

CASE REPORT

A RARE CASE OF INDIRECT INGUINAL HERNIA WITH OVARY AS CONTENT

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ABSTRACT: This is a case of a 26 year old female who presented with swelling in the left groin associated with dragging pain in the left iliac fossa. She was investigated and diagnosed as left indirect inguinal hernia. Hernioplasty was planned and intraoperatively ovary along with fimbria was identified as content. An inguinal ovary may occur if the gubernaculum fails to attach to the uterus in fetal life or if the canal of Nuck remains open after birth.

KEYWORDS: Inguinal ovary, Indirect inguinal hernia, Irreducible hernia.

INTRODUCTION: Inguinal hernias occur in less than 5% of women. Ovary within the inguinal canal is occasionally seen in female infants, but is rare in adult women. This case describes a woman with an inguinal ovary who presented with swelling in the left groin associated with pain. We review the literature which revealed fifteen case reports in adults. The majority presented with a groin mass and was diagnosed at time of surgery for suspected bowel hernia as evident in our case.

CASE REPORT: A 26 year old woman presented with swelling in the left groin of 6 months duration on a background of longstanding left sided iliac fossa pain, the swelling was not reducible and the pain aggravated after taking food and after strenuous physical work. Past medical history was insignificant. Obstetric history included two vaginal deliveries followed by tubectomy 8 years back. Ultrasound scan demonstrated retroverted uterus and the right ovary appeared normal, however left ovary was not identified. Patient was diagnosed with left indirect inguinal hernia and was planned for hernioplasty. Intraoperative findings revealed the left ovary along with fimbriae of left fallopian tube herniating through the left internal inguinal ring (Figure 1). The contents were reduced, the round ligament is clamped and cut. Hernioplasty was performed with prolene mesh (Figure 2). Post-operative period was uneventful and patient was discharged on 7th post-operative day.

DISCUSSION: Inguinal hernias occur in less than 5% of women.^[1] Even though infrequent, when present, hernias must be promptly evaluated due to possible strangulation of organs, including, on rare occasion, the ovary and fallopian tube. In most circumstances, the diagnosis of an inguinal hernia can be made based on history and physical examination alone. Inguinal hernias may present as an asymptomatic finding such as a painless bulge in the groin, or in a subacute or acute manner, with mild to severe abdominal-pelvic pain.^[2] When an adult woman presents with severe abdominal pelvic pain, abdominal wall hernias must be considered in the differential diagnosis. Hernias may frequently be overlooked particularly if not assessed in a physical examination.

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Hernias may contain a variety of visceral organs, of which intestines or omentum is most commonly found, resulting in an incarceration or strangulation which would be a surgical emergency. The ovary or fallopian tube may also become entrapped, although this is rarely considered. The patient may present in a nondescript manner and describe a heaviness or dull discomfort in the groin that is most pronounced when intra-abdominal pressure is increased. Typically, hernias can be diagnosed by careful palpation on physical examination and confirmed by ultrasound imaging. On Ultrasonography, the hernias with ovary as content appear as either solid masses or solid masses containing cysts. However, when ultrasound results remain ambiguous and there is concern for entrapped organs, a CT scan can be performed to provide definitive diagnosis and aid in proper counseling, consultation, and timely decision making for urgent surgical management.

In adult women, indirect hernias are more common than direct hernias and typically occur during age 40–60.^[1] Most of these hernias contain intestinal contents and rarely viscera such as female adnexa (ovaries or fallopian tubes) in 3% of hernia cases.^[3] If entrapment of the female adnexa occurs, it is found more frequently in female infants due to anatomical causes including a relatively short inguinal canal, a canal that has an oblique direction through the abdominal wall, and a diverticulum of Nuck.^[3,4,5,6] The occurrence of adnexa within an indirect hernia in women, as seen in our patient, would be unexpected and uncommon. When discovered in adult females, the majority of hernias reported are found in perimenopausal or postmenopausal women.^[3,7]

Timely management must be undertaken to ensure prompt surgical intervention to reduce the risk of ovarian damage and subsequent infertility. In past reports where female adnexa were involved, more than half required oophorectomy secondary to strangulation.^[3] When extending to cases involving female infants or children, 27% of those who presented with irreducible ovaries were found to have infarcted ovaries at surgery^[6] as reported in a series of 1699 children with inguinal hernia. Thus, female adnexa are particularly vulnerable to damage when entrapped in inguinal hernias, and failure to recognize this may result in an infarcted and unsalvageable ovary and/or fallopian tube.

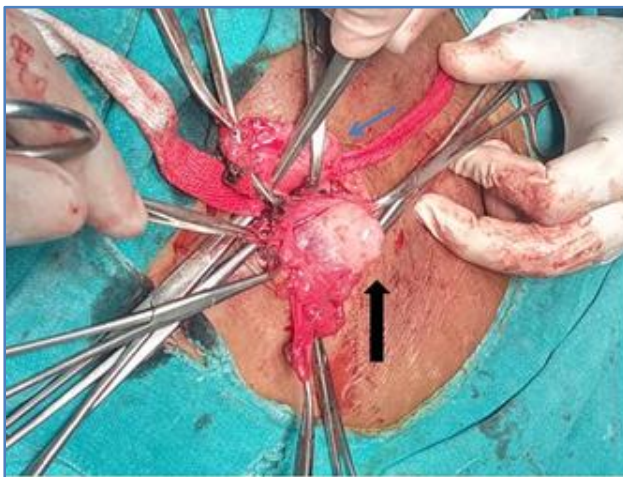
CONCLUSION: In summary, we have described the rarity of a normal fallopian tube and ovary within an indirect inguinal hernia in a premenopausal adult female. The majority of cases present with a groin mass and were diagnosed at time of surgery for suspected bowel hernia as evident in our case. The diagnosis of entrapped viscera including the adnexa must be considered in the differential diagnosis of hernias in adult women, in order to ensure proper surgical and medical management to ensure surgical intervention in a timely fashion in order to prevent and relieve torsion and to return normal perfusion to the adnexa. Multiple imaging studies may be necessary to assist in diagnosis, including ultrasound and/or cross-sectional imaging by computed tomography (CT), if a clinical suspicion is made preoperatively.

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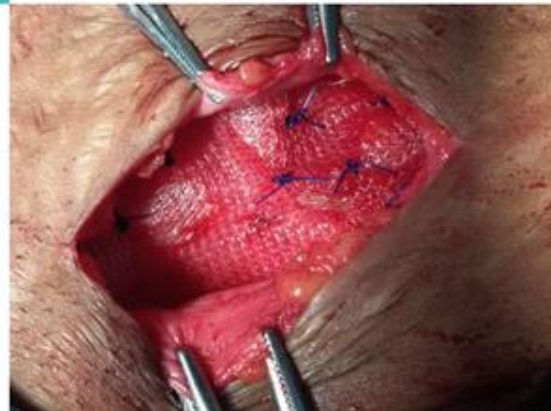
← **FIGURE 1 :**

Showing left ovary along with fimbria [Black arrow] within the sac in the left inguinal canal. Round ligament being retracted aside [Blue arrow].

FIGURE 2 :



The contents (Ovary and fimbria) are reduced. Round ligament is clamped and cut. Polypropylene mesh is placed and hernioplasty done.



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