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### RESEARCH ARTICLE

#### PRIMARY PELVIC HYDATIC CYST : ABOUT A CASE

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#### Abstract

Hydatidosis is endemic in Morocco, its pelvic location is rare and misleading. We report the observation of a 34-year-old 2th G 2th P patient admitted for a pelvic mass associated with gravity signs without other accompanying signs. Ultrasound and CT scans located a right anterior lateral septum anechoic mass. The diagnosis of pelvic hydatid cyst is made intraoperatively. The treatment consisted of a resection of the protruding dome. The evolution was favorable.

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#### Introduction:-

Human echinococcosis is a very old parasitic disease that remains endemic in several countries, especially those where sheep farming is thriving; it is due to the development in humans of the larval form of the tapeworm of the dog "echinococcus granulosus" [1].

The liver and lungs are the most frequently affected organs, but once the parasite crosses these two filters, hydatidosis can affect any organ [2].

Pelvi-genital involvement remains relatively rare; its frequency varies from 0.3 to 4.27% of hydatid localizations [1-3].

We report the unusual case of a pelvic hydatid localization in a patient whose mode of contamination of the etiopathogenesis is discussed as well as the different radiological and therapeutic aspects.

#### Observation:-

Our patient is a 34 year old patient from a rural area, with no notable pathological history who presented 2 months before her admission a clinical picture of diffuse abdominal pain predominantly pelvic evolving in a paroxysmal mode accompanied by intermittent vomiting with notion constipation all evolves in a context of fever, asthenia and anorexia.

The admission examination found a tired patient, her conjunctivae were slightly discolored, her hemodynamic state was stable, and she was feverish at 38.5 ° C.

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The physical examination found a diffuse sensitive abdomen with a mass at the level of the right flank measuring 10 cm and a painful impasto pelvic lateral right.

The abdominopelvic ultrasound reports the presence of a cystic formation of 15 cm of right uterine latero seat

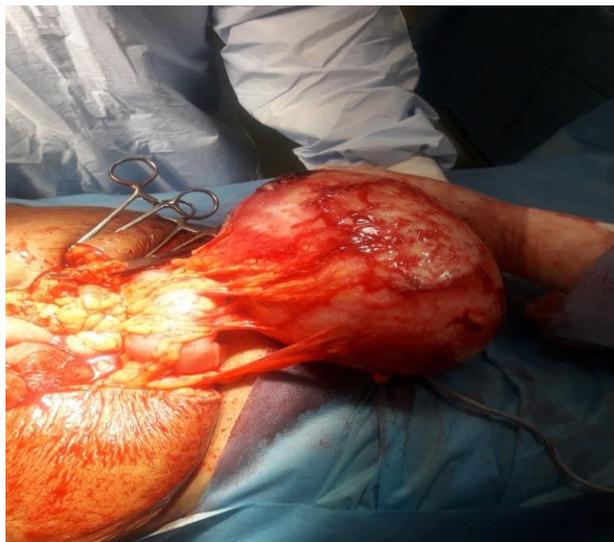
A chest x-ray performed to eliminate associated pulmonary hydatidosis is unremarkable.

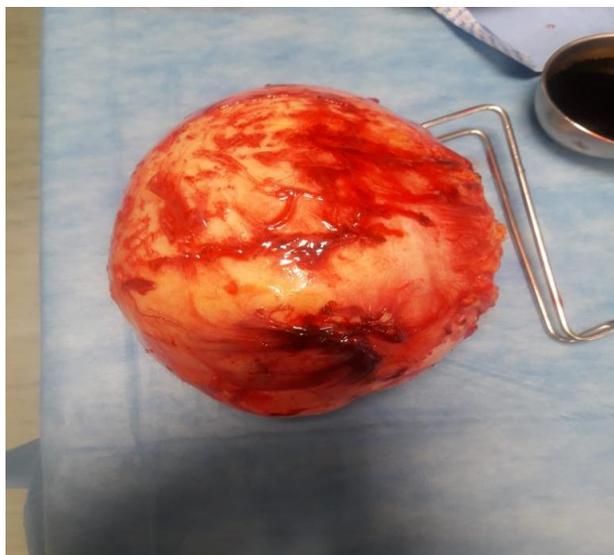
The blood count shows a leukocytosis at 25600 / mm<sup>3</sup> predominantly neutrophils and a hypochromic microcytic anemia at 9.3 g / 100ml.

The patient was first put on antibiotic therapy based on protected ampicillin for suspected infection of the cyst; under analgesics and under anticoagulants.

The patient was approached by a pfannenstiel incision, the exploration after exposure found a large cyst about 12 cm long from the major axis of the latero uterine seat contracting multiple epiploic and hail-like adhesions which are released first carefully.

After having protected the neighboring organs with fields soaked in a scolicide solution based on hydrogen peroxide, the cyst is sterilized with the same solution and then with partial cysto-perikystectomy (Figure 1,2,3)





**Figure 1, 2, 3:-** Operative view of the cystic lesion.

Draining the residual cavity by a tubular drain completes the intervention. The post-operative follow-ups were simple with resumption of food the day after the intervention removal of the drainage on Day 3 and the patient was discharged on Day 5.

Cyto-bacteriological examination of the puncture fluid returned negative A hydatid serology was requested, it turned out positive, The patient was put on medical treatment with albendazole, and the patient is asymptomatic and without recurrences

### **Discussion:-**

Hydatidosis is a relatively common parasitosis in North African countries where it represents a real public health problem [1-3].

The organs most frequently affected being the liver and lungs which represent 90% of all hydatid localizations. Pelvic involvement remains rare and therefore constitutes an atypical or aberrant localization of hydatid disease [2].

Pelvic echinococcosis can be primary without any other hydatid localization this condition occurs either following a hematogenous dissemination of the hexacanth embryo after having crossed the hepatopulmonary filter, or by borrowing from the venous system of retzius and anastomoses of schmiedel [4].

The other route of dissemination is represented by the cracking of the abdominal hydatid cysts and secondary migration of the embryos in the Douglas pouch. In addition, the diagnosis of pelvic hydatidosis is exceptionally made preoperatively since pelvic hydatidosis is a rare and misleading condition. Pelvic echinococcosis is most often revealed by an abdominopelvic mass associated with pelvic pain [9].

This affection has a slow and insidious evolution the clinical signs are generally of late appearance and dominated by the palpation of a hypogastric mass retro-pubic and compressive manifestations. The appearance of hydaturia is a pathognomonic sign and signs cracking cyst in the bladder [5].

It can also be revealed by signs of compression of the neighboring organs [1-4] or an acute complication such as retention of urine or anuria by bilateral compression of the ureters [1]. The symptomatology can be vague and confusing, such as metrorrhagia or sterility. The diagnosis can be made fortuitously during cesarean section or during a complicated pregnancy, obstructed labor or hemorrhage from childbirth [10]. The symptomatology is very polymorphic, there is no specific or suggestive sign, hence the importance that should be given to interrogation and paraclinical examinations [1, 3]. The disease usually remains asymptomatic for years and is only discovered incidentally during clinical or radiological examination [1-3].

The positive diagnosis is based on abdominal ultrasound which makes it possible to specify the location of the cyst, its vascular relationships and to check for the existence of other synchronous abdomino-pelvic locations.

The ultrasound images of the pelvic hydatid cyst are identical to those described in the liver by Gharbi et al who classified the images into five types [3]:

1. Type I: well limited pure liquid collection
2. Type II: liquid collection with detached wall
3. Type III: multi vesicular fluid collection
4. Type IV: heterogeneous mass of predominantly liquid or solid echo-structure called pseudo-tumor, posing a problem of differential diagnosis with a tumor origin and requires the performance of a computed tomography to support the diagnosis.
5. Type V: calcified cyst.

Magnetic resonance imaging makes it possible, in case of doubt, to make the differential diagnosis with vestigial retro-rectal, nerve or bone tumors.

On the biological level, hydatid serology is moderately sensitive in extrahepatic localizations 30 to 70% but can help the diagnosis in case of doubt. Hyper-eosinophilia is suggestive of hydatidosis in 33 to 53%.

The differential diagnosis is made with all cystic or mixed retro-peritoneal tumors (dermoid cysts), pyogenic abscesses or tuberculous abscesses.

In women, types I can be confused with an ovarian cyst or a hydrosalpinx, types IV and V can evoke an ovarian tumor or uterine fibroid.

The treatment of the pelvic hydatid cyst is above all surgical and consists of the injection of a scolicide solution (hypertonic serum or oxygenated water at 10 volumes) intra-cystic, then emptying of the cystic content after protection of the operating field by fields soaked with the scolicide solution. The technique of choice is total cysto-perikystectomy this can be partial resecting the maximum of the pericyst and sparing the plaques in contact with dangerous areas such as the ureters, the vessels or the digestive tract. The drainage of the residual cavity does not protect against secondary infection.

Postoperative medical treatment with antiparasitic agents for several months to avoid recurrences has been recommended by some teams, it is not systematic in our practice [6].

Postoperative monitoring is necessary in order to detect a possible recurrence as early as possible and is based on clinic, immunology and medical imaging.

### **Conclusion:-**

The primary location of the hydatid cyst in the pelvis is exceptional, its puzzling clinical symptomatology means that the diagnosis is often late. The diagnosis must be evoked in front of any process occupying the pelvic space, especially in a country of hydatidemia, its treatment is above all surgical and consists of a total or partial cysto-perikystectomy.

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