

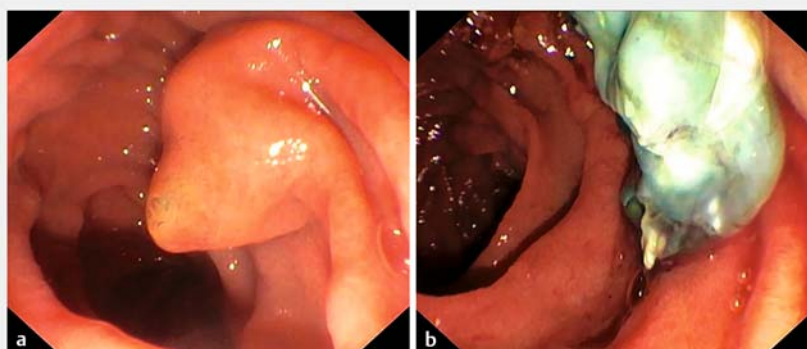
## Biliary obstruction caused by an erupted hepatic hydatid cyst



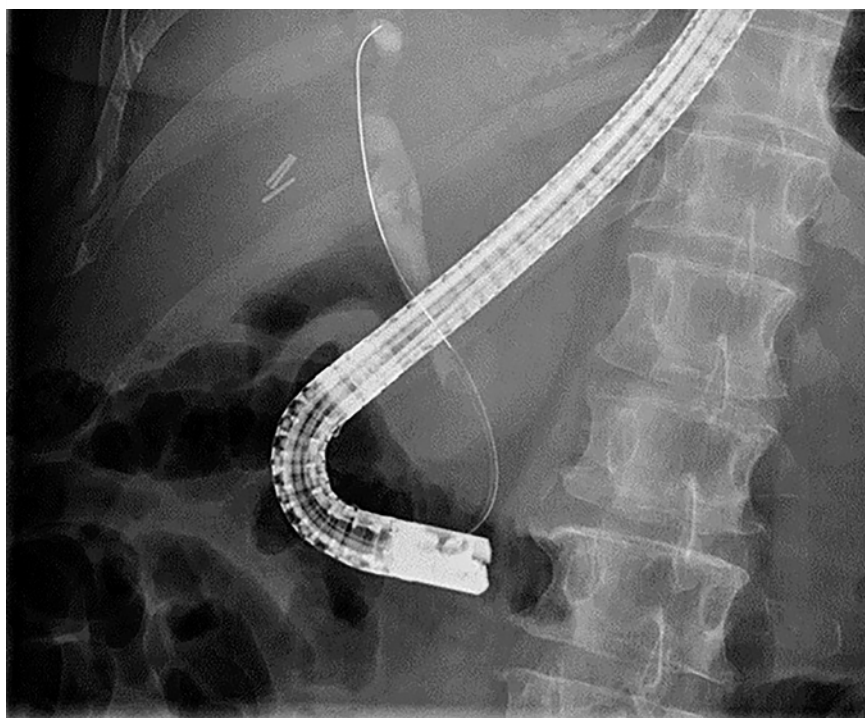
► **Fig. 1** Endoscopic ultrasound shows a non-dilated common bile duct (CBD) containing a heterogeneous substance.

A 60-year-old woman presented to the emergency room with nausea and upper abdominal pain radiating to the back. Her past medical history was significant for an inactive hepatic hydatid cyst for 30 years. She had presented 4 months earlier with acute pancreatitis. Despite a negative abdominal ultrasound, a laparoscopic cholecystectomy was performed for presumed biliary pancreatitis.

On physical examination, a non-icteric, afebrile patient was seen. No tenderness or pain was observed during abdominal examination. Laboratory results showed elevated liver tests and a normal eosinophil count (AST 557 U/l; ALT 535 U/l; LD 754 U/l; gamma-GT 440 U/l; bilirubin 74  $\mu$ mol/l (conjugated 30  $\mu$ mol/l); eosinophils 0.04  $\times 10^9$ /l). Endoscopic ultrasound showed a non-dilated common bile duct containing a heterogeneous substance (► **Fig. 1**). An endoscopic retrograde cholangiopancreatography (ERCP) was performed showing a protruding papilla (► **Fig. 2 a**). Immediately after cannulation, black fluid drained out of the papilla. Cholangiography suggested remaining material within the choledochal duct (► **Fig. 3**). After papillectomy, pus and a gelatinous substance of approximately 2 centimeters were extracted using a balloon (► **Fig. 2 b**, ► **Video 1**). The material was aspirated and the pathology report noted its origin from a hydatid cyst. An abdominal computed tomography (CT) scan showed a



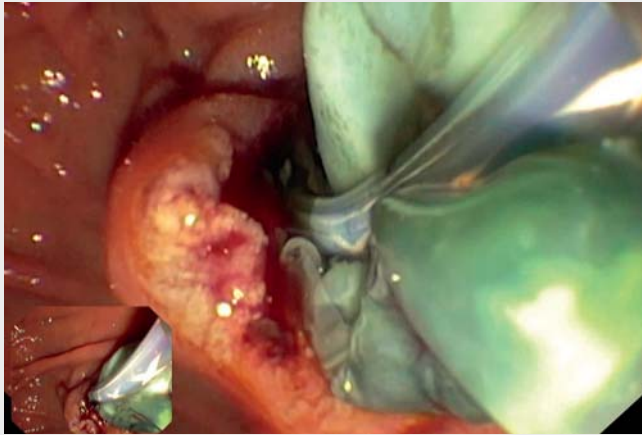
► **Fig. 2** a Endoscopic retrograde cholangiopancreatography shows protruding papilla. b After papillectomy, a soft substance was extracted from the common bile duct.



► **Fig. 3** Cholangiography shows remaining material within the choledochal duct.

multilocular hydatid cyst of 66 by 48 millimeters, consistent with prior imaging (► **Fig. 4**). Anthelmintic albendazole therapy was started and the patient was referred for percutaneous evacuation of cyst content [1].

Hepatic hydatid cysts are caused by parasitic infection through ingestion of eggs from the echinococcus tapeworm (*Echinococcus granulosus*) [2]. Biliary obstruction secondary to a frank intrabiliary rupture occurs in up to 17% of cases [3, 4]. The prior episode of acute pancreatitis in



**Video 1** Endoscopic extraction of hepatic hydatid cyst material. During cannulation black fluid drained out of the papilla. After papillotomy, a soft substance of approximately two centimeters was extracted using a balloon.



**Fig. 4** Abdominal computed tomography scan shows a multilocular hydatid cyst of 66 by 48 millimeters.


our patient might have been caused by an earlier eruption [5]. Primary treatment of intrabiliary rupture consists of balloon extraction by ERCP followed by percutaneous or surgical treatment and albendazole therapy for 1 to 3 months [1–4].

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## Competing interests

The authors declare that they have no conflict of interest.

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