONCLUSION

In most cases, the contents of the hernia sac can be detected intraoperatively. Although considered to be a very rare entity, the possibility of ovarian hernia should be kept in mind in a female patient presenting with an irreducible swelling in the inguinal or femoral region in order to avoid complications.

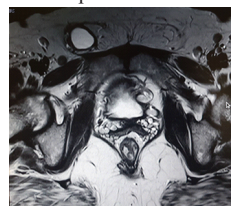


Figure :1 MRI showing right ovary in right inguinal hernial sac

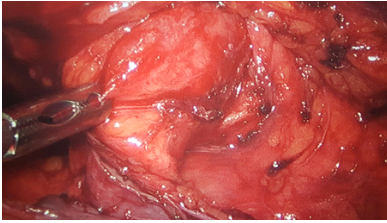


Figure 2: Laparoscopic view of right inguinal hernia with enlarged right ovary as content

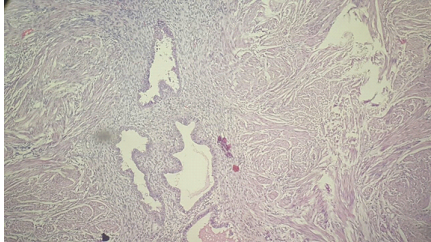


Figure 3: Low power view (10X) showing foci of endometrial gland and stroma surrounded by bundles of benign smooth muscle cells, suggestive of Leiomyoma of ovary

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