



Inflammation and infection

A rare case of acute urinary retention in a woman caused by primary retro vesical hydatid cyst

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ABSTRACT

Hydatid disease is a parasitic infestation that is endemic in many sheep and cattle-raising geographic areas including Mediterranean countries. Primary retro vesical hydatid cyst is a very rare entity. It can be revealed by urinary and gynecological signs. We reported a case of a retro vesical hydatid cyst in a 67-years old woman revealed by an acute urinary retention.

Introduction

Hydatid cyst is a widespread zoonotic infection caused by the larval stages of *Echinococcus*. Primary retro vesical hydatid cyst (RVHC) is extremely rare with only few cases reported in literature. We present a rare case of an acute urinary retention caused by RVHC.

Observation

A-67-year-old woman with no medical past history was referred to our department with an acute urinary retention. She reported a three-months history of hypogastric pain and irritative lower urinary tract symptoms.

Physical examination revealed a bladder ball. The vaginal touch combined with abdominal palpation revealed a round firm retro vesical mass that could not be separated from the uterus. The rest of physical examination was unremarkable. Blood investigations were normal and the cytobacteriological examination of the urine was negative. MRI exam revealed a solid, retro vesical cystic mass which adheres to the uterus and to the bladder whose origin could not be determined (Fig. 1).

Per operative finding was a cyst with gelatinous content adherent to the posterior wall of the bladder that was removed by hard dissection (Fig. 2). Histopathological exam confirmed the diagnosis of hydatid cyst (Fig. 3).

Discussion

Hydatid cyst is a benign parasitic disease that predominantly affects the liver. Urologic location is involved in 2,15% and RVHC is very rare with 0,1 to 0,5 of hydatid cases.¹ Most retro-vesical echinococcal cysts are secondary to rupture of hepatic cysts, either spontaneously or during surgery. However, the absence of cysts in liver or other organs define a primary pelvic cyst.² In these cases, embryos get access to the pelvis through the pelvic venous plexus and peri vesical tissue.³ Such was the case with our patient. No other cyst was found neither on imaging nor during surgery.

Retro-vesical cysts are usually revealed by urinary symptoms due to their compressive effect on bladder, that can be frequency, urgency or rarely an acute urine retention.⁴ In our case the RVHC caused an acute urine retention to a female which is extremely rare.

The diagnosis is based on clinical findings and imagery. Ultrasound as a first line investigation for abdominal pain can be useful to evaluate cysts, but computed tomography and MRI remain the primordial imaging technique to characterize cysts.⁵

Despite these efficient techniques, the diagnosis is confirmed by per operative findings and histopathological examination. Which was the case with our patient. The diagnosis was not obvious even with a well-technical MRI.

The gold standard treatment of symptomatic large hydatid cysts remains the cysto-*peri*-cystectomy either by open or laparoscopic surgery.⁴

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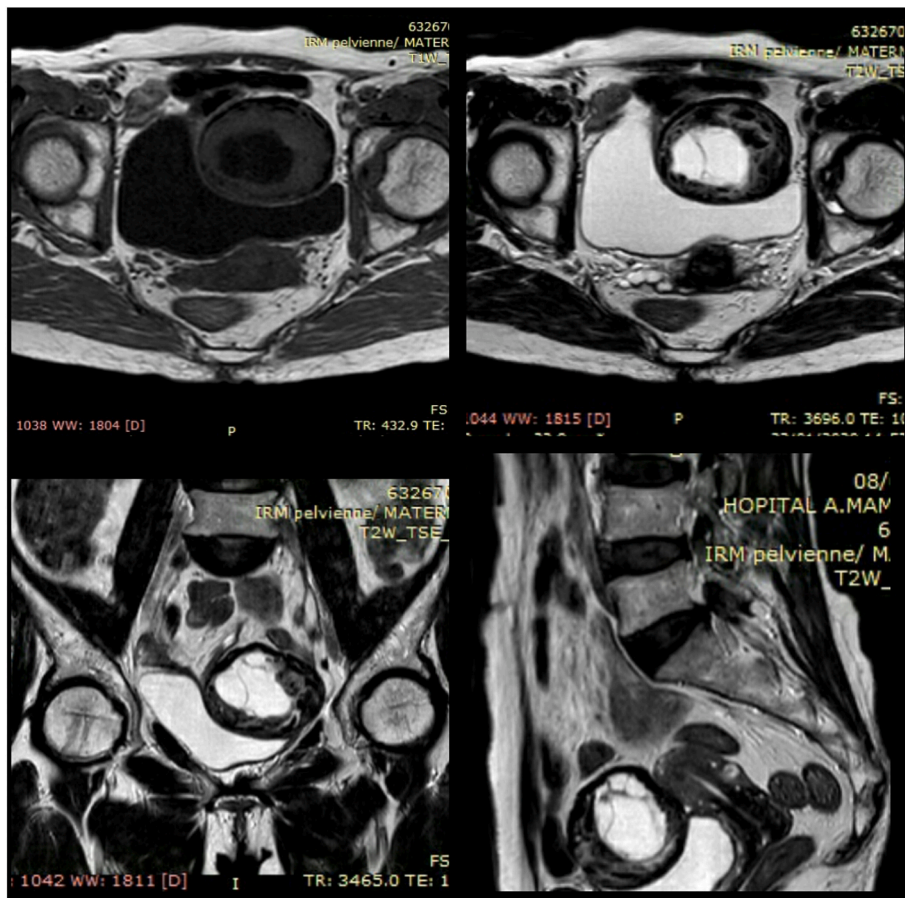


Fig. 1. Pelvic mass with cystic and tissue component.

Conclusion

Hydatid cyst is a zoonotic disease that mainly affects the liver but may have other rare locations. Even being isolated, the main is to keep in mind, especially in endemic areas that a retro vesical cyst can be a hydatid cyst.

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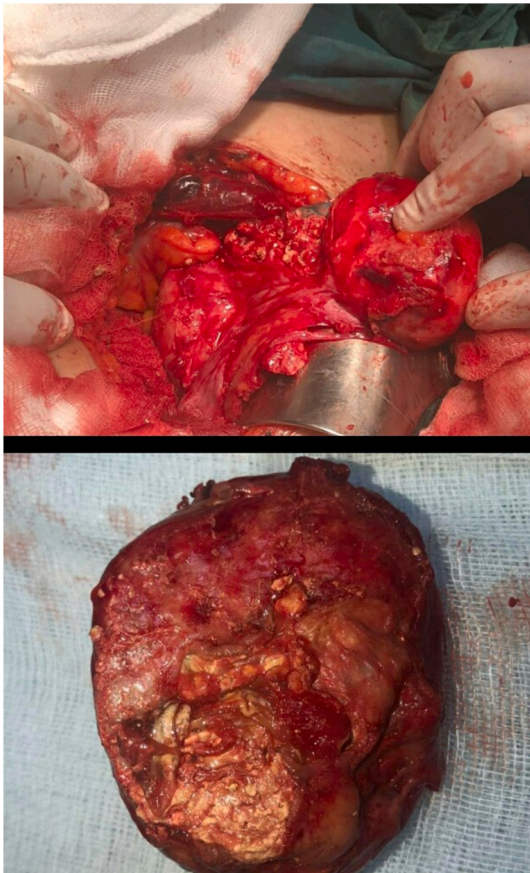


Fig. 2. Cyst with gelatinous content completely removed.

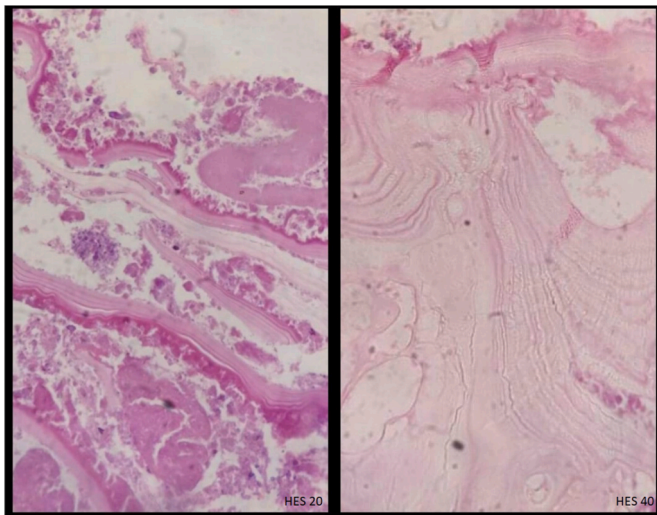


Fig. 3. Lamellar acellular anhist and eosinophilic membranes.