

Case Report



Primary Hydatid Cyst of Skeletal Muscle: A Condition Which is Worth To Be Kept in Mind in The Differential Diagnosis of The Soft Tissue Masses

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ABSTRACT

Involvement of skeletal muscle in Echinococcal infection is a relatively rare condition which clinically mimics soft tissue tumors at initial presentation. We present a case report of a 30 years old female patient presented with a painless mass on anterolateral region of her left thigh. Diagnostic work up begun with an MRI examination and it revealed a mass containing multiple cystic vesicles in vastus lateralis muscle which was identical to hydatid disease those seen elsewhere in human body. Surgical excision with Albendazole medication cured the patient. Hydatid disease may present as a painless mass in extremities thus it should be included in differential diagnosis of such masses especially in endemic areas.

Key words: Hydatid disease, Muscle involvement, Muscular echinococcosis

ÖZET

İskelet Kasının Primer Hidatik Kisti; Yumuşak Doku Kitlelerinin Ayırıcı Tanısında Akla Getirilmesi Gereken Bir Durum

Çizgili kasların Ekinokokal enfeksiyonu göreceli olarak nadir bir durumdur ve başvuruda klinik olarak yumuşak doku tümörlerini taklit edebilir. Sol uyluğunun anterolateral bölgesinde ağrısız bir kitle ile başvuran 30 yaşında kadın hastayı olgu olarak sunduk. Tetkiklere manyetik rezonans görüntüleme (MRG) ile başlandı. MRG’ da vastus lateralis kasının içinde vücudun diğer yerlerinde görülen kist hidatik ile benzer olan multiple kistik veziküller görüldü. Cerrahi olarak eksize edilerek albendazol tedavisi ile hastada kür sağlandı. Kist hidatik özellikle endemik bölgelerde ekstremitelerde ağrısız kitle olarak belirti verebilir, bu yüzden bu tür kitlelerin ayırıcı tanısında düşünülmelidir.

Anahtar Sözcükler: Kist hidatik hastalığı, Kas tutulumu, Kas echinococcosis

Echinococcus tape worm genus causes hydatid disease especially at certain endemic locations such as Mediterranean area, South Africa, South America and Australia (1). Although in up to 90% of the cases primarily involved organs are liver and lungs, infestation may occur at any tissue. Muscle involvement in hydatid disease is relatively rare and reported to be present in 3-5% of all cases (2,3). In cases with muscular involvement clinical presentation may mimic soft tissue tumors (4). Thus, as in our case too, although the diagnosis with US and the treatment with simple excision could be done at a regular hospital, these patients are often referred to advanced care units, which is arguably necessary.

CASE REPORT

Thirty years old female having a painless mass on her left thigh was referred to our hospital. An MRI screening was performed for suspicion of a soft tissue tu-

mor. MRI revealed a mass in left vastus lateralis muscle measuring 17x6x9 cm which contained multiple cystic vesicles and surrounded with a regular border (Figure 1). After establishing the diagnosis of hydatid disease 2x200 mg oral Albendazole therapy was begun and an abdominal US was performed. The US revealed no abdominal organ involvement. The mass was surgically excised with meticulous care to avoid perforation; no drain catheter was placed (Figure 2). Pathological examination confirmed hydatid disease caused by E. Granulosus infestation. There was no postoperative complication and patient was discharged on the next day. Albendazole therapy was continued for two months and there was no evidence of recurrence at second month and one year after operation.

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Figure 1. MRI image demonstrating the Hydatid disease inside of the left m. vascus lateralis.

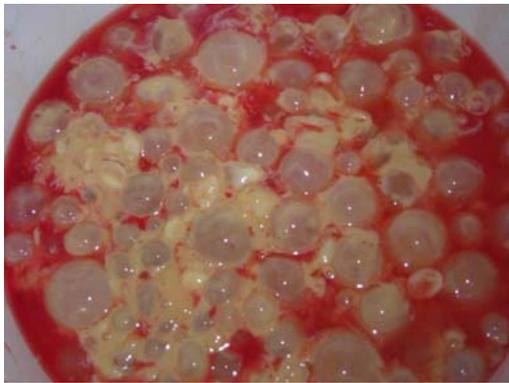


Figure 2. Section of the excised mass demonstrating daughter cysts

DISCUSSION

Palpating a painless solid mass at deep soft tissues of extremities alerts rural area's surgeon for the possibility of a tumor presence which warrants further diagnostic work up at an advanced center. But at an endemic area perhaps keeping muscular involvement of hydatid disease as a possible differential diagnose for such masses in mind, may not necessitate such a referral since an ultrasound work up alone could as well establish the diagnosis (5). More over an advanced tertiary orthopedic oncology care unit may possibly complicate the outcome by intending to take a biopsy because of being unfamiliar with this lesion (4, 5).

We also diagnosed the disease with an extremity MRI as a referral center but we have to admit that performing an US previously would possibly reveal the same diagnose easier, cheaper and with similar accuracy (5). As previously reported in the literature, intact surgical excision of the cyst and Albendazole medication cured the disease in our case which could also easily be done at a regular hospital. We conclude that in an endemic area of hydatid disease, for a muscular mass found at extremities US could establish the diagnose of Hydatid cyst and further diagnostic evaluation may not be required. However muscular involvement of hydatid disease is a rare condition, keeping it in mind may be helpful to establish an accurate diagnosis and a treatment which may be earlier, easier and cheaper.

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