Primary Hydatid Disease of the Soft Tissue

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Abstract

Hydatid disease is endemic in many parts of the world. It may develop in almost many part of the body. We present an unusual case of hydatid disease which located in left inguinal region. Hydatid disease should be considered in the differential diagnosis of all cystic masses in all anatomic locations especially in endemic areas.

INTRODUCTION

Cystic hydatid disease is due to Echinoccocus granulosus may contract the infection either by direct contact with a dog or by ingestion of foods or fluids contaminated by the eggs, which are contained in the feces of the dog (₁). Hydatid disease may develop in almost any part of the body, but the liver is the most frequently involved organ (%75), fallowed by the lung (%15) (_{2,3}). Soft tissue involvement by primary hydatid disease is extremely rare and is sparsely described in the literature.

REPORT OF THE CASE

A 62 years old female patient was rushed to the emergency service with 1 year history of a swelling in her left inguinal region. She reported that it suddenly became larger and painful when she had a cough. On her physical examination 4 x 4cm painful mass was observed in the sub-inguinal ligament. Her liver profile and other laboratory tests revealed no abnormalities. Ultrasonography showed 32.5 x 19.6mm cystic lesion in the same localization. The patient was treated surgically as her clinical findings were associated with incarcerate femoral hernia. The inguinal region was explored and 4 x 3 x 2 cm lesion was excised without any spillage of the cyst (Fig.1).

Figure 1



The cyst was defined as a hydatid cyst after the pathological diagnosis. Having been reevaluated as a primary focus, liver profile and abdominal ultrasonography findings were normal; and serological tests results were negative. Hydatid cyst in inguinal region was accepted as a primary cyst.

DISCUSSION

Hydatid disease is endemic in many parts of the world; in the Mediterranean Countries, the Middle and Far East and South America ($_3$). Humans are infected either by a direct contact with a dog or by ingestion of foods contaminated by the dog feces ($_1$). After ingestion, the eggs are freed from their coating and larvae penetrate the mucosa of the jejunum reaching through the venous and lymphatic channels to any region of the body where they transform into small cysts ($_1$). The cysts may be single or multiple, uni- or multiloculated and thin or thick walled (4). Soft tissue hydatid disease without the liver and the lung involvement occurs in 2.3% of patients reported from endemic areas (3). Imaging modalities such as USG, CT; MRI and serological tests may help the diagnosis (3). The natural course of the infection varies; some cysts spontaneously may collapse or calcify while the other cysts increase in size (5). The growth of hydatid cysts is usually slow and the annual growth rate of the cyst is about 1-3 cm in diameter $(_5)$. The clinical evolution of hydatid disease is non-specific. It depends on the number, dimensions and localization of the cysts (6). Abscess, chronic hematoma synovial cyst and necrotic malignant soft tissue tumor should be taken into consideration in the differential diagnosis (3). Malignant fibrous histiocytoma and the most common malignant soft tissue tumor in adults may undergo necrosis and appear partially cystic (3). Hydatid disease should be considered in the differential diagnosis of all cystic masses in all anatomic locations especially in endemic

areas. The combination of the patient's story and clinical history, imaging methods and serological tests may be helpful in diagnosis of the disease.

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