

LETTER TO EDITOR

Left retroperitoneal hydatid cyst disease and the treatment approach

Sol retroperitoneal kist hidatik ve tedavi yaklaşımı

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Dear Editor,

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 the other sites. Echinococcal cysts are mostly found in the liver (60%-70% of cases), followed by the lungs (10%-25%), spleen, ovaries, kidneys, brain, bones and heart, but rarely elsewhere in the body.¹⁻³ Retroperitoneal location of hydatid cyst is encountered rarely and only occasional case reports have appeared since Lockhart and Sapinza first reported this entity in 1958.⁴⁻⁶ Primary retroperitoneal hydatid cyst is extremely rare. Hydatid disease in extrahepatic locations usually remains asymptomatic unless the cyst grows and produces symptoms due to pressure, rupture to the pleural or peritoneal cavity, secondary infection, or an allergic reaction. The differential diagnosis of a retroperitoneal cystic mass includes soft tissue tumors, cystic lymphangioma, retroperitoneal abscess, pseudocyst, and embryonal cysts.⁷⁻⁸ We reported a rare case of a 21-year-old woman with a hydatid cyst in her left retroperitoneum, with concomitant left diaphragmatic involvement. *J Microbiol Infect Dis* 2013;3(4): 222-223

A-21-year-old female admitted with abdominal pain. There was no abnormality in the laboratory tests. Thoraco-abdominal computed tomography (CT) showed left intrapulmonary and left retroperitoneal round, cyst shaped masses (Figure 1). Suspected diagnosis was hydatid cysts. *Echinococcus granulosus* IgG was positive at 1/640 titer in the Immunofluorescence Assay (IFA) test. Treatment with albendazole 15 mg/kg/day (4 weeks treatment, 2 weeks nontreatment periods) was started. Cystectomy was applied for diaphragmatic cyst via left

thoracotomy. After surgery, computed tomography showed decreased diameters of the cysts (Figure 2). Phrenotomy, drainage of retroperitoneal cyst and capitonage applied via transthoracic approach. Patient was discharged home on day of postoperative period with treatment of albendazole. Sixth month's follow up computed tomography showed no recurrence of cysts.

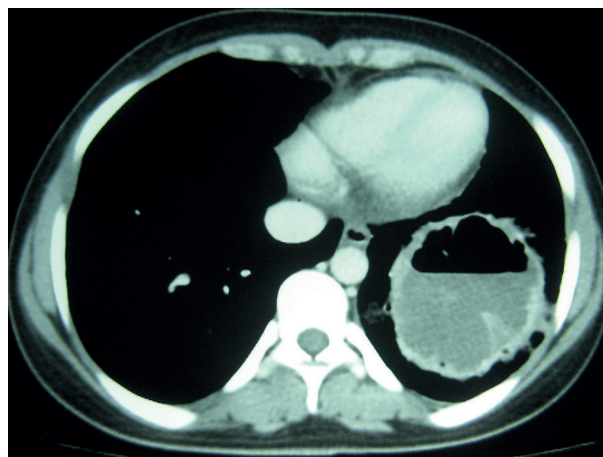


Figure 1. Thoracoabdominal computed tomography showed diameter left lower lobe pulmonary cystic mass with air-liquid level

Transdiaphragmatic migration of hydatid disease is probably related to proximity to the diaphragm. The clinical presentation of hydatid disease depends on the size and site of the lesion and the accessibility of the organ involved for clinical examination. Radiography, Ultrasonography (USG) and CT studies are important for a diagnosis of echinococcal disease. USG is the method of choice for the detection of hepatic and extrahepatic echinococcal

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cysts. CT confirms the diagnosis by revealing the presence of daughter cysts and plaque-like calcifications in the cystic wall. It is important as it provides information regarding the exact location of extrahepatic cysts in relation to neighboring structures. CT sensitivity ranges from 90% to 97%. Serological tests contribute to diagnosis. Immunoglobulin G antibody detection by enzyme-linked immunosorbent assay has a sensitivity of 95% and a specificity of 94%. The sensitivity of indirect hemagglutination test has been found to be 87.5%. Eosinophilia is expected in patients with parasitic infestations.⁷⁻⁹

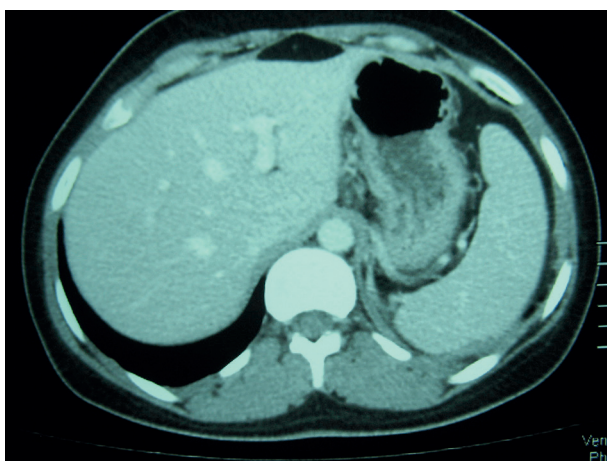


Figure 2. Sixth month's follow up computed tomography showed no recurrence of cysts.

For symptomatic hydatid thoracic and peritoneal cysts, surgery, when feasible, is the principal method of treatment. Total cystectomy, whenever possible, is the gold standard. In our case, to eradicate the disease, total cystectomy of the thoracic-diaphragmatic cyst was carried out and cystotomy was applied via transdiaphragmatic approach. This technique prevented additional laparotomy and achieved satisfaction in the explorative viewing. Postoperative anti-parasitic therapy has been

used to prevent secondary recurrence in patients with pulmonary hydatid cysts. Reported recurrence rates of hydatid lung cysts are low.^{6,8}

In conclusion, a diagnosis of extrahepatic echinococcal disease is more accurate today because of the new imaging techniques available. Hydatid disease should be kept in mind in the differential diagnosis of retroperitoneal masses in patients living in endemic areas. Surgery, when feasible, is the principal method of treatment. Total cystectomy, whenever possible, is the gold standard. Postoperative anti-helminthic therapy has been used to prevent secondary recurrence of the cysts.

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