

# **RESEARCH ARTICLE**

# LARGE OVARIAN CYSTADENOMA HERNIATING THROUGH A PARA-UMBILICAL HERNIA :A CASE REPORT

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# Manuscript Info

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#### Abstract

**Introduction:** Incisional hernia or eventration is a frequent complication that affects approximately 10 to 25% of the patients after a laparotomy. These hernias must be repaired because of their significant morbidity. The usual hernial content is the omentum and intestines, the incarceration of other abdominal structures, such as the genitals, is very rare.

**Observation:** We present an unusual case of a large ovarian cystadenoma herniating through a para-umbilical hernia, resection led to full recovery.

**Discussion:** Large para-umbilical hernias are usually irreducible and incarcerated. Omentum, small and large intestine are commonly encountered in these hernias. By reviewing the literature, we found that incarceration of other abdominal structures is quite rare. Thus the transvaginal sonography is the first-line imaging, we may usually need further investigations such as CT, MRI or even surgical exploration, to avoid any unnecessary delay.

**Conclusion:** In conclusion, para-umbilical hernia in adults can be the site of the incarceration of any abdominal organ and urgent exploration is recommended in these cases.

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# **Introduction:-**

Incisional hernia or eventration is a frequent complication after a laparotomy and affects approximately 10 to 25% of the patients [1,2]. Several risk factors can be linked to this complication such as age, obesity, infection, immunomodulatory therapy, diabetes and smoking. Several choices made by the surgeon can also influence the occurrence of an eventration : the suture technique, the suture material and the location of the incision [3, 4, 5]. These hernias must be repaired because of their significant morbidity [2]. Nowadays, there is insufficient data to provide evidence-based recommendations for the treatment management of the ventral hernia, which relies essentially on the surgeon's preferences. The usual hernial content is the omentum and intestines, the incarceration of other abdominal structures, such as the genitals, is very rare. We present an unusual case of a large ovarian cystadenoma herniating through a para-umbilical hernia.

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#### **Case Report:**

A 49-year-old woman was admitted to the gynecology department at Ibn Rochd University Hospital, she had three children delivered vaginally and had a poly myomectomy performed by a midline laparotomy eight years ago. The patient presented with an abdominal mass of progressive appearance without any other associated semiological sign. The examination showed an obese woman with a body mass index (BMI) of 31 kg / m2. She had a flexible abdomen with a scar from the median umbilical laparotomy, and a soft mass of 5cm painless and without inflammatory signs opposite located at the right latero-umbilical level in connection with a non-reducible eventration whose hernial neck is located at 2 cm below the umbilicus (Figure 1,2). The rest of the somatic examination was unremarkable.

An exploratory laparotomy was performed showing a parietal hernia and the contents of which consisted of a cystic mass with abdomino-pelvic development coming from the right ovary, then an adnexectomy was performed (Figure 4,5). In the histopathological study, it was an ovarian serous cyst-adenoma.

Laboratory tests including CA125 were without abnormality, Computed tomography (CT) of the abdomen and pelvis was performed. It suggested a lateral and left uterine intra-abdominal cystic mass measuring 220x201x120 mm with a thin and regular wall forming an umbilical parietal hernia (Figure 3).

## **Discussion:-**

The transvaginal sonography is the first-line imaging examination in an adult ovarian tumor, the abdominal sonography is useful for having anoverview and for large tumors. The sonographer's expertise is the most efficient parameter for discriminating between malignant and benign tumors [6]. The transvaginal ultrasound makes it possible to define the characteristics and measurements of the ovarian tumor. It is recommended to use the nomenclature or ultrasound terminology defined by the group from the International Ovarian Tumor Analysis (IOTA) which classifiessurgical exploration. Thus the age, the pathological history, the clinical data, the dosage of CA125 and the imaging may point to the benign or malignant nature. If there is any doubt in the ultrasound diagnosis as to the ovarian origin or not of a pelvic cystic lesion, pelvic MRI should be preferred over CT. [7].In our case, the clinical (good general condition, soft and mobile mass), biological (CA125ratio of 5:1 (Russell et al., 2004) [8]. Large para-umbilical hernias are usually irreducible and incarcerated. Omentum, small and large intestine commonly encountered in these hernias (Russell et al. 2004; Morris and Wood 2000). By reviewing the literature, we found that incarceration of other abdominal structures is quite rare [10]. We found only one case in the literature of benign ovarian cystic teratoma of the left ovary reported by (Wolfson et al. 1991). In this case, a large left ovarian cyst was incarcerated in a pre-existing paraumbilical hernia. After reviewing the literature, we found that thistumors into 6 categories according to two criteria :unilocular or multilocular, liquid or solid. We can oppose the determined masses for which the ultrasound makes it possible to propose an etiological diagnosis such as the corpus luteum, the hemorrhagic cyst, the endometrioma and the dermoid cyst of the undetermined complex masses which will lead to further investigations such as CT, MRIor even negative) and radiological (Unilocular cystic lesion, absence of ascites or peritoneal tumor lesions) data pointed towards the benign nature of the mass.Surgical exploration noted the huge cystic ovarian tumor which was free without adhesions, tumor implants or signs of malignancy, then adnexectomy alone was performed and the histological study confirmed its benign nature. The patient made an uneventful postoperative recovery, being discharged from hospital three days after surgery. Adult para-umbilical hernia is common. It occurs more frequently in women, with a female to male ratio of 5:1 (Russell et al., 2004) [8]. Largewas the first case of an ovarian cyst incarcerated in a para-umbilical hernia [9]. This case was initially misdiagnosed as an intra-abdominal abscess extending into the hernia. This misdiagnosis led to unnecessary insertion of a drain and unnecessary delay of the operation for 6 days.

# **Conclusion:-**

In conclusion, a para-umbilical hernia in adults can be the site of the incarceration of any abdominal organ and urgent exploration is recommended in these cases.

#### **Conflict of interest:**

The authors declare no conflict of interest.

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# **Consent :**

Written informed consent was obtained from the patient for publication of this research study. A copy of the written consent of each patient is available for review by the Editor-in-Chief of this journal on request.

**Figures:-**



Figure 1:- Clinical image of the abdomino-pelvic mass.



Figure 2:- Clinical image of the abdomino-pelvic mass.



Figure 3:- Abdomen in ct showing the incarcerated part of the ovarian cyst in a paraumbilical hernia.



Figure 4:- Image of the cystadenoma during the operation.

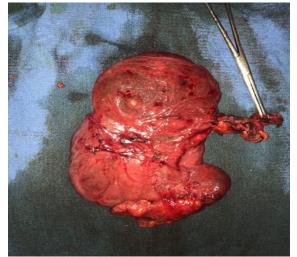


Figure 5:- Image of the cystadenoma after being extracted.

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