Spontaneous intraductal stent migration after endoscopic ultrasound-guided choledochogastrostomy



Fig. 1 Abdominal radiograph showing a partially covered self-expanding metal stent in position between the extrahepatic bile duct and the gastric antrum.

Endoscopic ultrasound-guided biliary drainage (EUS-BD) is increasingly being reported as an alternative method of biliary decompression [1]. EUS-guided choledochogastrostomy (EUS-CGS) is considered a possible salvage therapy for patients in whom EUS-guided choledochoduodenostomy (EUS-CDS) or hepaticogastrostomy (EUS-HGS) is not possible [2]. We report a case of intraductal migration of a partially-covered self-expandable metallic stent (PCSEMS) after EUS-CGS, which was managed successfully with endoscopic intervention.

A 56-year-old woman with locally advanced cancer of the pancreatic head was admitted to our hospital. She had previously undergone a gastrojejunostomy and percutaneous biliary drainage for malignant gastric outlet obstruction and biliary obstruction at another hospital. Given her strong desire to have the exter-

nal drainage tube removed and because EUS-CDS and EUS-HGS were impossible for anatomical reasons, she underwent EUS-CGS with insertion of a PCSEMS for internal biliary drainage without complications (**© Fig. 1**; **© Video 1**).

The external drainage tube was removed successfully 15 days after EUS-CGS, but 1 month later she developed acute cholangitis. An emergency endoscopy revealed that the PCSEMS had migrated into the bile duct (Fig. 2), which was confirmed on an abdominal radiograph (> Fig. 3). The remaining fistula was successfully cannulated and a guidewire was advanced through the migrated PCSEMS into the intrahepatic bile duct. Another PCSEMS was placed across the fistula between the first PCSEMS and the stomach (Fig. 4; ▶ Video 2). The cholangitis subsided and she was discharged 3 days after the procedure without complications.

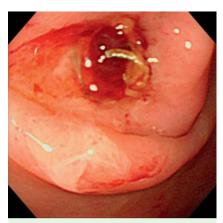


Fig. 2 Endoscopic view 1 month after formation of the choledochogastrostomy showing the partially covered self-expanding metal stent that had migrated into the bile duct.

Spontaneous intraductal migration of a covered metallic stent after EUS-BD is a serious complication [3]. We managed this successfully with endoscopic placement of a further PCSEMS across the resulting fistula. Because the extrahepatic bile duct and gastric antrum are not connected anatomically, we must be aware of this complication after EUS-CGS.

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Competing interests: None

Video 1

Endoscopic ultrasound-guided choledochogastrostomy (EUS-CGS) using a partially-covered self-expandable metallic stent (PCSEMS).

Video 2

Placement of a second partially-covered selfexpandable metallic stent (PCSEMS), which was positioned across the fistula between the first PCSEMS and the stomach.



Fig. 3 Abdominal radiograph showing the distal end of the partially-covered self-expandable metallic stent located inside the fistula.



Fig. 4 Abdominal radiograph showing a second partially-covered self-expandable metallic stent (PCSEMS) placed across the fistula between the first PCSEMS and the stomach.

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