

Case illustrated

Primary Echinococcosis of ilio-psoas muscle

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A 43-year-old female presented with a left lower abdominal swelling of 6 months duration. There was no history of any trauma or fever. General physical examination was unremarkable except for the abdominal examination on deep palpation revealing a firm swelling without inflammatory signs. It was globular, non-compressible with negative cough impulse in left lower abdomen. The hydatid serology (ELISA) was positive in the case of our patient (45 kU/L). Abdomino-pelvic computed tomography scan showed a well limited multi-locular retro-peritoneal cystic mass with parietal calcifications centered on the left psoas muscle measuring 180 × 99 mm. It produced a mass effect on the common and external left iliac vessels, which remained patent. No liver cysts were noticed (Figs. 1 and 2). A pelvic magnetic resonance imaging (MRI) was performed to better characterize this mass which showed a mass with the same characteristics suggestive of a hydatid cyst of the left psoas muscle (Fig. 3). Surgical exploratory was done by left iliac incision after a protection by fields soaked in the hydrogen peroxide (Fig. 4). The cyst was scraped from the surrounding tissue and was partially excised leaving remnants of the cystic wall in contact with the iliac vessels. Albendazole (10 mg/kg/day) was given for post-operative 12 weeks. Post-operative period was uneventful. The histopathological examination of the specimen was consistent with a hydatid cyst wall.

Echinococcosis is an anthroponosis caused by the development of the larva of the tapeworm *Echinococcus granulosus*. It

occurs mainly in the countries of the Mediterranean [1]. It escapes the pulmonary and hepatic localization in 10% of cases, muscular localization represents only 1–3% of all localizations of the hydatid cyst [2–4], even more rarely in psoas muscle. A literature review made by El Khassouy et al. showed that over the last 40 years, only 41 cases have been reported in the literature [5]. The ultrasound appearance reflects the evolutionary stage of the disease. It is superior to computed tomography for identifying the hydatid nature of the cyst, but it is less efficient in the accuracy of its topography and its various reports. Magnetic resonance imaging (MRI) is reserved for cases where the diagnosis remains doubtful [6]. Total surgical excision is the corner stone of the treatment of psoas hydatid cyst. However, it is not always feasible because of the anatomical reports of the cyst. The administration of anthelmintic therapy is recommended to prevent occurrence.

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CRediT authorship contribution statement

Atef Chamakh, Sohaib Messaoudi and Farouk Taamallah, Marwen Selmi and Farouk Ennaceur: Clinical management of the patient and writing the manuscript. **Mohamed Maatouk, Sofiene Sayari and Mounir Ben Moussa:** Writing and editing the manuscript.

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Fig. 1. Abdominal CT scan: sagittal view showing a limited multi-locular retro-peritoneal cystic mass with parietal calcifications centered on the left psoas muscle measuring 180 × 99 mm.

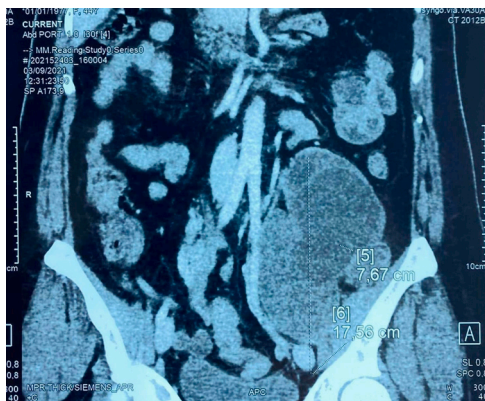


Fig. 2. Abdominal CT scan: frontal view showing the hydatid cyst and its reports with iliac vessels.

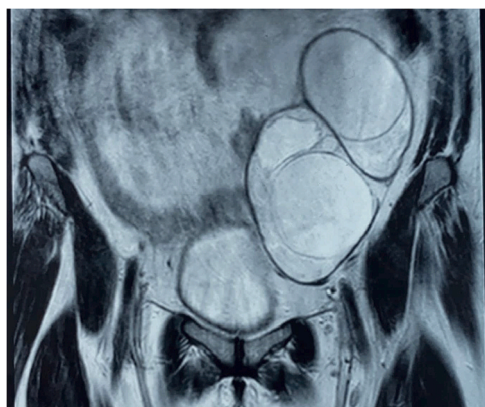


Fig. 3. A pelvic magnetic resonance imaging (MRI) showing a mass suggestive of a hydatid cyst of the left psoas muscle.

Consent

Written informed consent was obtained from the patient for the publication of this case report and its accompanying images.



Fig. 4. Operative view of the cyst.

Ethical approval

We have reported a single case with no requirement for ethical approval.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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