

Avulsion of the papilla of Vater managed using a rendezvous technique and extra-anatomic drainage

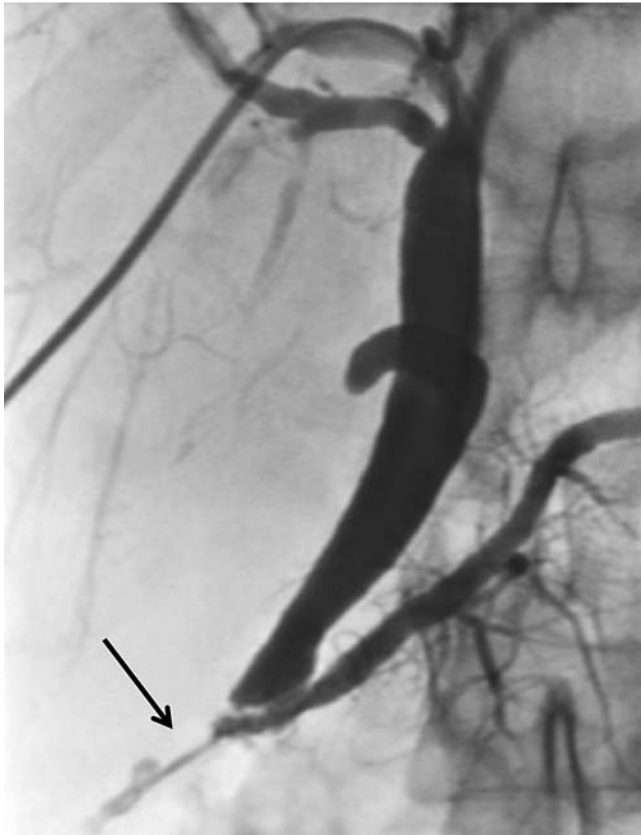


Fig. 1 Cholangiogram after percutaneous cannulation of the biliary ducts showing retrograde filling of the main pancreatic duct. The bile and pancreatic ducts are dilated and there is leakage from the common sphincter (arrow).

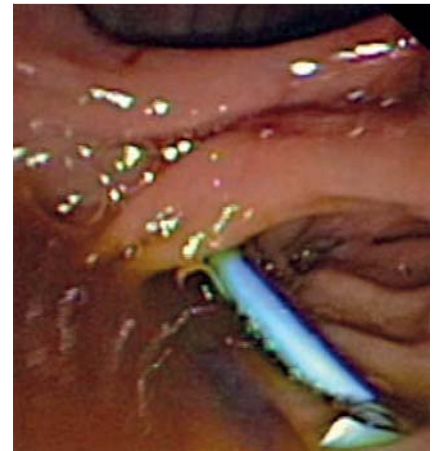


Fig. 2 Endoscopic view showing the plastic stent in the third part of the duodenum.



Fig. 3 A 10-cm, 10-Fr plastic stent was placed through the new biliary duct when the original stent was changed after 6 weeks.

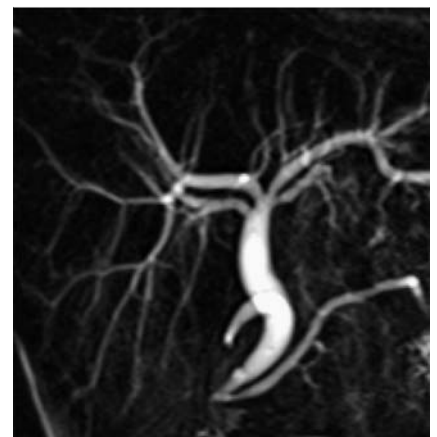


Fig. 4 Biliary magnetic resonance imaging (MRI) performed 12 months after removal of the biliary stent showing a normal common bile duct and main pancreatic duct.

While recommendations exist for the surgical management of pancreaticoduodenal injuries according to their seriousness [1], the recommended management of avulsion of the papilla of Vater has not been clearly defined [2,3]. Here we describe the first reported case of avulsion of the papilla of Vater being managed by endoscopy using a rendezvous technique. A 19-year-old woman was admitted following blunt abdominal trauma sustained in a car accident. Laparoscopic surgery revealed a split posteriorly in the head of the pancreas. A cholecystectomy was performed with retroduodenal drainage and drain placement in the cystic duct. Postoperatively she developed a pancreaticobiliary fistula. Two attempts at endoscopic retrograde cholangiopancreatography (ERCP) resulted in failure of cannulation. Percutaneous cholangiography confirmed avulsion of the papilla of Vater and complete transection of the common sphincter (● Fig. 1).

Several attempts were made to pass through the papilla, and a new path was finally created between the common sphincter and the third part of the duodenum. A plastic multiperforated, 12-cm, 7-Fr Geenen stent (Cook Medical Inc., Bloomington, Indiana, USA) was positioned through this new path (● Fig. 2). The pancreaticobiliary flow through the retroduodenal drain immediately stopped and the patient's biological cholestasis regressed. The stent was changed after 6 weeks for a 10-cm, 10-Fr plastic stent (Boston Scientific Inc., Natick, Massachusetts, USA; ● Fig. 3), which was removed 2 months later.

At 18 months after her car accident, the patient's clinical condition was excellent, and her biological markers were totally normal. A biliary magnetic resonance imaging (MRI) scan showed a normal common bile duct and main pancreatic duct without any fistula (● Fig. 4).

Here, we report the first case of avulsion of the papilla of Vater managed using a “classical” rendezvous technique combining percutaneous transhepatic biliary drainage (PTBD) and ERCP, which successfully created a new biliary tract between the common bile duct and the third part of the duodenum, to bypass the papilla. No immediate complications have occurred and the potential morbidity and mortality of pancreaticoduodenal surgery has been avoided. This technique could be considered in the management of trauma to the papilla of Vater.

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Competing interests: None

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