

Case Report

Primary Intramuscular Hydatid Cyst of the Biceps Brachii Muscle Accurately Diagnosed Preoperatively.

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CASE REPORT:

A 43-year-old lady who presented with a soft tissue mass in the anterior aspect of the left upper arm which was enlarging over the last three years .

The mass was painless and the patient was afebrile, without weight loss and denied any history of trauma. Physical examination revealed a nontender, soft , fluctuant , nonpulsatile mass of about 4 , 3 , 3 cm in dimensions in the biceps brachii muscle and it was mobile with contraction of the muscle . No erythema, ecchymosis, warmth or lymphadenopathy was determined.

Ultrasound of the local area revealed a unilocular, echo free mass. Fine needle aspiration from the cyst was performed, which yielded crystal clear fluid and microscopic examination of fluid was inconclusive. Based on these findings, a working diagnosis of hydatid cyst arising from muscle was made . Screening for other hydatids in the abdomen by doing ultrasound or in the chest by doing chest x-ray were both negative.

After preoperative preparation the mass was explored which revealed the presence of whitish cystic mass inside the biceps brachii muscle typical of hydatid cyst (Figures 1, 2, 3) .

KEY WORDS: “Hydatid, Muscular, Biceps “



Figure 1 : The cyst is explored from inside
The biceps brachii muscle

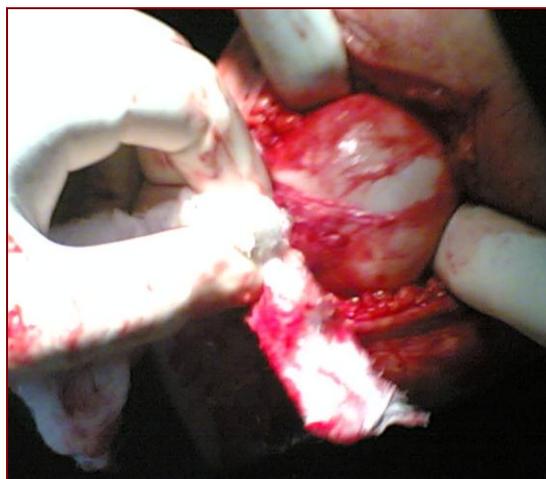


Figure 2 : The cyst appeared bulging from inside
The biceps brachii muscle

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Figure 3 : Complete excision of the cyst
The mass was excised intact and sent for histopathological examination (Figure 4)



Figure 4 : Intact cyst.
Histopathological examination confirmed the preoperative diagnosis of hydatid cyst.

DISCUSSION:

Hydatid disease is caused by the larval tapeworm of the genus *Echinococcus granulosus*, *Echinococcus multilocularis* and *Echinococcus oligarthrus* (1 – 2 - 3). It is endemic in developing countries where it forms a common health problem there including Iraq . The most common organs to be affected are the liver , spleen and the lungs with variable incidence in other organs of the body . The primary intramuscular hydatid disease without other primary focus elsewhere in the body is quite rare with only isolated cases being described in the literature because of the contractility of muscles and the presence of lactic muscle (1) The reports of muscular hydatid cysts are in the neck , thoracic , erector spine , poses , proximal thigh , quadriceps , adductor , intercedes , vast us medial is and sartorial muscles (3) .

To date with revision of contemporary literatures this is the first reported case of primary intramuscular hydatid cyst to occur in the biceps brachii muscle. The preoperative diagnosis is very difficult but in the endemic areas it should be considered in any patient with soft tissue mass and typical ultrasound and MRI findings (1 – 2 - 4).

In this case, correct preoperative provisional diagnosis of hydatid cyst was highly suspected . The diagnostic modalities widely used include ultrasound, computed tomography and magnetic resonance imaging (MRI) (7, 8).

Typically, ultrasound revealed presence of anechoic mass with floating membrane (1).

MRI has low signal intensity on T1-weighted images and high signal intensity on T2- weighted images (1) . Percutaneous fine needle aspiration is a controversial issue due to danger of infection and allergic reactions to anaphylaxis which usually occur at a rate of 19% (2 – 4) .

But some considers it to be safe, simple and effective means to reach a working diagnosis (3) and may be used therapeutically as drainage (2) . The best treatment is surgical and when it is complete excision of an intact cyst as with this patient is usually curative .

But when the cyst ruptures during surgery or there is a chance of spillage of fluid , recurrence is high and of about 70% . In this case antihelminthic treatment is required to decrease recurrence until IgG antibodies titres return to normal limit (2)

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