Massive bleeding after plastic stent removal during ERCP: what’s next?

Portal biliopathy or portal cavernoma cholangiopathy refers to cholangiographic abnormalities, which occur in patients with portal cavernoma. These include shallow bile duct impressions and indentations causing wall irregularity, smooth strictures with upstream dilatation, and luminal filling defects (▶Fig. 1, ▶Fig. 2). These changes occur as a result of pressure on bile ducts from bridging tortuous paracholedochal, epischoledochal, and cholecystic veins [1]. Symptoms of portal cavernoma cholangiopathy include longstanding jaundice due to chronic cholestasis, or biliary pain with or without cholangitis due to biliary stones [2].

We present the case of a 41-year-old man with portal biliopathy secondary to non-cirrhotic portal vein thrombosis, who was admitted with obstructive jaundice and cholangitis. He had a biliary plastic stent placed 2 months earlier for obstructive jaundice. The previous stent had become blocked and was removed. A sudden spurt of massive bleeding from the ampulla was noticed. A fully covered self-expandable metal stent (fcSEMS; Wallflex biliary fcSEMS, 10 × 60 mm; Boston Scientific, Marlborough, Massachusetts, USA) was deployed, with resolution of the hemorrhage (▶Video 1).

The second case involves endoscopic retrograde cholangiopancreatography in a 54-year-old woman with portal hypertension and cholangitis. Hemobilia was noticed after balloon sweeping. A fcSEMS was used with success (▶Video 1).

ERCP with plastic stent exchanges is the first-line intervention for jaundice or cholangitis due to biliary strictures. If
biliary obstruction does not resolve, portosystemic shunt surgery or transjugular intrahepatic portosystemic stent shunt is performed to decompress the portal cavernoma. Rarely, plastic stents may also induce bleeding due to rupture of the hepatic artery, which can be managed with angiography with coiling of the artery [3, 4]. In general, placement of metal stents is not recommended in patients with benign diseases who are expected to have prolonged survival. Even the short-term use of removable metal stents may be fraught with problems and should be considered with care. However, deployment of a fcSEMS appears to be a useful maneuver to control massive hemobilia [5].

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