

Primary paraspinal hydatid cyst: a case report

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Citation

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Abstract

Hydatid disease is a parasitic infection generally occurring in specific geographical areas. Exclusive involvement of the muscles is extremely uncommon, because implantation at this site would require passage through the filters of the liver and lung. En bloc resection without inducing rupture and spreading the daughter cyst is recommended treatment strategy and accepted to be curative for intramuscular hydatid cyst. We report a case of primary hydatid cyst of the erector spinae muscle.

INTRODUCTION

Hydatid disease is a rare and endemic echinococcal infestation in Mediterranean countries. It is most frequently located in the liver and lungs and is occasionally found in other organs. Hydatid cyst of muscle is not commonly encountered, as the presence of lactic acid creates an unfavorable milieu for growth [12]. For this reason, primary muscle hydatidosis without liver and lung involvement is also quite uncommon [1234]. It has been reported in about 2%–3% of all patients [5]. We report a case of primary hydatid cyst seated in erector spinae muscle.

CASE REPORT

A 24-year-old farmer presented with a history of right lumbar swelling of 6 months' duration. The swelling was gradual in onset and associated only with discomfort. On examination, there was a 4 × 4,5 cm mass in the right lumbar region with no evidence of cough impulse (figure 1).

Figure 1

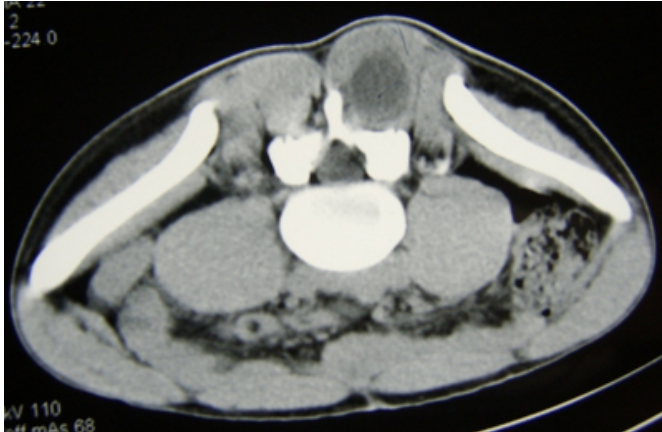
Figure 1: Clinical presentation of mass in the right lumbar region.



A computed tomography scan revealed a large cystic mass arising within the right erector spinae muscle at the level of L2 and extending down to the level of the L5 vertebra (Figure 2).

Figure 2

Figure 2: Computed tomography scan showing cystic mass.



No intra-abdominal or pelvic extension of disease was identified. Based on all these clinical and radiological data, the mass was suspected as hydatid cyst. The echinococcal haemagglutination test (IHA) was negative and further imaging studies ruled out coexistent hydatid disease in other organs.

During surgical intervention all precautions like antiscolicidal solutions along with meticulous surgical technique go a long way in the prevention of recurrence of this disease. The capsule was excised. The cavity was sterilized with alcohol-soaked iodine dressings for several minutes. The patient did not receive chemotherapy.

DISCUSSION

Musculoskeletal hydatid disease is relatively uncommon, with an incidence of 2–3% [5], hence, the interest of this case. Furthermore, paraspinal muscles are much more rarely affected [678].

Clinical symptoms of hydatid disease depend on the site and size of the cyst. Because this patient's disease involved the lumbar musculoskeletal region, there were very few symptoms. The cosmetic aspect, as being the principal concern of the patient, is reported [9].

Isolated muscular involvement in the absence of liver or lung hydatid disease is usually a diagnostic challenge both for the orthopedic surgeon and the radiologist. Serologic tests are valuable when they are positive but in half of the primary intramuscular hydatidosis case serology is false negative because the capsule isolates the parasite from the host's immune system [1011]. Therefore, complete reliance on serology for definitive diagnosis is not recommended. Ultrasonography should be the first preferred imaging

modality for the detection of muscular hydatid cyst as being a non-invasive method. It is also helpful in guiding the physician during aspiration and following up the course of disease. However, the extent of lesion, clear identification of involved structures and surgical planning may best be performed with magnetic resonance imaging [12].

En bloc resection without inducing rupture and spreading the daughter cyst is recommended treatment strategy and accepted to be curative for intramuscular Hydatid disease [13]. Puncture-aspiration-injection-reaspiration (PAIR) refers to an ultrasound guided technique consisting of puncture and evacuation of the contents of the hydatid cyst; injection of scolecidal agents such as 95% ethanol; and reaspiration of the contents of the cyst. This technique was first developed by Mueller et al. as an alternative treatment method against surgical excision of the liver hydatid cysts [14]. Although, puncture of a hydatid cyst has long been discouraged because of potential complications, such as anaphylactic shock or risk of iatrogenic spreading, there is an expanding literature suggesting that PAIR is effective for treatment of primary uncomplicated hepatic cysts [15]. However, this technique has been used for muscular hydatid cyst [16].

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