Spermatic cord hydatid cyst: an unusual localization

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Abstract
Lesions of the groin include hernia, hydrocele, spermatic cord cyst, undescended testes, lymphadenopathy, and abscess. Hydatid cysts are endemic in certain regions of the world. They are usually located in the liver, lung, spleen, brain, and kidney. Although many uncommon locations have been reported, hydatid disease has been reported 3 times in the spermatic cord. This is the first report of a child with hydatid disease in the spermatic cord. A 9-year-old boy with a spermatic cord cyst proven to be a hydatid cyst is reported.

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Hydatid cyst, caused by Echinococcus granulosus, is endemic worldwide [1,2]. These cysts are usually located in the liver, lung, spleen, brain, and kidney [2,3]. They can also be encountered in almost every part of the body, such as the posterior mediastinum, intestinal mesentry, parotid gland, thigh, retroperitoneal space, adrenal gland, salivary glands, and scrotum [2,4-8]. Although very unusual locations are described, hydatid disease has been reported 3 times in the spermatic cord of adult patients [9]. This is the first report of a child with hydatid disease in the spermatic cord.

1. Case report

A 9-year-old boy was admitted to the Selcuk University Meram Medical Faculty Department of Pediatric Surgery with the diagnosis of spermatic cord cyst. On admission, his weight was 32 kg, axillary temperature was 37.0°C, pulse was 92 beats per minute, and blood pressure was 110/65 mm Hg. He had no vomiting and headache; and his central nervous system was normal according to his hearing status, balance, and motor activity. On examination, a mass approximately 3 × 2 cm in diameter was
identified in the left groin, his testes were in the scrotum, and there was no silk sign regarding the processus vaginalis. Other physical examination findings did not reveal any abnormal findings. His complete blood count and prothrombin time were normal.

A left inguinal incision was performed. A 3 × 1-cm spermatic cord cyst in the left groin was found (Fig. 1). It was strongly adherent to the spermatic cord. The spermatic cord and vessels were intact. Total cyst excision was performed after dissection of the cyst. The operative diagnosis was hydatid cyst because we identified the germinative membrane and liquor of a hydatid cyst after opening the cyst wall. The pathologic examination findings, which were cuticula and eosinophilic infiltration, confirmed the operative diagnosis of hydatid disease (Fig. 2). Postoperative chest radiography and ultrasonography showed no coexisting thoracic or intraabdominal hydatid disease. The child received albendazole (10 mg/[kg d]) for 12 months on condition that the enzymes of the liver were measured at 2-month intervals. No recurrent disease was encountered during 12 months of follow-up.

2. Discussion

Lesions of the groin include hernia, hydrocele, spermatic cord cyst, undescended testes, lymphadenopathy, and abscess [1]. On examination, most of these lesions were characterized by a mobile bulge in the groin and are easily diagnosed. Moreover, all of them are managed using surgical procedures [1].

Echinococcal cysts can be seen in every part of the body, such as the posterior mediastinum, intestinal mesentry, parotid gland, thigh, retroperitoneal space, adrenal gland, salivary glands, scrotum, and spermatic cord [2,4-8]. Therefore, when dealing with spermatic cord cysts, hydatid cyst should be suspected, despite the fact that the spermatic cord is an uncommon site for the disease. Especially in countries where echinococcosis is endemic, such as Turkey, Australia, Brazil, Chile, New Zealand, Argentina, Peru, Uruguay, Algeria, Spain, and Greece, hydatid disease should be considered [2].

When a spermatic cord cyst is identified, hydatid disease should be considered even if hydatid disease is absent in other organs. If the disease is considered preoperatively, the percutaneous treatment of hydatid cysts should be performed. If the disease is not considered preoperatively, operative findings (which are cystic and mobile) suggesting hydatid disease should alert the surgeon. Although hydatid disease has been seen in adult patients, spermatic cord hydatid cyst, as an unusual localization, must be considered in children as well [9]. The diagnosis is confirmed by pathologic examination. Initiation of anthelmintic therapy may prevent dissemination [2].

In countries where echinococcosis is endemic, hydatid cyst should be considered among the causes of cystic lesions of the spermatic cord even though it is rarely seen.

References