Dear Editor;

Hydatid disease is a parasitic infection. The most commonly involved organ in hydatid disease is the liver (1). Although hepatic hydatid disease may be asymptomatic, it can become symptomatic due to expansion, rupture or pyogenic infection. Hydatid cyst rupture may cause mild to fatal complications (2). Rupture of the hepatic hydatid cyst into the biliary tract is one of the most serious complications (3). We report a case who presented with abdominal pain, nausea, vomiting and acute renal failure associated with spontaneous rupture of a hepatic hydatid cyst into the peritoneum.

A 65-year-old man presented to the emergency department with abdominal pain severe nausea and vomiting. Physical examination, was normal except the abdominal distention, pain on the right upper quadrant and diminished bowel sounds. Laboratory tests showed levels of sodium, 125 mEq/L (135-145 mEq/L); potassium, 2.6 mEq/L (3.6-4.8 mEq/L); alkaline phosphatase, 100 U/L (98-251 U/L); aspartate aminotransferase, 60 U/L (12-31 U/L); alanine aminotransferase, 40 U/L (12-31 U/L); blood urea nitrogen, 95 mg/dl (10-20 mg/dl); serum creatinine, 3.5 mg/dl (0.4-1 mg/dl); bicarbonate, 18 mEq/L (22-29); white blood cell count of 10,500 cells/mm³ with 15% eosinophils (normal < 1%). Serum IgE level was 30 U/mL (normal 6-12 U/mL). Plain abdominal X-ray revealed multiple fluid levels and dilated small and large bowel loops with air-fluid levels. Abdominal ultrasonography revealed a ruptured cystic mass occupying the right lobe of the liver with hydatid disease caused by echinococcus granulosus. The patient was hospitalized and hydrated with intravenous saline with potassium supplementation. After treatment, blood urea nitrogen, serum creatinine and potassium was normal. We decided to initiate the therapy with albendazole, 15 mg/kg /day. Laparotomy was performed at once to resect the entire affected lobe of the liver together with local scolicide solution instillation and abdominal cavity cleaning. At the time of laparotomy, the cyst membrane was freely floating in the abdominal cavity. Adjunctive chemotherapy with albendazole was administered in the post-surgical course. Pathological examination confirmed Echinococcosis granulosus. The patient was followed up with magnetic resonance imaging and computed tomography that displayed no recurrence of the disease during a follow-up of 6 months.

The clinical symptoms depends on cystic lesions size, location and complications. Our case was admitted to the emergency department with abdominal pain severe nausea and vomiting. Anaphylaxis due to intrabiliary or extrahepatic rupture of the cysts may rarely occur but in our case ileus emerged. Treatment of Echinococcosis granulosus can be the use albendazole, percutaneous drainage and surgical procedure. Albendazole is indicated for six months to reduce the risk of distant recurrence. Successful treatment with percutaneous drainage and albendazole has also been reported in literature. Surgical procedure consists of removing the cyst (3,4,5). Suturing of the cystobiliary communications together with omentoplasty is classically performed.

In conclusion, although it is usually asymptomatic, it can become seriously symptomatic due to expansion, rupture or pyogenic infection. In cases with peritoneal ileus, hydatid disease should be considered among the differential diagnosis in endemic areas.
References


