Eskisehir Medical Journal
Eskişehir Tıp Dergisi

Eskisehir Med J. 2023; 4(1): 71-72
doi: 10.48176/esmj.2023.107

Letter to Editor / Editöre Mektup

A RARE LOCALIZATION OF PRIMARY HYDATID CYST: ANTERIOR ABDOMINAL WALL

PRİMER KİST HİDATİĞİN NADİR BİR YERLEŞİMİ: KARIN ÖN DUVARI

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Dear Editor,

Hydatid cyst is a parasitic infection caused by Echinococcus granulosus, and is endemic in some countries and regions where the common hosts (cattle, cow, sheep) are frequently raised, such as Middle East, Australia, South America, and Turkey (1). The human is an intermediate host of this parasite, and is usually contaminated through infected foods. Liver and lungs are the most common sites of hydatid cyst whereas soft tissues are rare localizations for this disease, even in endemic areas. Among those, abdominal wall is an extremely unusual site for primary hydatid cyst (1-3). Herein, a rare and interesting case of hydatid cyst located in the anterior abdominal wall was presented.

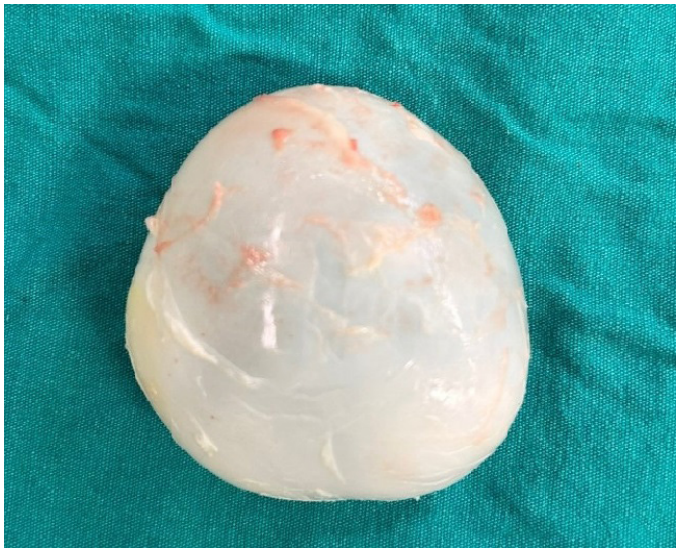

Figure 2: Totally excised abdominal wall hydatid cyst.

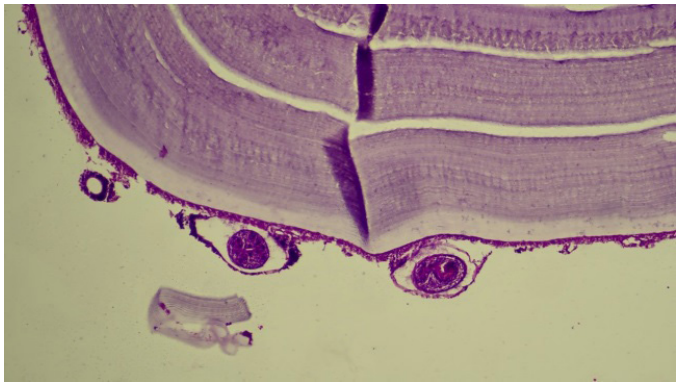

Figure 3: The cyst wall is made up of a laminated membrane which is lined by germinal epithelium with protoscolices (x10).

A 45-year-old man from rural area was admitted to surgery outpatient clinic with complaints of painless and slow growing mass in the left lower quadrant of abdomen for approximately two years. His past medical and surgical history was unremarkable. There was also no history of external trauma to the abdomen. On physical examination, a soft and semimobile mass of 5 cm with normal overlying skin was palpated in the left abdomen. Ultrasonograhy showed a properly bounded cystic mass in the left lower quadrant of the abdominal wall. Computed tomography demonstrated a solitary cystic mass localized between the muscle planes of the abdominal wall, doubtful for a hematoma (Figure 1). There were no additional cystic lesions in another organs such as liver and lungs. The indirect hemagglutination test for hydatid cyst was also negative (Ig G: 1/100). At operation, a whitish, thin-walled, and well-circumscribed cystic mass localized between the abdominal wall muscles under the fascia was totally excised (Figure 2). On histopathological examination, the lesion was reported as a hydatid cyst (Figure 3). The patient

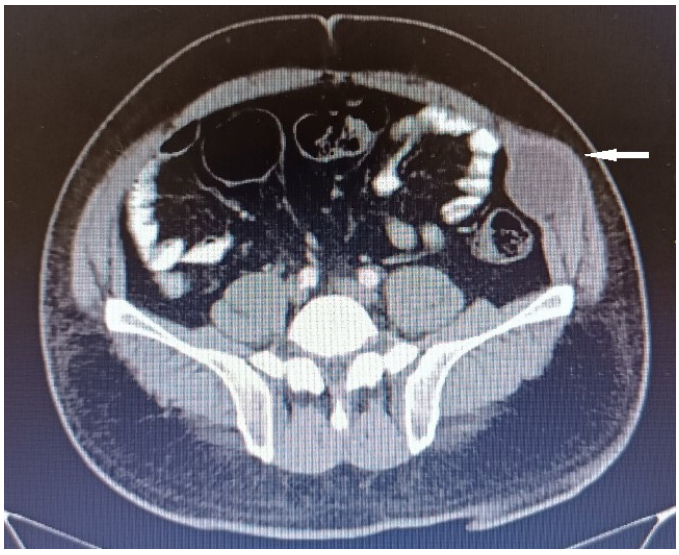

Figure 1: Tomographical apperance of the smooth contoured cystic lesion localized between the abdominal wall muscles in the left lower abdomen (white arrow).

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Received date: 02.03.2023 **Accepted date:** 12.03.2023

Cite as: Kılıç MÖ, Sarı ZB. A Rare Localization of Primary Hydatid Cyst: Anterior Abdominal Wall.
Eskisehir Med J. 2023; 4(1): 71-72
doi: 10.48176/esmj.2023.107

was uneventfully discharged on postoperative 2nd day. The patient was further treated with albendazole (400 mg per day) for 3 months. The patient was informed for publication, and a consent was taken from him.

Subcutaneous hydatid cysts constitute of 2% of all hydatid cyst cases, most of which are secondary to hepatic or pulmonary disease. On the other hand, primary hydatid cyst of abdominal wall is an exceptional condition, with reported few cases (1-6). The underlying mechanism of primary abdominal localization is unclear because it is very difficult for the larvae to bypass the liver and lung, the main filters of the body. However, systemic, lymphatic, and direct disseminations are the hypotheses for unusual localizations (2).

Almost all cases of primary abdominal wall hydatid cyst were reported from endemic countries for this disease. No sex or age predilection was reported in the literature. The clinical course of these cases were also non-specific, and mainly depended on the site and size of the lesions. Abdominal wall hydatid cysts are most often slowly growing and painless lesions, similar to our case. Absence of hydatid cysts in the liver or lung and serology negativity especially in early period of the disease make the diagnosis difficult. Soft tissue tumors should be always considered in the differential diagnosis (7). Therefore, radiological imaging methods such as ultrasonography, computed tomography, and magnetic resonance imaging should be included in the diagnostic workup. In our case, both ultrasonography and tomography could not clearly indicate the diagnosis of hydatid cyst. The excised lesion was diagnosed as hydatid cyst in the pathological examination. The definitive treatment of the abdominal wall hydatid cysts is surgery. Total excision of the cyst without perforation is the most important cornerstone of the surgical approach. After surgery, albendazole treatment can be administered for an average of three months (7). These patients should be also followed up regularly for the local recurrence or new primary lesions.

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