Ovarian Hydatid Cyst: A Case Report.

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Abstract: Hydatidosis is a parasitosis widely spread in developing countries, it is caused by a dog taenia: Echinococcus granulosus. The hepatic and pulmonary localization are the most frequent, unlike the pelvic localization which is exceptional and misleading. The diagnosis is based on imagery, the treatment is surgical associated with antiparasitics. Primary prevention remains an important tool to prevent this disease, which can affect the prognosis of fertility of these patients.

Keywords: Ovarian hydatid cyst, parasitosis, cystectomy, fertility.

1. Introduction

Hydatidosis is a parasitosis widely spread in developing countries, it is endemic in Morocco, it is due to the development in the human body of the larval form of a dog taenia: Echinococcus granulosus. The hepatic and pulmonary localization are the most frequent, contrary to the pelvic localization which is exceptional and misleading, considering the richness of the pathology with cystic manifestation in the pelvis. Early diagnosis and appropriate treatment can safeguard the obstetrical and gynecological future of these patients, obviously associated with regular follow-up to diagnose possible recurrence.

We report an observation of ovarian hydatid cyst in a patient who consulted for an abdominopelvic mass.

2. Observation

Mrs. M.Y., 53 years old, resident in a rural area, multiparous, hypertensive, consulted for increasing of abdominal and pelvic volume associated with intermittent pelvic pain of the heaviness type evolving for 2 years, without digestive or urinary symptoms. The history reveals contact with dogs as a risk factor.

The clinical examination found a left lateralized pelvic mass, sensitive, renal with a separation groove with the uterus. No hepatomegaly or splenomegaly was noted. The general condition was preserved.

Pelvic ultrasound showed a cystic image with retro and laterouterine septations of about 12 cm in diameter with multiple non-dopplerized septa.

Surgical exploration with placement of the border fields found a pearly white, liquid multilocular ovarian cyst that was transparent in places. Exploration of the liver, spleen and the rest of the digestive tract was negative. A cystectomy was performed with sterilization of the cavity with exogenous water. Anatomopathological and parasitolosic examinations confirmed the diagnosis of hydatid cyst of the ovary, the patient was put under antiparasitic treatment and connected with the visceral consultation.

3. DISCUSSION

Hydatid disease is common in the Maghreb, where it is endemic. Once the parasite has passed through the liver and the lungs, any location in the body is possible [1][2][3].

Pelvic localization is rare, its frequency varies from 0.30% to 4.27% of hydatid localizations [4]. Ovarian involvement ranks second after uterine localization [5]. Often secondary to another primary location, in our case the ovarian location is primary, retained following the absence of clinical and radiological arguments in favor of another location, notably hepatic and pulmonary.

The pelvic symptoms of Echinococcus granulosus infection are non-specific, and the diagnosis can be made in the context of chronic pelvic pain, menstrual irregularity, increased pelvic volume or during an infertility investigation [6].

Exceptionally in the presence of a surgical pelvis secondary to cyst rupture or adnexal torsion, sometimes the diagnosis may be incidental in the context of a radiological examination. Pelvic ultrasound remains a simple and effective means of exploring pelvic pathology (figure 1), the ultrasound semiology is identical to that of hydatid cysts of hepatic location [1][7[8][9], and may simulate an organic ovarian cyst [9] or a hydrosalpinx. The cystic image of our patient is classified as type III. CT scan is indicated in view of the limitations of ultrasound, showing floating membranes within a multilocular cyst.

The role of immunology is crucial to confirm infection by the parasite, and for postoperative follow-up, hemagglutination and immunofluorescence techniques are the most sensitive. These tests can be negative in 10% corresponding to a simple uni-vesicular cyst making the diagnosis intraoperatively. However, preoperative diagnosis is important, as it allows the avoidance of iatrogenic rupture and the administration of albendazole-based antiparasitic treatment before surgery to reduce the risk of dissemination of the infection [11]. In our case, the hydatid serology was strongly positive.

The reference treatment is surgical and is based on total cystectomy when technically feasible. Mebendazole or albendazole are used as adjuvant treatment to surgery to minimize recurrence. In our patient, cystectomy was possible

and performed without rupture with sterilization of the residual cavity with hydrogen peroxide.

Clinical, immunological and radiological follow-up is recommended to detect recurrence.

The functional prognosis of fertility seems to depend essentially on the surgical procedure and postoperative adhesions.



Figure 1: hydatid cyst of the ovary on US: multilocular cyst with multiple floating septa within a liquid image.

4. Conclusion

Pelvic hyadtidosis is an exceptional localization of this parasitosis. The diagnosis is based on the couple of imaging and immunology, and remains difficult because of the great similarity with other pelvic cystic pathologies. The reference treatment is surgical coupled with antiparasitic drugs. But primary prevention remains the ideal, fighting against infestation of the definitive host, protection of the intermediate host and fight against human contamination.

5. References

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