Primary Hydatidosis of the Gluteus Muscle: Report of a Case and Review of the Literature

Soykan Barlas¹ · Arzu Akan¹ · Yavuz Eryavuz¹ · Refik Bademci¹ · Giray Yavuz¹ · Sedat Kamali¹ · Gülçin Kamali²

Published online: 7 March 2016
© Association of Surgeons of India 2016

Abstract Hydatid disease is a parasitic infestation of humans and herbivorous animals, caused by *Echinococcus granulosus*. A 55-year-old woman had no prior surgery for hydatid disease earlier. Total cystopericystectomy was performed without cyst rupture. Albendazole was given postoperatively. Neither systemic or local complications nor recurrences were found after minimum follow-up of 12 months, and the laboratory test results were within the normal ranges. Since primer muscular hydatidosis is a very rare disease, care should be taken in diagnosis of cystic mass of skeletal muscle, especially in endemic areas.

Keywords Hydatidosis · Gluteus muscle · Cystic septations · *Echinococcus granulosus*

Fifty-five year-old female presented with the complaint of a mass causing pain in the gluteal region for 1 year. The mass was noted to be measuring approximately 10 × 8 cm in size, fixed to the underlying tissues. It was noted that she has been living in a city for the last 15 years but she had lived in a village earlier. A mass within the gluteus maximus muscle measuring 100 × 72 × 53 mm in size was determined by ultrasonographic examination. The mass

consisted of multiple cysts (the largest one measuring 60 × 37 mm in size) with cystic septations. Computerized tomography scan revealed that the capsulated lesion was measuring 90 × 60 mm in size and including multiple cystic lesions suggesting scolece and extending from the gluteus maximus muscle to the fatty tissue at the level of the iliac crest (Fig. 1). Based on those findings, the mass was considered to be soft tissue hydatid disease.

Echinococcus serologic test was performed in the patient and it was reported as negative. The patient decided to be operated. Albendazole, 400 mg p.o, daily treatment, was administered for 4 weeks during the preoperative period. The mass was excised totally with its capsule (Fig. 2). The patient was discharged on the second postoperative day. After the discharge to home, she was instructed to use 400 mg albendazole, p.o, daily for the next 3 months. No complications or recurrence were determined in the follow-up period for 12 months.

Fig. 1 Computerize tomographic image of the patient with hydatid cyst of the gluteal region

✉ Arzu Akan
akanarzu@hotmail.com

¹ Department of General Surgery, Okmeydani Education and Research Hospital, Istanbul, Turkey

² Department of Pathology, Okmeydani Education and Research Hospital, Istanbul, Turkey

Fig. 2 Intraoperative view of the hydatid cyst

Discussion

Primary involvement of the muscle tissue is very rarely seen and has been reported in approximately 1–4 % of all patients with hydatidosis [1, 2]. It has been suggested that the muscle provides a poor environment for the parasite because of the presence of lactic acid. Direct hemagglutination and ELISA

can be used for differential diagnosis [3]. If ultrasonography is not sufficient to diagnose an extra-abdominal hydatid cyst, CT imaging can be helpful to determine the surgical margins [4]. Although there are some authors using needle biopsy for diagnostic purposes [5], we do not recommend needle biopsy since it may cause the cyst to rupture resulting in an anaphylactic reaction. Treatment is total excision of the cyst together with its pericyst content.

References

1. Aleksic-Shihabi A, Vidolin EP (2008) Cystic echinococcosis of the heart and brain: a case report. *Acta Med Okayama* 62:341–344
2. Trabelsi A, Fatnaci R, Ouni F (2008) Hydatid cyst of the breast: a case report. *Pathologica* 100:197–198
3. Thursky K, Torresi J (2001) Primary muscle hydatidosis of the thigh: management of a complicated case with combination adjunctive albendazole and praziquantel chemotherapy. *Clin Infect Dis* 32:65–68
4. Al G-D, Ros Mendoza LH, Villacampa VM (2000) MRI evaluation of soft tissue hydatid disease. *Eur Radiol* 10:462–466
5. Kacheriwala SM, Mehta KD, Pillai B (2004) A rare presentation of primary hydatid cyst. *Indian J Surg* 66:47–49