Retroperitoneal Hydatid Disease

Retroperitoneal Hidatid Hastalık: Bir Vaka Sunumu

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Abstract

Localization of hydatid disease in the retroperitoneal space is extremely rare. We reported a recent case with primary retroperitoneal hydatid cyst, the diagnosis of which was established before surgery. In diagnosis of a cystic retroperitoneal mass, fine needle aspiration biopsy would be useful for planning the definitive surgical strategy.

Key Words: Hydatid cyst, Retroperitoneum, Fine needle aspiration biopsy.

Özet

Hidatid hastalığın retroperitoneal lokalizasyonu oldukça nadirdir. Tanısı cerrahiden önce konulan, primer olarak retroperitonealde yerleşimli olan bir hidatid kist vakasını tanımladık. Retroperitonealdeki kistik kütlenin tanısında, kesin cerrahi strateji planı için ince bir iğne aspirasyon biyopsisi faydalıdır.

Anahtar kelimeler: Hidatid kist, Retroperitoneum, İnce iğne aspirasyon biyopsisi

Introduction

Hydatid disease is one of the oldest diseases known to mankind. In 85-95% of the cases, the liver and /or the lung are involved and in only 5-15% the cyst occurs at other sites (1). Primary retroperitoneal hydatid disease [Echinococcus granulosus] is extremely rare (2). We report a recent case with primary retroperitoneal hydatid cyst, the diagnosis of which was established before surgery.

Case Report

A 50 year old woman was referred to our center on postoperative day 5, after being operated in a peripheral hospital with a diagnosis of ovarian mass. The operator noticed a retroperitoneal mass in close relationship with the iliac vessels. He ended the procedure without any further intervention. She had a past history of weakness, abdominal pain and lack of appetite for 1 month.

Physical examination disclosed tenderness especially in the left lower quadrant. Vital signs and blood pressure were normal. Whole blood count and urine analysis were normal. Indirect hemagglutination test was negative. On ultrasound a large well defined solid lesion including multiple cysts was seen. Computed tomography [CT] demonstrated two adherent solid lesions 10x8x7 cm and 9x6x5 cm in diameter including multiple peripheral cysts. Lesions were localized in the left retroperitoneum and pelvic fossa adjacent to left iliac vessels (Figure 1). Because of suspicion in diagnosis, fine needle aspiration biopsy [FNAB] was done. Cytological examination was consistent with a hydatid cyst. Thus a re-operation was planned. Laparotomy revealed two large hydatid cysts in the retroperitoneum adjacent to iliac vessels.

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Because of dense vascular adhesions, evacuation with partial pericystectomy and drainage of the remaining cavity was preferred. The rest of the retroperitoneal cavity and liver were thoroughly examined to rule out any other hydatid cyst. The postoperative course was uneventful.

Discussion

Hydatid disease is still a major health problem in endemic areas such as the Mediterranean region. The infection is caused by the parasite Echinococcus granulosus and involves the liver in 70% of cases (3). Uncommon locations of hydatid disease in sites other than the liver and lungs accounts for approximately 10% of cases of hydatid disease (4-6).

Retroperitoneal involvement was always thought to be secondary to rupture or spillage during surgery of liver hydatids. Primary retroperitoneal hydatid cyst without other organ involvement was first reported by Lockhart and Sapinza (7) in 1958.

El Oukadi et al (8) reported 31 retroperitoneal tumors, and 6 of them were retroperitoneal hydatid cysts. The frequency of primary retroperitoneal hydatid cyst is estimated to be 0.8% in series of Ismail et al (9) consisting of 122 patients with hydatid disease (10). In another study, Prousalidis et al (11) reported 49 uncommon sites of hydatid disease, and 2 of them were in the retroperitoneal space.

Preoperative diagnosis of retroperitoneal hydatid disease is difficult. The differential diagnosis of a retroperitoneal cyst includes retrorectal cyst, teratoma, cystic lymphangioma, abscess, necrotic malignant soft tissue tumour.

In 1973 Mukherjee et al (12) reported 9 cases, 2 had died due to anaphylactic reaction resulting from spillage during excision or biopsy done with the misdiagnosis of a retroperitoneal tumor. In our patient the diagnosis was determined with CT and FNAB and anaphylaxis was not seen during or after biopsy. Biopsy would be useful in suspicion of a retroperitoneal cystic tumor, but adequate precaution should be taken to avoid anaphylaxis.

For treatment of retroperitoneal hydatid cyst, total excision may not be possible because of dense adhesions to major vessels such as iliac vessels. The choice of surgery should be evacuation of the cyst and excision of the redundant portion of the pericyst leaving the rest of the cavity open. In conclusion, especially in the endemic areas, hydatid cyst should be remembered in the differential diagnosis of a cystic retroperitoneal mass. Because of difficulty in the diagnosis of a retroperitoneal mass, FNAB would be useful for planning the definitive surgical strategy. Thus mortality, complications and unnecessary resective procedures can be avoided by a preoperative correct diagnosis.

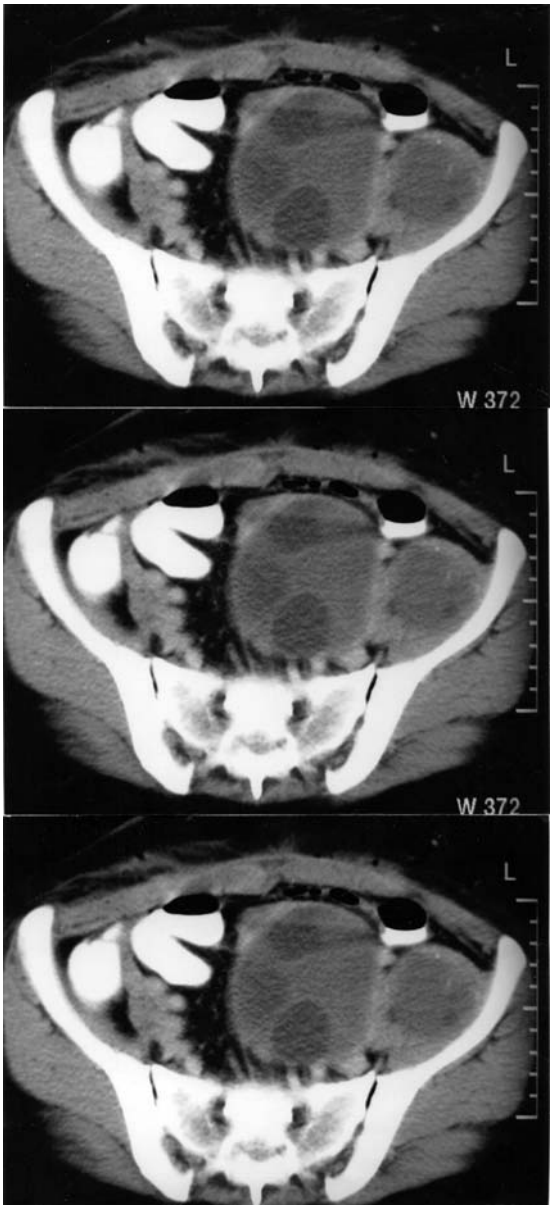

Figure 1. CT image shows a solid lesion including multiple peripheral cysts localized in the left retroperitoneum and pelvic fossa adjacent to iliac vessels.

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