Primary Hydatid Cyst of Vastus Lateralis Muscle

A. Kocakusak, A. Koyuncu, S. Arikan, O. Senturk
Haseki Education and Research Hospital, General Surgery Clinic, Istanbul, Turkey.

Key words. Hydatid cyst ; skeletal muscle.

Abstract. Musculoskeletal system is rarely involved by hydatid cyst, the larval form of Echinococcus Granulosus. A 37-year old man was diagnosed as having a cystic mass within his left thigh musculature. Preoperative computerized tomography suggested an unusual location of echinococcus although serology could not confirm the diagnosis. During surgery, a white coloured cyst within left vastus lateralis muscle was enucleated. Pathological examination after removal of the mass revealed hydatid cyst of vastus lateralis muscle. This case emphasizes that hydatidosis should be included in differential diagnosis of any soft tissue mass especially in regions where it is endemic.

Introduction

Hydatid cyst is an endemic disease caused by the larval form of Echinococcus Granulosus. As a parasitic disease, hydatidosis is usually localized in liver and lung. However, any other organ or part of the body can be potentially affected (1-9). Involvement of musculoskeletal system by hydatid cyst is a rare entity, but it should be included in the differential diagnosis of unusual soft tissue mass in rural regions where hydatidosis is endemic. We report on a case of hydatid cyst found within thigh musculature with review of literature.

Case report

A 37-year old man was admitted to our general surgery clinic because of a cystic mass within his left thigh musculature. He had realized a progressively growing mass in his left thigh for four years. Ultrasonographic and magnetic resonance imaging (MRI) examinations revealed a possible soft tissue hydatidosis (Fig. 1 and 2). However, this diagnosis could not be confirmed by serology. According to MRI, the mass was localized...
within vastus lateralis muscle and had a diameter of 6 cm. During the operation a white cystic ovoid mass was successfully extirpated (Fig. 3). Pathological examination confirmed our preoperative diagnosis as hydatid cyst of thigh. The patient was discharged from the hospital in his second postoperative day uneventfully and postoperatively he underwent Albendazole treatment. During the follow-up period of our patient we performed echocardiography; computed tomography (CT) and MRI of thorax and abdomen to exclude other possible localizations of hydatidosis. According to this work-up, we concluded this case as a primary soft tissue hydatidosis.

Discussion

Isolated primary hydatidosis of skeletal muscle is extremely rare. Diagnosis of hydatid cyst in an unusual location can be easy, if there is multiorgan involvement in the same patient (3). However, in the absence of multiple organ involvement, the diagnosis may be difficult, especially if also serology remains negative, as it was also true for our patient. Echography in detecting the cystic nature, CT in showing the wall calcification and MRI in localization and detecting the nature of the cyst are all useful in diagnosis and treatment planning. Hydatidosis is still a major problem especially in rural areas, including Turkey. Surgery with accompanying adjuvant chemotherapy is the recommended treatment modality. Anti-hydatid drugs can be used alone in cases with any contraindication for surgery (10). Percutaneous aspiration under ultrasonographic guidance of orbital hydatid cysts has been advocated in the literature as a safe and effective alternative to surgical extirpation (6).

References