

Primary and Aberrant Localization of a Hydatid Cyst: Bladder Hydatid Cyst About A Case

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Abstract

Case Report

Hydatid cyst is a frequent affection in Morocco. The urogenital localization accounts for 4% of the visceral sites. Observation / case: we report the case of a 70 years old female patient, with no medical history, who has been experiencing dysuria for a month, complicated later by hematuria and abdominal pain. The US and CT performed suspected a vesical hydatid cyst. Discussion: The bladder is an exceptionnal localization for hydatid cyst, often suspected when the patient is having micturition disorders and mostly in the presence of hydaturia wich is a pathognomic sign. The ultrasound usually confirms the diagnosis. CT is performed when the diagnosis is not sure and also to assess the extension and the impact on the urinary tract. The hydatid serology is positive in 30% to 70% of cases. Conclusion: The primary vesical hydatid cyst is rare, the clinical presentation is polymorphic, ultrasound makes the diagnosis and CT allows the assessment of this affection.

Keywords: Hydatid cyst of the bladder, vesical localization of the hydatid cyst, cystic lesion of the bladder.

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INTRODUCTION

Hydatidosis is a condition caused by the development in the human body of a larval form of a small dog tapeworm: echinococcus granulosus [1, 2]. In Morocco the disease is endemic with an incidence of 4.55 cases operated on 100,000 inhabitants, placing it in 3rd position in the Maghreb after Tunisia and Algeria.

It is a cosmopolitan pathology that affects all the organs of the body, whose lung and liver localizations remain the most frequent [1,3]. Acquisition of the urogenital tract is relatively rare and represents 2 to 4% of visceral localizations [4], the kidney is the most affected, and the bladder is rarely affected.

CASE REPORT

It is a 70-year-old patient, with no particular pathological history, his symptomatology dates back to a month by the occurrence of dysuria whose evolution was marked by the appearance of a hematuria and a Abdominal pain, the clinical examination was without particularity. The pelvic ultrasound revealed an intravesical cystic formation measuring 20x15mm, well limited to thick hyperechogenic wall and heterogeneous content with floating membranes [Fig. 1]. abdominal pelvic CT was performed which confirmed the presence of an intra-vesical formation of fluid density measuring 25x20mm, enclosing an air bubble achieving a hydro-aerian level; its wall was slightly thick [Fig. 2].

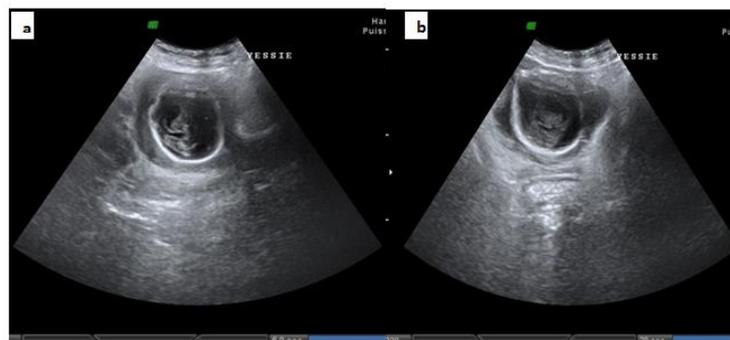


Fig-1(a et b) : Pelvic ultrasound showing a heterogeneous intra bladder cystic formation with membrane detachment



Fig-2(a,b): Pelvic abdominal CT in axial section showing an intra-vesical cyst closing air with enhancement of its wall after injection of the contrast product.

Given the ultrasound and scanographic aspect of this training, the diagnosis of a hydatid cyst type 2 of the GHARBI classification was retained.

The CT carried out also made it possible to study the impact on the high urinary tract apparatus by revealing a bilateral ureterohydronephrosis [Fig.3], and to make the extension assessment by looking for other localization, the latter proved negative.

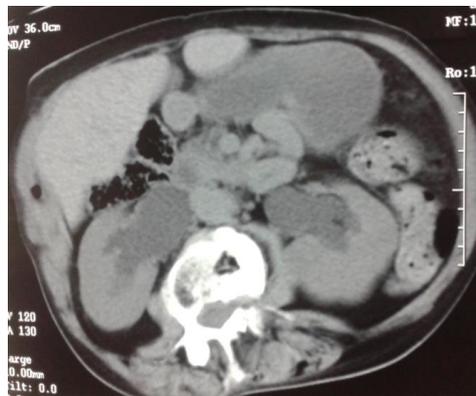


Fig-3: Pelvic abdominal CT in axial section showing bilateral ureterohydronephrosis

DISCUSSION

Bladder hydatid cysts are exceptional, often secondary to pelvic localization [5], and are the result in most cases of an intra-abdominal rupture of a hepatic or splenic hydatid cyst. The primary forms are very rare which can be explained by the hematogenic release of a hydatid embryo [6] which concurs with the case if on the basis of the absence of other localizations, especially the most usual ones.

This condition is slow and silent, which explains why clinical signs are usually late onset. Clinical manifestations are polymorphous and confusing, dominated by urinary disorders such as pollakiuria, dysuria, and acute urine retention [7]. Hydaturia is the only clinical pathognomonic sign of the disease [8], it was missing in this patient. Symptomatology sometimes combines pain and hypogastric mass.

Ultrasound is the first-line examination before any pelvic symptomatology, and in hydatidiasis, it specifies the location of the cyst, these reports and the existence of another abdominal localization [8]. It allows to distinguish 5 types of hydatid cyst according

to the Gharbi classification [9]; type I: Pure liquid collection, type II: Collection with total or parcellar removal of membranes, type III: Multivesicular vesicle collection with presence of endocavitary vesicles (appearance in bee's nest), type IV: heterogeneous cyst with solid focal lesion and calcifications (pseudotumour) and type V: calcified sequellary lesion. The patient's cystic image is classified as Type II.

Computed tomography is indicative of the limits of urinary sonography, it allows better exploration of the hydatid cyst, study these relationships, look for another location and appreciate the impact on the urinary tract [10]. In this case abdominal pelvic CT supported the diagnosis of the bladder hydatid cyst, to confirm the absence of localization and to evaluate the repercussion on the upper urinary tract, and a bilateral ureterohydronephrosis. Biologically, hydatid serology has an average sensitivity in extrahepatic locations of 30 to 70% [11]. Diagnostic confirmation is usually anatomopathological after surgical exeresis of the cyst.

The main differential diagnosis that arises in front of this clinical picture is the tumoral pathology

especially in the presence of hematuria, but the pelvic ultrasound allows discarding the diagnosis by showing the cystic lesion. The late discovery ureterocele also represents a differential diagnosis. It presents itself in ultrasound as a pure cystic formation lateralised at an ipsilateral dilation of the upstream excretory ducts [12].

The counter element in this patient is the heterogeneous appearance, the presence of floating membranes and also the bilateral impact on the upper urinary tract unlike the ureterocele or dilatation concerns that the side reached. Treatment of bladder hydatid cysts involves surgery, total kystectomy remains ideal, however exploration must look for other localizations that have escaped imaging to treat them at the same time [13].

CONCLUSION

The bladder hydatid cyst is an exceptional entity, usually of late diagnosis, revealed by micturition signs. Le diagnostic positif est posé par l'échographie. La tomodensitométrie joue un rôle fondamental dans l'approche diagnostique et le bilan lésionnel de la maladie.

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