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Case Report

Hydatid cyst of the uterus: Very rare location ☆,☆☆

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ABSTRACT

The involvement of the genital tract of a hydatid cyst is rare and the occurrence in the uterus is an extreme rarity. The diagnosis of this localization is difficult because the clinical and radiological findings are often misleading and the diagnosis is often worn during surgery and after histopathological examination of the surgical specimen. We report the case of a patient who consulted for primary infertility, with a clinical finding as the only anomaly significantly large uterus, and imaging pointing strongly toward an ovarian multilocular cyst, and in which the discovery of hydatid cyst was accidental intraoperative with double localization uterine and omental. Radical treatment cannot be discussed in this young patient of 32 years and gravid 0. The removal of the cyst wall completely and excision of the mass epiploic seemed reasonable. The patient was placed under Mebendazol and is always under the supervision of a possible recurrence.

Introduction

Pelvic location of hydatid cyst remains rare and its often misdiagnosed [1], especially when no clinical or primary location is known.it occurs in only 2%of cases. Uterine location is even rarer.

MRI is the best tool to lead to diagnosis.

Case report

A 32-year-old female, housewife, and urban resident, with no previous medical history presented with primary infertility for 6 years.

Physical examination finds an enlarged uterus with no palpable adnexal mass.

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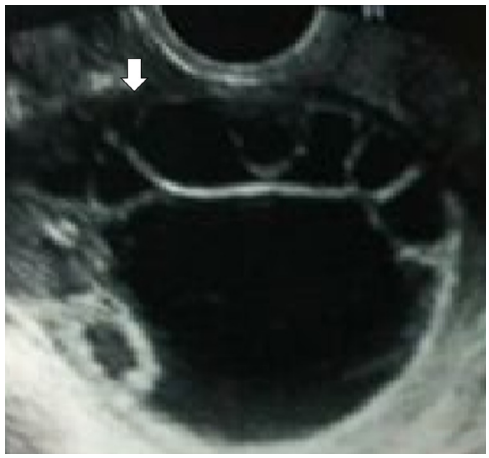

Fig. 1 – Pelvic ultrasound showing a multilocular cystic mass with thin septa poorly vascularized on color Doppler (white arrow) measuring 10 x 4 cm, most likely of left ovarian origin.

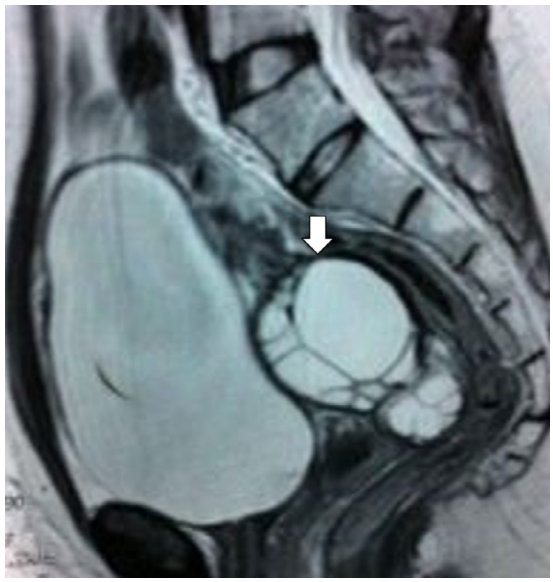

Fig. 2 – Pelvic MRI in T2-weighted images in sagittal plan showing a cystic left lateral uterine multilocular mass (white arrow).

Pelvic ultrasound shows bilateral multiloculated ovarian cysts measuring each 7 cm of the long axis, suggesting a serous cystadenoma (Fig. 1).

Pelvic MRI scans show 2 masses; one is a multiloculated cystic mass, with some thick septa, in the upper and left lateral-uterine area, presenting a heterogeneous signal that did not enhance at T1-weighted imaging measured 81 × 75 × 45 mm (Fig. 2).

The levels of the tumor markers, CA 125 and CA19-9, were within the normal range.

Hysterosalpingography was not performed due to technical difficulties.

The patient's partner's spermogram was normal.

Chlamydia serology and serum beta-hCG were negative.

Surgical exploration by laparoscopy and hysteroscopy was decided in the first place.

Hysteroscopy showed a small uterine cavity, reduced to a canal with pale mucosa.

Laparoscopic exploration revealed an epiploic mass of 3-4 cm adhering to the parietal peritoneum and another mass at the level of the posterior uterine wall (Fig. 3).

Hepatic exploration did not find any abnormality and Chest X-ray did not show any pulmonary localization.

We decided to convert to laparotomy and we performed an excision of the omental mass, then a corporeo-isthmic uterine incision gave rise to whitish vesicles evoking a hydatid cyst.

We performed then aspiration and washing with hydrogen peroxide, resection of the entire cyst wall, and hysteroghaphy.

Exploration of the abdominal cavity, pouch of Douglas, and ovaries did not find any suspicious lesions.

The resumption of medical history found that the patient had regular visits to rural areas during her childhood.

They were no post-operative complications and the patient was discharged 3 days later.

The histopathologic study confirmed the hydatid nature of the cyst with a double localization of uterine and omental.

Six months post-operative Mebendazole (Zentel 400 mg) was prescribed: 1 tablet per day for 3 weeks with a therapeutic window of one week and regular monitoring of liver function.

Discussion

Hydatidosis or echinococcosis is a worldwide anthropozoonosis.

It is due to human infection by the larval stage of Echinococcus granulosus tapeworm, living in the small bowel of domestic carnivores.

Morocco, a traditional breeding country, is one of the most infested countries by this parasitosis.

Hepatic and pulmonary localizations are the most frequent [2], but hydatidosis can develop in any organ.

Hydatid cysts with a primary genital pelvic location in women are among these rare and misleading cases [3].

The incidence of pelvic localization is between, 0.2 and 0.9%, and 80% of those cases involve the genital area in particular the ovaries [4].

The majority of cases reported in the literature concern patients aged between 20 and 40 years [5].

Uterine localization was first described by Gueddana in 1990 [6] and then in 1994 by Okumus [7].

BagÜl et al. in 2002 reported a case of uterine hydatid cyst incidentally discovered during a histological examination of a subtotal hysterectomy specimen for an enlarged uterus in a 70-year-old postmenopausal patient [8].

The most recently described case goes back to 2011 by Sabrina Quddus Rashid in Bangladesh [9] in a patient diagnosed with uterine hydatid cyst based on ultrasound and hypereosinophilia on blood count.

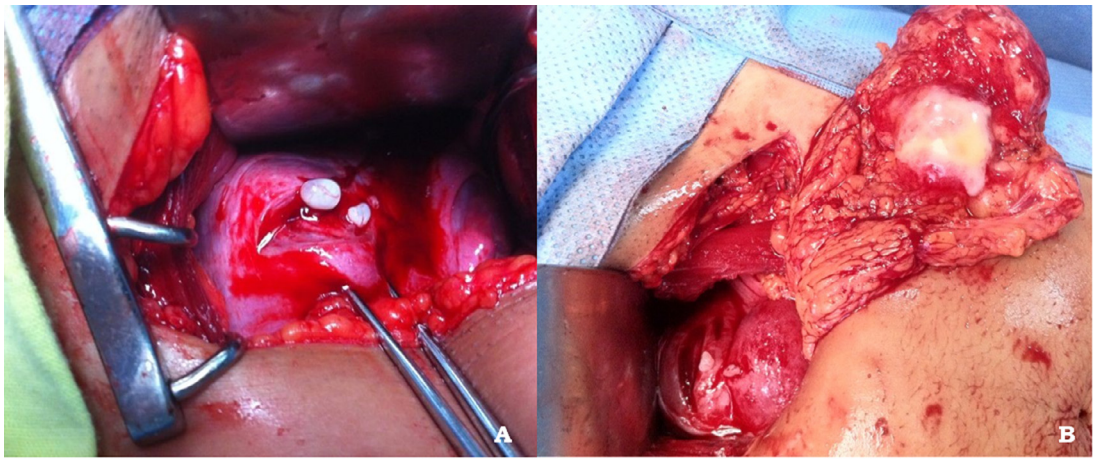

Fig. 3 – Hydatid vesicles popping out from hysterectomy (A), epiploic localization of a hydatid cyst (B).

Pelvic hydatidosis is usually secondary to the accidental rupture of a contiguous hydatid cyst.

However, primary pelvic hydatid cysts have been reported [1,6–8,10].

There are no specific symptoms of pelvic hydatidosis, and the disease usually remains asymptomatic for years.

Pelvic echinococcosis can cause a problem of differential diagnosis with malignant tumors, particularly ovarian ones.

There are no pathognomonic serological or immunological tests for hydatid disease.

Currently, ultrasound and computed tomography are performed for positive and topographic diagnosis of hydatid disease with high specificity and sensitivity.

These 2 examinations show the typical appearance of a hydatid cyst which can be single or multi-vesicular [11].

Surgery is the treatment of choice for pelvic hydatidosis.

Cystectomy is the ideal procedure, but partial or subtotal cystectomy can be performed to avoid injury to surrounding organs.

Exploration must seek other hydatid localizations which will be treated at the same time.

Mebendazole or Albendazole are used in the adjuvant treatment of surgery to minimize recurrences, especially when the excision is incomplete or in the case of multiple locations.

A follow-up of 2 years is necessary to judge the effectiveness of the treatment.

Our patient was put on Mebendazole treatment due to the double localization uterine and omental.

Surgical treatment depends on age, parity, and desire for pregnancy.

The data in the literature are insufficient to standardize a particular surgery or predict fertility after surgical treatment of uterine hydatid cyst.

In our case, uterine preservation seemed reasonable given the context of primary infertility and the young age of the patient.

In front of a pelvic cystic mass in an endemic country, the diagnosis of uterine hydatid cyst should be always considered despite the rare nature of this location.

Conclusion

The genital hydatid cyst and in particular uterine location is an extremely rare condition.

The diagnosis is sometimes difficult and confusing.

It is often based on the couple ultrasound-hydatid serology, but only the histopathological study can confirm the diagnosis of uterine hydatid cyst.

The surgical treatment depends on the volume and location of the cysts.

Hysterectomy remains the treatment of choice to avoid recurrences; it is to be discussed according to the patient's age, parity, and desire for pregnancy.

Medical treatment is only necessary when the excision is incomplete or for multiple locations.

Genital localization affects women essentially and brings 3 issues: etiopathogenic, diagnostic (atypical ultrasound appearances) and therapeutic with the possibility of mutilation.

Availability of data and material

Data available within the article.

Patient consent

I confirm that patient consent has been obtained.

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