



Isolated hydatid cyst of seminal vesicle: A new case

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ABSTRACT

We present a rare case of a hydatid cyst involving the seminal vesicle of a 39-year-old man. Left lumbar pain was the initial symptom. CT-scan and MRI revealed a retro vesical cystic mass arising from the seminal vesicle. Surgical excision of the lesion was carried leaving the seminal vesicle preserved.

Histopathological report was hydatid cyst of the seminal vesicle. No recurrence has been found after a 1-year follow-up.

1. Introduction

Cystic echinococcosis or hydatid disease is an important public health issue, mainly in developing countries where it is endemic^{1,2}.

The main sites of infection in humans are the liver and the lungs^{1,2}. Hydatid disease of the urogenital system, especially of seminal vesicles, is an extremely rare condition.¹ Its treatment is essentially surgical.¹

We report a case of an isolated primary hydatid cyst involving the seminal vesicle in a young male.

2. Case presentation

A 39-year-old male presented an isolated left lumbar pain. Abdominal examination was normal. Rectal examination revealed a left painless mass over the prostate. Ultrasonography revealed a well encapsulated, multiloculated retro vesical mass measuring 66 mm. Computed tomography revealed an attached mass to the left seminal vesicle, repressing the bladder, with serpiginous content, calcified in places, without tissue bud (Fig. 1).

On the MRI, this mass, well encapsulated, was on hyposignal T1, hypersignal T2, with heterogeneous content, without enhancement after injection of gadolinium (Fig. 2).

ELISA for hydatid disease was negative. laboratory tests revealed normal level of eosinophilia. Surgical exploration was using lower abdominal midline incision and extra-peritoneal approach. The Cyst was completely excised (cystopericystectomy) and seminal vesicle was

preserved. Histopathology confirmed the diagnosis of hydatid disease (Fig. 3). Prophylactic albendazole was not used. No recurrence has been found after one year of follow-up.

3. Discussion

Echinococcosis of the urogenital tract is a rare entity.¹ Seminal vesicle localization of hydatidosis is extremely rare.¹ Several cases have been reported in the literature^{1,3}.

Hydatidosis is due to the development of the echinococcus granulosus in the human body, considered as an accidental host in the cycle of the parasite, coming from of the larval form of the Tenia hosted by dog. This pathology presents a real public health problem because of the frequent hepatic and pulmonary localization^{1,2}.

Some authors have proposed that the swarming of the echinococcusgranulosis in the urogenital tract and the seminal vesicle particularly occurs by hematogenous or lymphatic route^{1,3}.

Symptomatology is variable, ranging from completely asymptomatic character for years to lower urinary tract symptoms or lumbar pain due to extrinsic compression of bladder or ureter, or even urinary retention. Sometimes the patient presents a hydaturia by opening the cyst in the excretory urinary tract.⁴ This pathology rather affects adults, without predominance of sex.³

The diagnosis is evoked in front of radiological findings: Ultrasound makes it possible not only to evoke the diagnosis but also to specify the cyst type and classify it according to the classification of Gharbi,² where

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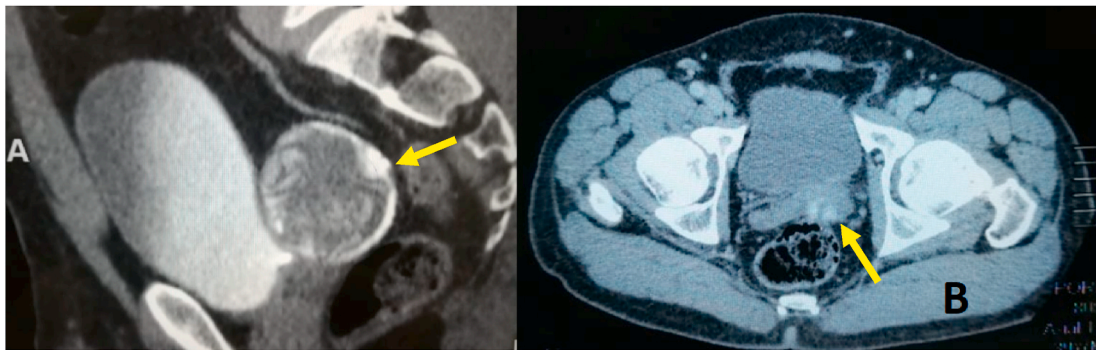


Fig. 1. Sagittal computed tomography cut (A) and axial cut (B) showing a mass with serpiginous content, calcified in places developed from the left seminal vesicle (arrow).

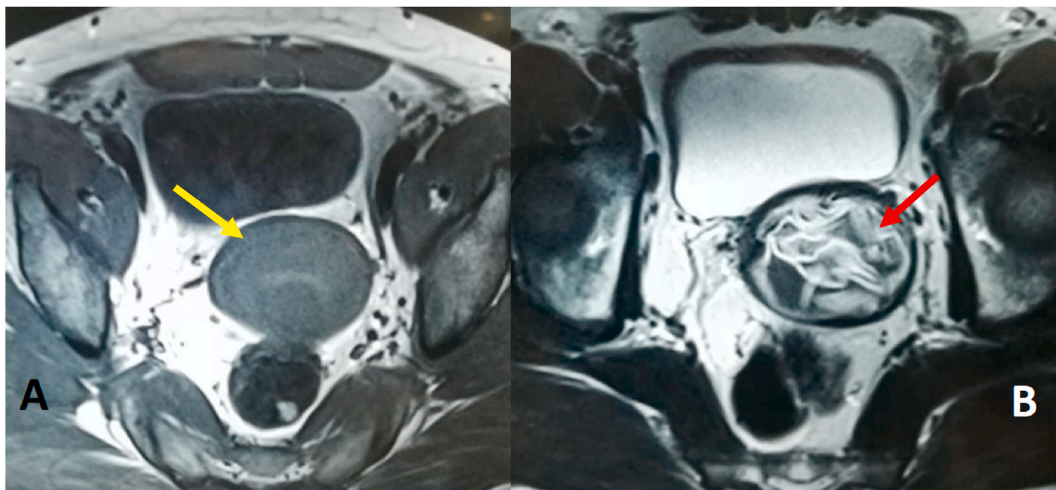


Fig. 2. Axial MRI cut showing a retro-bladder mass (yellow arrow) with hypointense T1 (A) and a heterogeneous content hyperintense T2 (red arrow) (B). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

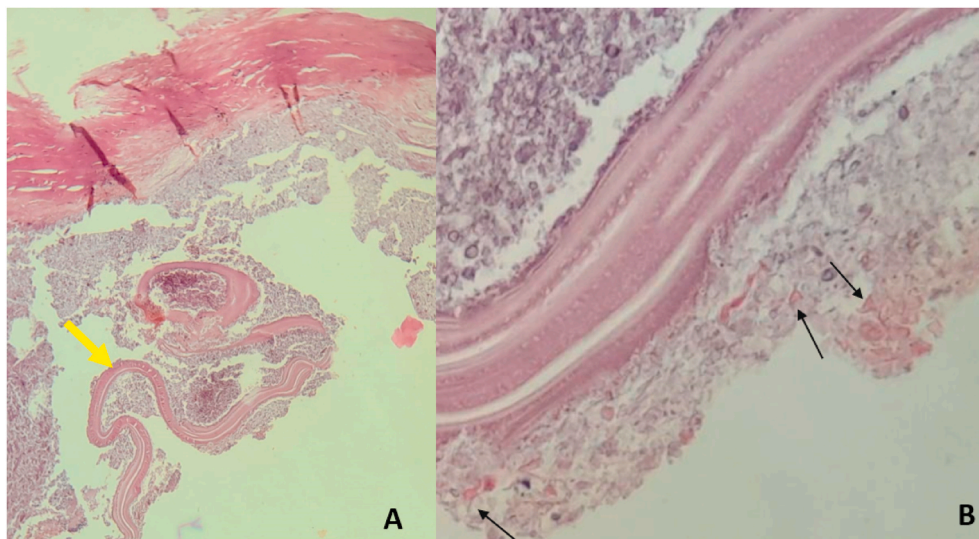


Fig. 3. Echinococcus multilocularis stained with hematoxylin and eosin (H&E). (A) Magnification at 100x showing hydatid membranes (yellow arrow) along with eosinophilic, flaky, amorphous material surmounting cystic wall. Higher magnification (400x) of the specimen (B) showing multiple hooks (black arrows). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

types 3 and 4, called pseudo-tumors, pose a differential diagnostic problem with solid tumors^{2,3}

Retroperitoneal pelvic hydatid cysts may have the same radiologic aspect as cystic adenoma of the seminal vesicles, mullerian duct cyst, retroperitoneal sarcoma, teratoma, leiomyoma, posterior vesical diverticulum, ureterocele, hydronephrotic or cystic pelvic ectopia kidney. Computed Tomography or MRI can also provide a valuable help.²

In case of doubt persistence about the diagnosis. Hydatid serology is a simple, inexpensive and easy to carry out that will also be used during postoperative follow-up to find a possible recurrence of the disease. Some false positives can be found related to a cross-reaction with other parasitoses especially in case of bilharzia.⁴ Eosinophilia can also guide the diagnosis in case of doubt. In our patient ELISA for hydatid disease was negative and no hypereosinophilia has been found.⁴

Treatment is essentially surgical, especially since the cyst is symptomatic and the patient is young. The principle of treatment is based on the eradication of the cyst, without contamination of the neighborhood space. According to some authors, the sub-peritoneal pathway should be favored, with fewer occlusive but also anaphylactic complications compared to the intraperitoneal approach^{1,3}

Dissection of the cyst should be careful so as not to erode the neighboring structures, notably the iliac vessel and the ureters. Intracystic injection of a scolicide solution is recommended in order to sterilize the content of the cyst. The reference resection technique is cystoperikystectomy. The management of the residual cavity is an important time in the intervention. Its adequate drainage is essential to reduce the risk of postoperative collections that can be complicated by secondary infection and fistula^{1,3}. Laparoscopic approach has been described by some authors with promising results.⁵ We treated our patient with total cystoperikystectomy with preservation of the seminal vesicle.

The place of medical treatment remains controversial, being effective in 30–40% of patients^{1,3}. Prophylactic medical treatment was not used in our case.

Post-operative follow up is clinical, radiological and serological, aiming to detect recurrence^{1,3}. Our patient did not experience a recurrence after one year of follow-up.

4. Conclusion

The hydatid cyst of seminal vesicle is exceptional. Its clinical

symptomatology is variable, the diagnosis must be evoked in front of some radiological findings especially in regions where hydatid disease is endemic. Its treatment is essentially surgical. Preventive measures, being essential, are based on individual and collective education aiming to interrupt the natural cycle of the parasite.

Informed consent

The patient gave informed consent for publication.

Disclosure statement

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Declaration of competing interest

There is no conflicts of interest to declare by authors.

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