

# An Endometrioid Ovary Cyst and Fallopian Tube in the Inguinal Canal: Conservative or Surgical Management?

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## ABSTRACT

The presence of an ovary in the inguinal canal, presenting as an inguinal hernia is an extremely rare condition in premenopausal women. We present a case, which was managed expectantly before but needed surgery thereafter.

A 31 year old woman who had 2 cesarean sections before presented with a painful and red mass in the left inguinal canal. Absence of the left ovary had been noted during previous cesarean sections and she had two attacks of pelvic inflammatory disease. She could not get pregnant through natural route and ovulation induction treatment was initiated upon which a left inguinal mass appeared. A previous attempt to aspirate the mass had been unsuccessful. Ultrasonographic diagnosis was hemorrhagic ovary cyst and abscess. Laparoscopic right salpingectomy was performed due to right hydrosalpinx and left inguinal hemorrhagic mass was excised surgically. Pathological examination confirmed that the mass was an ovary.

Most of the cases of hernia containing ovary and other genital organs are found in children, but they may be seen in premenopausal or menopausal women also. Some of them are diagnosed before the operation but most of them are diagnosed during or after the operation. Asymptomatic cases may be managed expectantly but in symptomatic patients, surgical removal is indicated.

**Keywords:** Inguinal hernia, Ovarian cyst, Laparoscopy, Hemorrhagic mass

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## Introduction

Ovary-containing inguinal hernia is a rare condition in women of reproductive age. The presence of an inguinal hernia containing genital organs in females is usually due to an incomplete closure of the processus vaginalis.

## Case Report

A 31 year old, gravida 2, parity 2 woman who had 2 cesarean sections before presented with a painful and red mass in the left inguinal region. She had recognized the mass a week earlier and a gynecologist tried to aspirate the mass. Her complaints increased thereafter.

She remembered having inguinal pain during her asthma

attacks since adolescence. She had had a cesarean section 12 years ago. During the operation it was recognized that she did not have left ovary and tube. Five and 7 years after the operation, she developed pelvic inflammatory disease twice and was treated medically. On an ultrasound examination later, right hydrosalpinx was diagnosed and laparoscopy was decided. During laparoscopy, left ovary could not be visualized, right ovary, tube and uterus had adhered to the abdominal wall and hydrosalpinx was identified. A week ago, she had again a mass in the left groin, which was aspirated and a little amount of bloody material was obtained. She was referred to us for suspected malignancy.

On physical examination, a hyperemic painful mass was identified on the left groin, extending from the inguinal canal to mons pubis and labium majora. Ultrasonography revealed a heterogeneous and hemorrhagic irregular mass.

Adhesions in the abdomen were removed laparoscopically and right salpingectomy was performed because of hydrosalpinx. In the left groin, an oblique incision was performed on the mass and 6x10 cm solid, hemorrhagic mass was completely removed. Defective inguinal canal was repaired by Lichtenstein method using a mesh.

On pathological examination of the excised mass, endometriotic cyst, corpus luteum, follicular cysts and tube were identified.

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## Discussion

Most of the cases of hernia containing ovary and fallopian tubes were reported to be found in children and, often accompanied with other congenital anomalies of genital tract.

The inguinal canal in the female is not well demarcated as compared to the inguinal canal in the male. Ovarian hernias are extremely rare in premenopausal women, but it may contain the uterus, fallopian tubes and ovaries. In the study of Gurer et al<sup>1</sup>, inguinal hernia sac contained ovary and fallopian tube in 2.9% of the cases.

Yao et al have suggested that in premenopausal women, the morphological characteristics of the ovary in the hernia sac can be assessed sonographically. These characteristics include a mass with multiple sonolucent cysts indicating the ovary. Four to 37% of female inguinal hernias which have been found intraoperatively present with non-reducible ovaries. Ovarian torsion and infarction have been encountered in 2-33 % of these patients.<sup>2</sup> Ovarian cyts can be dealt with laparoscopy particularly if the cyst is benign, with concomitant repair of the hernia, if the diagnosis is made preoperatively.

Some hernias may be managed conservatively. However, since her symptoms increased in recent years and surgery was needed.

## Conclusion

Although rare, ovarian hernia should be kept in mind in a female patient presenting with an irreducible swelling in the inguinal or femoral region. Expectant management is proposed by some, but we suggest that whenever suspected, it must be treated as a surgical emergency.

## Inguinal Kanalda Endometrioid Over Kisti ve Fallop Tüpü: Konservatif mi Cerrahi Yaklaşım mı iyi?

## ÖZET

Premenapozal kadınlarda inguinal herni görülmesi ve içinde over bulunması çok nadir bir durumdur. Önceleri konservatif olarak yaklaşılan ancak daha sonra cerrahi girişim yapılan bir vaka sunulmaktadır.

Daha önce 2 kez sezeryan ameliyatı geçirmiş olan 31 yaşındaki kadın, sol inguinal kanalda ağırlı ve kızamık kitle şikayeti ile başvurdu. Daha önce yapılan sezeryan sırasında, sol overin olmadığı fark edilmişti ve iki kez pelvik inflamatuvar hastalık geçirmişti. Gebe kalamadığı için ovulasyon indüksiyon tedavisi uygulanmış ve sonrasında sol inguinal kitle ortaya çıkmıştı. Bu kitlenin ultrasonografi eşliğinde aspirasyonu denenmiş ancak başarılı olunamamıştı. Ultrasonografik olarak kitlenin hemorajik over kisti veya abse olabileceği söylenmişti. Hastaya, sağ tarafta bulunan hidrosalpenks nedeniyle laparoskopik sağ salpingektomi yapıldı, sol inguinaldeki kitle ise cerrahi olarak çıkartıldı. Patolojik incelemede, kitlenin over olduğu anlaşıldı.

Herninin içinde over veya diğer genital organların bulunması, genellikle çocuklarda görülen bir durum olmakla beraber, premenapozal kadınlarda da nadiren görülebilmektedir. Bazı hernilerde tanı operasyondan önce konmakla beraber çoğunlukla operasyon sırasında veya operasyondan sonra tanı konabilmektedir. Asemptomatik olgular konservatif olarak takip edilebilir ancak semptomatik hastalarda cerrahi olarak çıkartılması gerekir.

**Anahtar Kelimeler:** İnguinal herni, Over kisti, Laparoskopi, Hemorajik kitle.

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