

## Successful endoscopic treatment of spontaneous perforation of the common hepatic duct

Perforations of the biliary tract usually occur in the gallbladder as a complication of acute cholecystitis. Spontaneous perforation of the extrahepatic biliary tract is a rare entity, reported usually in infants and associated with congenital anomalies. Here we report the first case of spontaneous perforation of a common hepatic duct, treated successfully with percutaneous drainage and endoscopic stenting. A 67-year-old man presented to hospital with a 1-week history of upper abdominal discomfort, nausea, and fever. Laboratory tests revealed mild leukocytosis, C-reactive protein 265 mg/L (<10 mg/L), and total bilirubin 79 µmol/L (5–25 µmol/L). The other liver chemistry tests and plasma amylase activity were within normal limits. Blood cultures showed growth of *Escherichia coli*.

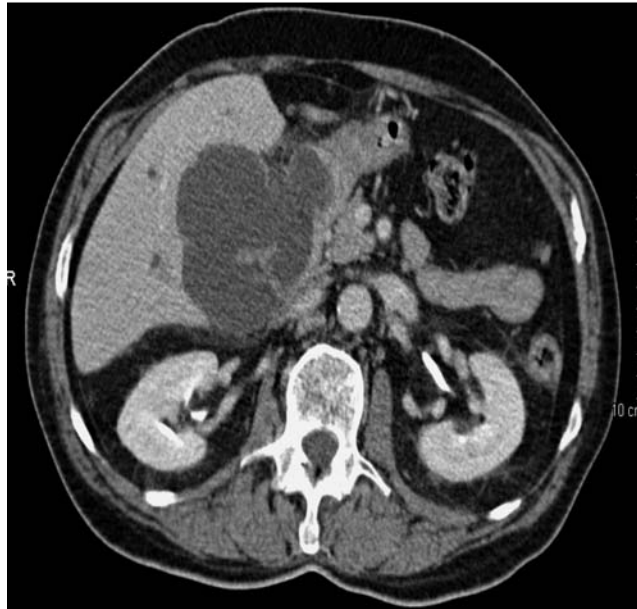
An abdominal computed tomographic (CT) scan revealed a large fluid collection approximately 10 cm in diameter in the hepatic hilar area (● Fig. 1).

The collection was drained on the same day and the fluid proved to be bile. Endoscopic retrograde cholangiopancreatography (ERCP) revealed contrast leakage from the common hepatic duct (● Fig. 2). A 10-Fr, 10-cm plastic stent was inserted into the bile ducts with the distal end of the stent above the leakage. Otherwise, the patient was treated conservatively and recovery was uneventful. At repeat ERCP 3 months later, the stent was removed and the cholangiogram showed no leakage or strictures (● Fig. 3).

Eighteen months later, the patient was free of biliary symptoms.

Spontaneous perforation of the biliary tract is a rare entity; in adults it is often diagnosed at a postmortem. Although several etiological factors such as bile duct stones, tumours, infections, and ischemia have been proposed, 70% of the cases are related to stones [1]. Traditionally, the treatment of choice in bile duct perforations has been surgery [2,3], but with the recent advancements in stenting [4] and lessons learned from iatrogenic lesions [5], endoscopic treatment should be considered in stable patients.

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**Fig. 1** A large fluid collection, approximately 10 cm in diameter, in the hepatic hilar area, visualized on an abdominal computed tomographic scan.



**Fig. 2** Endoscopic retrograde cholangiography showing contrast leakage from the common hepatic duct.

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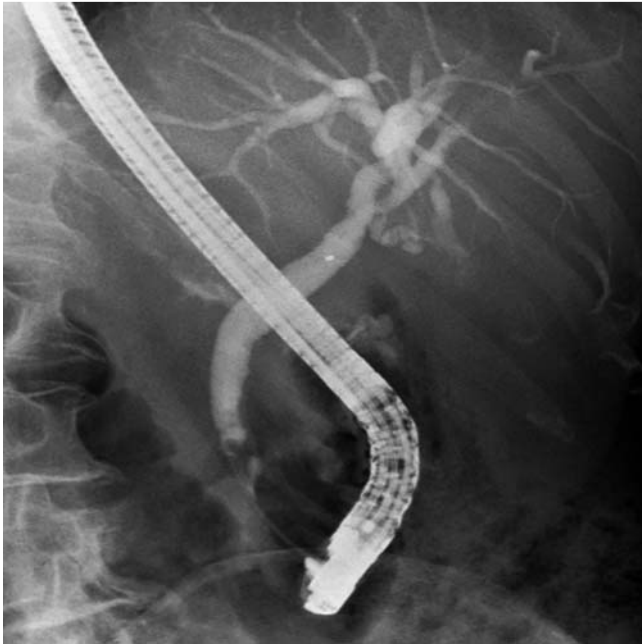
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**Fig. 3** Repeat endoscopic retrograde cholangiopancreatography 3 months later showing neither leakage nor strictures.

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#### **Bibliography**

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