

## Endoscopic Treatment of Biloma : Bilo-gastric drainage

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### To the Editor,

Bile tree injury and biliary leakage are common and serious complications after cholecystectomy, cyst hydatid surgery, pancreaticoduodenectomy, and hepatic segmentectomy. Bilomas are extrabiliary encapsulated cystic collections of bile, most often in perihepatic space but also elsewhere in the abdomen (1). Percutaneous or surgical drainage is the standart of care (2). Herein we present a novel transgastric endoscopic drainage of a biloma.

A 44-year-old woman was admitted with abdominal pain and jaundice 2 months after a laparoscopic cholecystectomy. Computed tomography (CT) showed a 7 cm cystic collection nearby the tail of the pancreas, compressing the posterior wall of the stomach (Fig. 1). ERCP revealed a narrowed intrapancreatic common bile duct, choledocholithiasis, and low grade leakage from the cystic duct stump. Choledocholithiasis was extracted and a nasobiliary drain was inserted. Cystic duct leakage resolved and the nasobiliary drain was extracted eight days after. Later on the cyst was punctured with a cystotome without endoscopic ultrasound (EUS) guidance. Drainage of bile confirmed the diagnosis of a biloma. Two 10 Fr double pigtail stents and a nasobiloma drain were

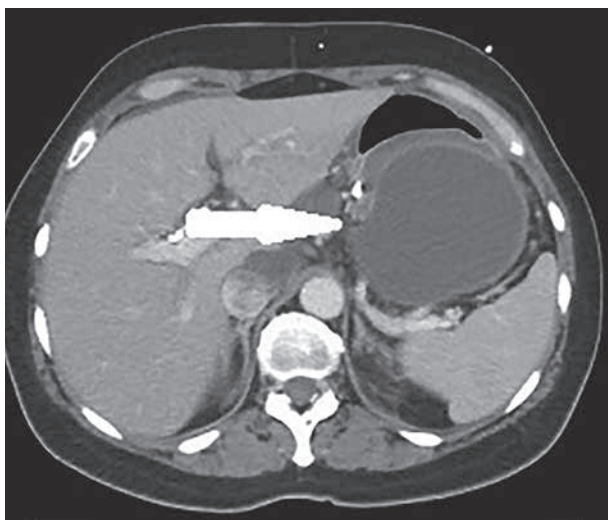


Fig. 1. — A 7 cm cystic collection nearby the tail of the pancreas, compressing the posterior wall of the stomach.

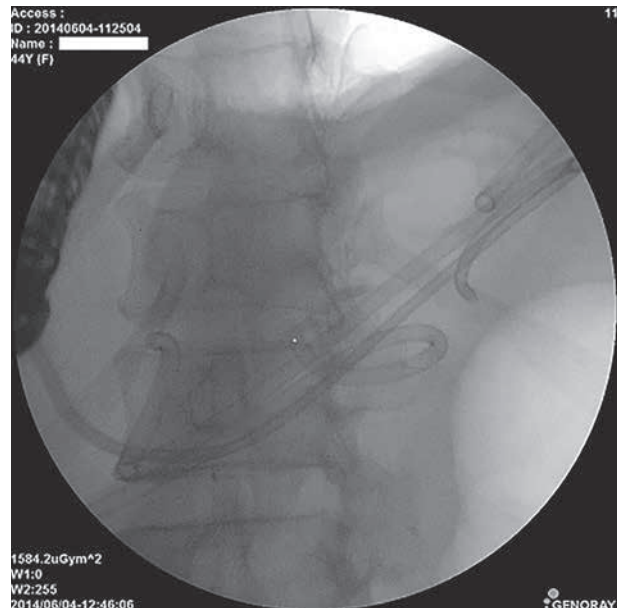


Fig. 2. — Scopic image of the two 10 Fr double pig-tail plastic stents.

placed (Fig. 2). CT scan showed that the biloma significantly decreased in size seven days after (Fig. 3). Nasobiloma drain was extracted ten days after. A month later the biloma vanished and the stents were retrieved.

The incidence of iatrogenic biliary tree injury after laparoscopic cholecystectomy is 0.3-0.6%. Low grade leaks can lead to bilomas which usually resolve spontaneously or after biliary drainage by sphincterotomy and stenting. Biloma drainage may be required in symptomatic cases . Percutaneous drainage constitute the standart treatment. EUS-guided drainage has also been reported in several case studies (3). EUS is used to determine the best site of approximation between the biloma and gastric wall, especially in cases without a visible bulge, which may decrease the risk of leakage. It also decreases the risk of injury to the intervening vascular structures.

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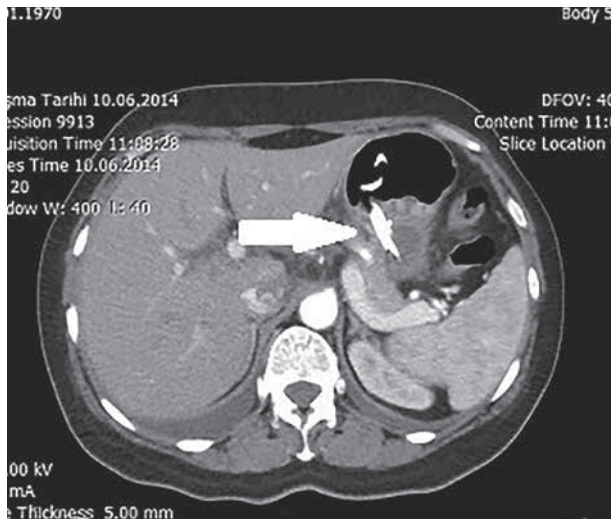


Fig. 3. — Seven days after the drainage. CT scan showed that the biloma significantly decreased in size.

There are three cases reporting successful transgastric endoscopic drainage of a biloma, developed after partial hepatectomy in one case and laparoscopic cholecystec-

tomy in 2 cases (4,5,6). Two of them were treated by using a combination of transpapillary and transmural techniques.

In conclusion, bilomas in apposition to the gastric wall can be successfully treated by transgastric drainage. Although there are no comparative studies, endoscopic treatment may be an alternative to percutaneous treatment or surgery in such cases. The EUS approach should be preferred whenever possible.

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