

**A RARE CASE OF HYDATIC CYST 'S LOCALIZATION: UTERINE HYDATIC CYST****\*Dr. Mounia Chigri, Zineb El mzabri, Nachchat Halima, Sabah El Amrani, Mounia Yousfi and Samir Bargach**

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**ABSTRACT**

In countries around Mediterranean sea, South America, and Australia hydatidosis is a common parasitosis. In our country it is an endemic disease with preferentially locations in the liver and in the lung. The pelvic location is rare and misleading. It represents 0.30% to 4.27% from all the hydatid localizations according to the different authors. We report an exceptional case of uterine hydatious cyst presenting on ultrasound and CT as a right ovarian mass. Diagnosis of pelvic hydatid cyst was suspected during the surgery and confirmed by histology.

**KEYWORDS:** Hydatidosis, pelvic localization, surgery.**INTRODUCTION**

Hydatidosis is an anthrozoosis due to the development in the human body of the larval form of a small dog taenia: *Echinococcus (E.) granulosus*.<sup>[1,2]</sup> This parasitosis is very common in Morocco, a country with traditional breeding.<sup>[1,2]</sup> The Hydatidosis can develop in any organ, with the most frequent locations being hepatic and pulmonary.<sup>[1,3]</sup> The pelvic location in women is one of the rarest.<sup>[3,4]</sup> We report the case of a uterine hydatidosis which seemed interesting to document because of the deceptive clinical picture suggestive of ovarian tumor.

**OBSERVATION**

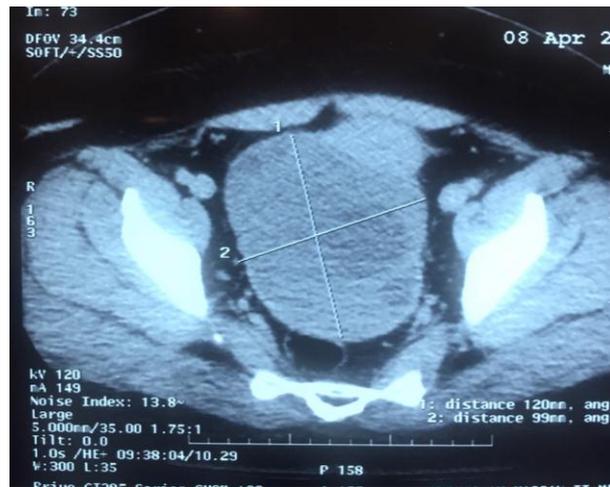
A 40-year-old patient, 2 gestites 2 parites, with no particular pathological antecedents, the onset of symptomatology dates back to one year before admission by the installation of gravitational pelvic pain with increased abdominal volume without other associated signs. The clinical examination found an abdominopelvic mass arriving midway to the umbilicus. Ultrasound shows a voluminous pelvic mass medially and roughly lateral right lateral pelvic, of regular contours, with triple component: fleshy, cloisonne cystic and calcic in places, measuring 97, 4x77.2 mm (Figure 1). This mass pushes the uterus upward without a clear border separation. Pelvic computed tomography confirmed the ultrasonographic evidence by showing a large solid-cystic mass 13 cm long, containing thick septa, with partially calcified peripheral fatty components, suggestive of an ovarian tumor (Figure 2). the hepatic ultrasound were without abnormality, and the CA125 rate was normal.

The surgical exploration finds a mass at the expense of the posterior face of the uterus extending to the broad ligament, of renitente consistency making 10cm of great axis. (Figure3) Both ovaries are of normal size and appearance. A cystectomy is performed during which the mass has broken releasing vesicles and membranes. (figure4) The anatomo-pathological examination of the operative specimen shows a reshaped hydatid cyst associated with a leiomyomatous proliferation reaction.

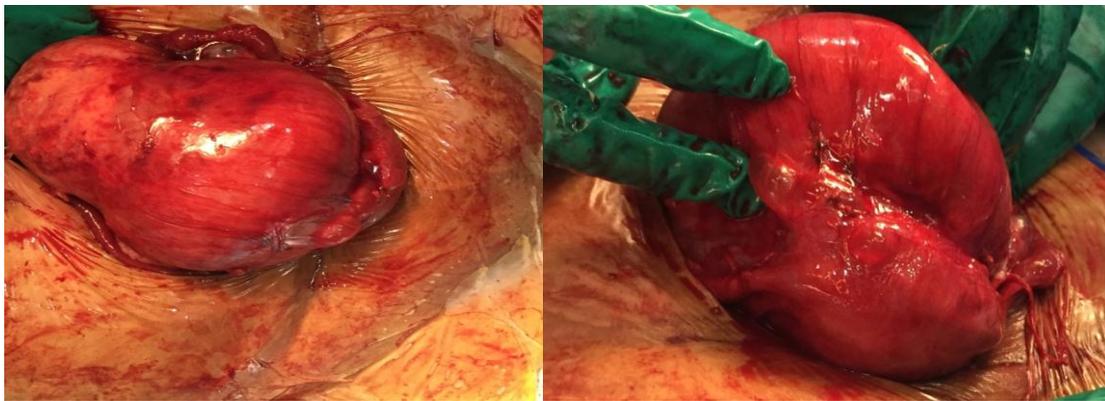
The resumption of the interrogation shows that the patient came from a rural environment, with contact with the dogs, and that she had no history of hydatid cyst. Postoperative follow-ups are simple. The patient is seen two months later in consultation without local or peritoneal recurrence.



**Figure 1: Pelvic ultrasound image showing a large medial and right lateral pelvic mass of regular, triple-component contours, measuring 97, 4x77.2 mm.**



**Figure 2: Pelvic CT scan in axial section: a massive solid-cystic mass 13 cm long axis, containing thick walls, with partially calcified peripheral fatty components, evoking an ovarian tumor.**



**Figure 3: A and b intraoperative images showing a mass at the expense of the posterior surface of the uterus extending to the broad ligament, of renitent consistency making 10cm of major axis.**



**Figure 4: Image showing the vesicles and membranes released after rupture of the mass.**

## DISCUSSION

Hydatidosis is a cosmopolitan anthroozoonosis caused by the development in humans of the larval form of dog taenia, *Echinococcus granulosus*, of which cattle and sheep are intermediate hosts. Man is an accidental host. It is endemic in North Africa, some countries around the

Mediterranean sea, New Zealand, Australia and America, where it is a real public health problem. It is preferentially located in the liver (60 to 70%) and the lung (20 to 30%).<sup>[5]</sup> Pelvic localization is rare and represents 0.30% to 4.27% of the hydatid localizations, whose 80% cases concerns the genital sphere.<sup>[3]</sup>

The mode of hydatid contamination of the pelvic area remains unclear; contamination usually occurs after intra-abdominal rupture of a hepatic hydatid cyst; small vesicles and released scolices bind in the Douglas and continue their development; thus, the intraperitoneal cyst becomes extraperitoneal following secondary endothelialization which excludes them from the peritoneal cavity. The cyst appears to be part of the pelvic cellular tissue.<sup>[1,2,3,6]</sup> However, the infection is exceptionally haematogenous responsible for primitive pelvic hydatid cysts. Cases have been reported, as is the case of our patient.<sup>[3,7]</sup> This form can be retained only if the patient has no other hepatic, pulmonary or splenic localization.<sup>[1,3,7]</sup>

Pelvic echinococcosis is a rare and misleading condition exceptionally worn preoperatively. It is most often revealed by pelvic pain associated with an abdominopelvic mass.<sup>[1,4,8]</sup> It can also be revealed by signs of compression of neighboring organs.<sup>[1,4]</sup> or an acute complication such as anuria by bilateral compression of the ureters or retention of urine.<sup>[1]</sup> The symptomatology can be confusing and vague, such as infertility or bleeding. The diagnosis can be made incidentally during cesarean section or during a complicated pregnancy, obstructed labor or haemorrhage after the delivery.<sup>[9]</sup> The symptomatology is very varied, there is no evocative or specific sign, hence the interest that must be given to the interrogation and paraclinical examinations.<sup>[1,3]</sup> The disease usually remains asymptomatic for years and is only fortuitously discovered by clinical or radiological examination.<sup>[1,3]</sup> If the diagnosis is strongly suspected in a patient with an origin where the hydatid cyst is endemic or has an history of pulmonary hydatidosis,<sup>[9]</sup> it is not the same in a patient with no antecedent and in whom the discovery of the cyst is fortuitous, hence the interest of interrogation and paraclinical examinations.

Ultrasound is essential in the assessment of the hydatid cyst, it shows the cyst, its dimensions and its content. The observed aspects are variable. In addition to the typical aspects of hydatid cyst with abdominal pelvic location classified into 5 types according to GARBI,<sup>[10]</sup> large cysts are difficult to attach to an organ, hepato-splenic or genital cyst, and sometimes misleading, especially in pelvic locations and the diagnosis is made on pathological examination of the operative specimen, case of our observation. In our patient, pelvic ultrasound revealed a cyst of the right ovary. Tomography finds its indication in front of limitations of ultrasound.<sup>[11]</sup> The X-ray of the thorax allows the search for a possible pulmonary localization. Abdominal ultrasound can be used to search for a primitive localization of the hydatid cyst.<sup>[11]</sup> Magnetic resonance imaging allows the analysis of pelvic reports of the hydatid cyst inaccessible to CT.<sup>[11]</sup> The treatment is mainly surgical. The approach must be wide and must be protected from the surgical field by hydrogen peroxide. Total cystectomy is the ideal treatment, however a partial cystectomy can be

performed to avoid organ damage.<sup>[1,3,12,13]</sup> It is always necessary to explore the rest of the abdominal cavity in search of other localizations especially hepatic ones. Medical treatment is inefficient; it is indicated if the resection is incomplete, in case of multiple localizations or in case of contraindication.<sup>[14]</sup> Several antiparasitic agents are used, among them albendazole. A clinical and ultrasound surveillance postoperatively is essential to detect recurrences.

## CONCLUSION

Hydatidosis is a common disease in endemic areas. Pelvic localization is rare. The preoperative diagnosis remains difficult since its clinical symptomatology is confusing. It must be referred to any pelvic mass in a woman from an endemic area. The treatment is essentially surgical. Prevention remains primary.

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