FORUM

CLINICAL IMAGES Ascites as an initial presentation of spontaneously ruptured hydatid cyst

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We describe the diagnosis of a 77-year-old woman admitted to our outpatient department with a 3-month history of abdominal bloating and distension. Abdominal computed tomography revealed a large cystic lesion in the posterior segment of the right hepatic lobe, with a separated germinal layer and widespread ascites with dense internal echoes and septal appearance. The result of a serum Echinococcus indirect haemagglutination test was positive and findings were indicative of the spontaneous

rupture of a hydatid cyst into the peritoneal cavity without trauma. Ascites is rarely seen in the course of hydatid disease, but can result from cyst rupture into the peritoneal cavity. This should be considered in the differential diagnosis of ascites, especially in areas such as Turkey, where hydatid disease in

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Hydatid disease is a common parasitic infection of the liver with Echinococcus granulosus. Complications include rupture into the biliary tree, peritoneum and chest, secondary infection, anaphylactic shock and sepsis.1 Ascites, although rare in the course of hydatid disease, can result from cyst rupture into the peritoneal cavity.2

A 77-year-old woman was admitted to our outpatient department complaining of abdominal bloating and distension in the preceding 3 months. The patient had lost weight and had appetite-associated nausea, with no history of jaundice. Her physical examination was unremarkable except for the presence of ascites. Serum-ascites albumin gradient (SAAG) was 0.4 - compatible with nonportal hypertensive ascites. The ascitic fluid showed no bacterial or tuberculosis infection and the cytological examination was negative for malignancy. Abdominal computed tomography (CT) revealed a large cystic lesion in the posterior segment of the right hepatic lobe, with a separated germinal layer and widespread ascites with dense internal echoes and septal appearance (Fig. 1).

The result of a serum *Echinococcus* indirect haemagglutination test was positive. The patient was diagnosed with spontaneous rupture of a hydatid cyst into the peritoneal cavity without trauma. Treatment

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Fig. 1. Large cystic lesion in the posterior segment of the right hepatic lobe, with a separated germinal layer and widespread ascites with dense internal echoes and septal appearance.

with albendazol (10 mg/kg/day) was initiated and emergency surgical exploration was suggested. However, the patient refused surgery and was lost to follow-up.

Ruptured hydatid cyst is a rare cause of ascites, but should be considered in differential diagnosis, especially in endemic areas such as Turkey. Because rupture of an hepatic hydatid cyst into the peritoneal cavity can lead to an acute abdomen with chemical or bacterial peritonitis, it can be fatal without appropriate surgical management.

- 1. Avgerinos ED, Pavlakis E, Stathoulopoulos A, Manoukas E, Skarpas G, Tsatsoulis P. Clinical presentations and surgical management of liver hydatidosis: our 20 year experience. HPB (Oxford) 2006;8(3):189-193.
- 2. Okan V, Araz M, Demirci F, Micozkadioglu H, Ozkur A. Hydatid cyst: a rare cause of ascites. Comput Med Imaging 2002:26(5):357-359

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