

Cysto-Biliary Rupture in Hepatic Hydatid Disease: Magnetic Resonance Cholangiopancreatography and Endoscopic Retrograde Cholangiopancreatography Findings

S. Selcuk Atamanalp¹, Pinar Polat², Gurkan Ozturk¹, Onur Bora Aslan¹

¹Atatürk University, Faculty of Medicine, Department of General Surgery, Erzurum, Turkey

²Atatürk University, Faculty of Medicine, Department of Radiology, Erzurum, Turkey

Correspondence to: S. Selcuk Atamanalp, Atatürk University, Faculty of Medicine, Department of General Surgery, 25270, Erzurum, Turkey. Phone: +90.442.3166333/2214, Fax: +90.442.3166340, e-mail: ssa@atauni.edu.tr

Hepatic hydatid disease (HHD) is a unique parasitic disease that is endemic in many parts of the world [1]. Biliary rupture is one of the most common complications of HHD, which leads to small to large cysto-biliary communications (CBC) [1, 2]. CBC can cause cholangitis and obstructive jaundice [2]. Magnetic resonance cholangiopancreatography (MRCP) and endoscopic retrograde cholangiopancreatography (ERCP) are the main diagnostic procedures that can be used to demonstrate the detachment of the endocyst from the pericyst and the presence of CBC and/or endocystic material in the biliary system [1, 2]. Therapeutic ERCP procedures, including endoscopic sphincterotomy and balloon or basket extraction, are the first choices for the treatment of patients with CBC from HHD [2].

A 43-year-old man was admitted with cholangitis and obstructive jaundice. On MRCP, a heterogeneous hyperintense cyst due to ruptured internal germinative membranes was observed. Communication between the cyst and small biliary ducts and daughter vesicles within the common bile duct were also seen (Fig. 1). Diagnostic ERCP demonstrated the presence of daughter vesicles within the common bile duct (Fig. 2). The patient was treated with therapeutic ERCP and endoscopic sphincterotomy, and the cystic materials were evacuated from the common bile duct by balloon catheter. An occlusion graph was performed, and no cystic material was found in the biliary system. In addition to the endoscopic treatment, oral albendazole treatment was given to the patient, and he had an uneventful recovery.

Keywords: Liver, Hydatid disease, Biliary rupture

Anahtar Kelimeler: Karaciğer, Hidatik hastalık, Biliyer yırtılma

Conflict interest statement The authors declare that they have no conflict of interest to the publication of this article.

References

1. Polat P, Atamanalp SS. Hepatic hydatid disease: radiographic findings. *EAJM* 2009; 41: 49-55.
2. Ozturk G, Yildiran MI, Atamanalp SS, et al. An algorithm for the treatment of the biliary complications of hepatic hydatid disease. *Turk J Med Sci* 2009; 39: 671-85.

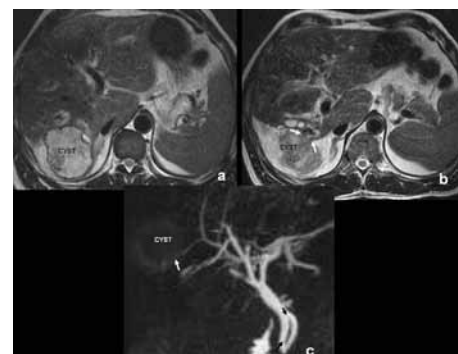


Fig. 1 — HASTE T2-weighted transverse images (a, b) show a heterogeneous hyperintense cyst due to ruptured internal germinative membranes in the region of the 7th liver segment. White arrows show the communication between the cyst and the small biliary duct. Also, note the small daughter vesicles within the biliary duct. Black arrows show the germinative membrane within the common bile duct (c).

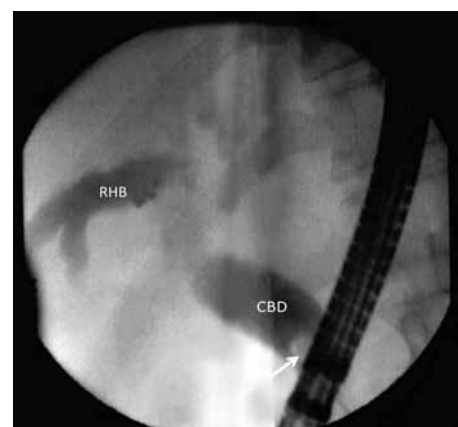


Fig. 2 — ERCP image of the patient (CBD: common bile duct, RHB: right hepatic bile duct, arrow: cystic materials within the CBD).