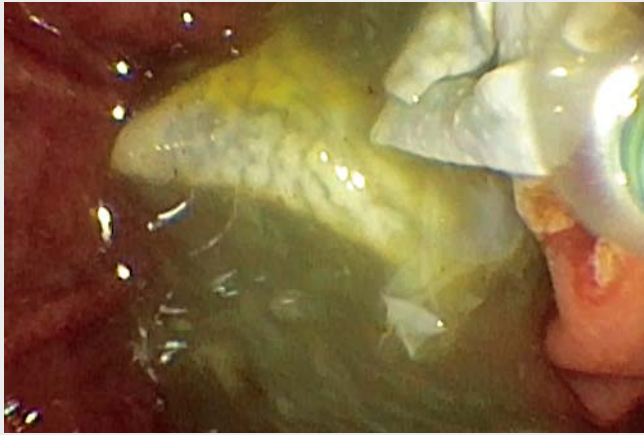
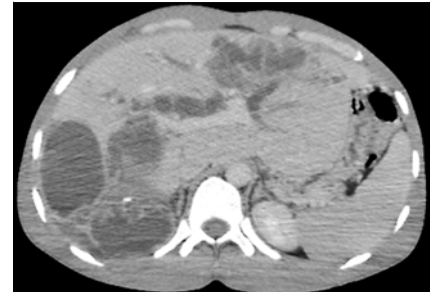


## Endoscopic treatment of a liver hydatid cyst with biliary rupture



▶ **Video 1** Endoscopic retrograde cholangiopancreatography in a 26-year-old man with cholangitis showing the removal of multiple hydatid membranes by balloon sweeps after endoscopic sphincterotomy.



▶ **Fig. 1** Computed tomography scan showing multiple hepatic hydatid cysts with biliary duct dilatation.



▶ **Fig. 2** Linear endoscopic ultrasound view showing multiple echogenic structures within the dilated common bile duct.



▶ **Fig. 3** Fluoroscopic view showing multiple filling defects within the proximal common bile duct.

Hydatid disease is a parasitic infection caused by the larva of *Echinococcus granulosus*, for which the liver represents the most common site of involvement [1]. One of the most serious complications of hepatic hydatid cyst disease is rupture of the cyst into the biliary tree, leading to jaundice and cholangitis. Recently endoscopic retrograde cholangiopancreatography (ERCP) has emerged as an alternative method of providing therapy for patients with biliary hydatid disease [2]. We present the case of 26-year-old man, with a history of pulmonary hydatid cyst surgery 13 years previously, who was admitted with cholangitis (▶ **Video 1**). The biochemistry tests showed hyperbilirubinemia at 6.5 mg/dL and high aminotransferase levels (>5 times normal), and he had a white blood cell count of 15000/mm<sup>3</sup>. A computed tomography scan showed multiple hepatic hydatid cysts with biliary duct dilatation and suspicion of a ruptured hydatid cyst (▶ **Fig. 1**). Linear endoscopic ultrasound performed before an ERCP showed multiple echogenic structures filling the dilated

common bile duct (CBD), evocative of hydatid membranes (▶ **Fig. 2**). Urgent ERCP was performed. The fluoroscopic view revealed multiple filling defects within the enlarged CBD (▶ **Fig. 3**). Endoscopic sphincterotomy, followed by sweeping of the bile duct with a balloon and basket, allowed removal of multiple hydatid membranes, along with debris and pus, with successful clearance of the biliary tree at the end of the procedure (▶ **Video 1**). A plastic stent (10 Fr×9 cm) was placed to ensure sufficient drainage. The endoscopic treatment resulted in a significant improvement in the patient's clinical and biochemical status, with a normal bile duct diameter at abdominal ultrasonography.


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### Competing interests

The authors declare that they have no conflict of interest.

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