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Unusual site of echinococcosis: axillary hydatid cyst—a case report

Fatma Hammami[1*], Makram Koubaa[1*], Khaoula Rekik[1], Fatma Smaoui[1], Chakib Marrakchi[1] and Mounir Ben Jemaa[1]

Abstract

Background Echinococcosis is a multisystem disease that might affect all organs, especially the liver and the lungs among adults. Axillary hydatid cyst, an extremely uncommon disease, was rarely reported in the literature. We report herein a case of axillary hydatid cyst which revealed a disseminated hydatid disease among a previously healthy woman.

Case presentation A previously healthy woman, aged 53 years old, presented with a painful mass in her right axillary region. Physical examination revealed a painful semi-mobile right axillary mass, of 12 cm in size. Thoracoabdominal computed tomography scan revealed numerous cystic lesions: right axillary, pulmonary, hepatic, pancreatic, splenic and intraperitoneal lesions. The diagnosis of disseminated hydatid disease was suspected in front of the cystic lesions and the positive serology result for hydatid disease. An excisional biopsy of the axillary mass lesion was performed, confirming the diagnosis of a hydatid cyst. The patient received albendazole after hospital discharge.

Conclusions Although axillary hydatid cyst is an extremely uncommon disease, the diagnosis should be rule out in front of the presence of a mass in the axillary region. Imaging results associated with serological tests might suspect the diagnosis, which can only be confirmed with parasitological or/and histopathological examination. Its management include surgical and medical therapy.

Keywords Hydatid cyst, Axillary, Echinococcosis, Albendazole, Case report

Background

Echinococcosis, caused by *Echinococcus*, is one of the currently twenty neglected tropical diseases. It is a multisystem disease that might affect all organs, especially the liver and the lungs among adults. Axillary hydatid cyst, an extremely uncommon disease, was rarely reported in the literature [1]. Differential diagnosis of axillary hydatid cysts include granulomatous lymphadenitis, parasitic diseases, hematoma, abscess, lymphocele, breast cancer manifested in the form of axillary metastasis, soft tissue sarcomas and other malignancies causing axillary metastasis [1]. Imaging results are of great benefit to guide the diagnosis of hydatid cyst represented by computed tomography scan, magnetic resonance imaging and ultrasound, which remains the choice for screening, follow-up after treatment and also cyst staging [2]. Different serological tests may help through the diagnosis process and during follow-up after treatment of the hydatid cyst. However, none of them is the definitive method [3]. As for its management, it includes surgery, percutaneous management and drug therapy depending on the stage of the cyst, its size and its location [2]. Currently, the most effective treatment for hydatid disease located in soft tissue remains surgery, which aims to prevent complications such as compression of surrounding structures, infection, or cyst rupture. Total cystectomy with fibrous adventitia

*Correspondence:
Fatma Hammami
fatma.hammami@medecinesfax.org
Makram Koubaa
koubaa_makram@medecinesfax.org
[1] Infectious Diseases Department, Hedi Chaker University Hospital, University of Sfax, Sfax, Tunisia

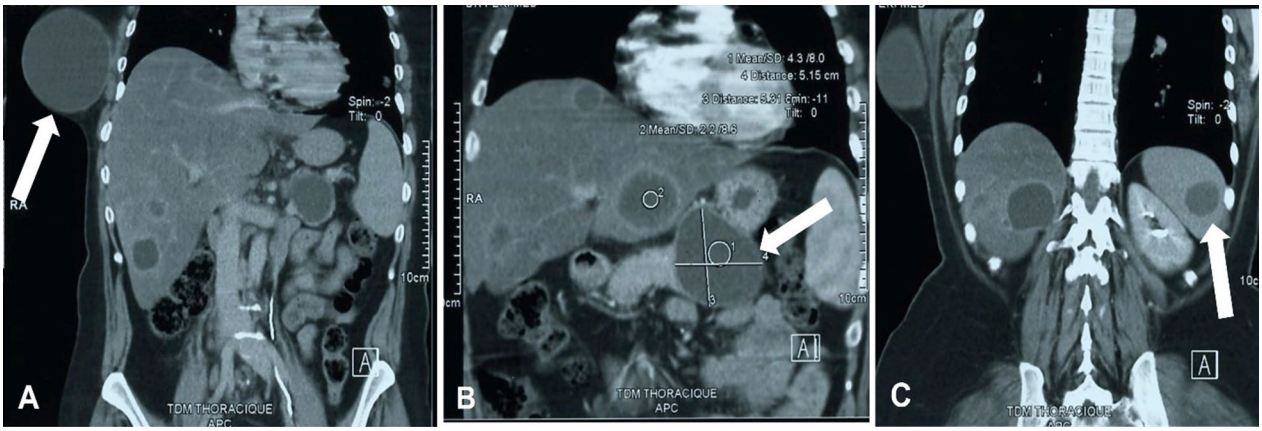

Fig. 1 Abdominal computed tomography scan showing right axillary hydatid cyst (arrow) (**A**), pancreatic hydatid cyst (arrow) (**B**) and splenic hydatid cyst (arrow) (**C**)

is curative treatment for soft tissue hydatidosis, including axillary hydatid cysts [1]. We report herein a case of axillary hydatid cyst which revealed a disseminated hydatid disease among a previously healthy woman.

Case presentation

A previously healthy woman, aged 53 years old, presented with a painful mass in her right axillary region, which appeared 3 years ago. The gradually increase in size of the mass motivated the patient to consult. Physical examination revealed a painful semi-mobile right axillary mass, of 12 cm in size, without any changes at breast exam. Laboratory investigations were normal. An ultrasonography of the region revealed a nonvascular mass in cystic texture, on right axillary, which was 10×7 cm sized. Thoracoabdominal computed tomography scan revealed numerous cystic lesions: right axillary, pulmonary, hepatic, pancreatic, splenic (Fig. 1) and intraperitoneal lesions. The diagnosis of disseminated hydatid disease was suspected in front of the cystic lesions and the positive serology result for hydatid disease. An excisional biopsy of the axillary mass lesion was performed. Histopathological exam confirmed the diagnosis of a hydatid cyst which was surrounded by a pericyst with a thickened wall without any associated signs of malignancy. The patient was discharged with the indication of following albendazole at a dose of 400 bid.

Conclusions

Our case presented an unusual site of echinococcosis. Although axillary hydatid cyst is an extremely uncommon disease, the diagnosis should be ruled out in front of the presence of a cystic lesion in the axillary region. The diagnosis confirmation is based on histopathological and/or parasitological exam, which explains the importance of surgery.

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Author contributions
FH and MK participated in the study design, drafting of the article, analysis, and interpretation of data. FH was the chief investigator and responsible for the data analysis. FH and FS participated in the study design and interpretation of data. CM and MB developed the trial design. FH and KR had full access to all of the data in the study and takes responsibility for the integrity of the data. FH and MK was a major contributor in writing the manuscript. All authors read and approved the final manuscript.

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