

Primary Musculoskeletal and Retroperitoneal Hydatid Disease: A Case Report and Literature Review

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Abstract

Hydatid disease is a parasitic infection caused by *Echinococcus granulosus*, most commonly affecting the liver and lungs. Musculoskeletal localization accounts for only 1-4% of cases, and primary muscular hydatidosis without thoracic or abdominal organ involvement is extremely rare. We report the case of a 65-year-old man who presented in an emergency setting with acute respiratory distress and an irreducible left inguinal hernia. Computed tomography revealed an extensive multiloculated cystic lesion involving the left iliopsoas and proximal thigh muscles, associated with pelvic bone destruction and a secondary right testicular cyst, in the absence of hepatic or pulmonary hydatid disease. Emergency surgery included hernia repair and excisional biopsy of the thigh masses, which intraoperatively showed the typical appearance of hydatid cysts. Histopathology confirmed *Echinococcus granulosus* infection, and postoperative albendazole therapy was initiated. The postoperative course was complicated by severe chronic obstructive pulmonary disease, and, despite initial recovery, the patient later developed a hip abscess and repeatedly refused further surgery, ultimately being lost to follow-up. An institutional 10-year review and a focused literature review underline the rarity and diagnostic difficulty of primary musculoskeletal hydatid disease. Primary musculoskeletal and retroperitoneal hydatid disease should be considered in the differential diagnosis of cystic soft-tissue lesions, even in the absence of hepatic or pulmonary involvement, particularly in patients from endemic areas.

Keywords: musculoskeletal hydatid disease, retroperitoneal hydatid disease, *Echinococcus granulosus*