



**Figure 1** Cholangiography shows the migrated metal stents at the tip of the intestinal loop of the choledochojejunostomy.

**Figure 2** The double-balloon enteroscope is passing through the anastomosis of the choledochojejunostomy and approaching the migrated metal stents.

The rate of migration of metal stents is very low, but stents can be technically very difficult to remove if the patient has previously undergone biliary Roux-en-Y surgery. We report here on a case in which a migrated metal stent was removed using double-balloon enteroscopy – a new indication for the latter procedure.

A 67-year-old man with a history of perforated peptic ulcer, who had undergone a partial gastrectomy with a Billroth II anastomosis, developed acute cholecystitis and was referred for laparoscopic cholecystectomy. The common bile duct was accidentally transected during the cholecystectomy, and a choledochojejunostomy was carried out. Subsequent cholangiography clearly showed a progressive

hilar stricture and dilation of the bilateral intrahepatic ducts. Metal Z-stents (Cook Z Stent GZS-12–6.0-CF, Cook Endoscopy, Winston-Salem, North Carolina, USA) were therefore inserted for percutaneous transhepatic cholangiographic drainage. Follow-up cholangiograms showed that the inserted metal stents had migrated distally to the tip of the Roux-en-Y intestinal loop (Figure 1). Removal of the migrated metal stents using conventional push enteroscopy (Olympus SIF-230, Olympus Corporation, Tokyo, Japan) was not successful. We therefore inserted a double-balloon enteroscope (Fujinon EN-450T5, Fujinon, Tokyo, Japan) through the anastomosis of the choledochojejunostomy and successfully approached the migrated metal stent within the tip of the Roux-en-Y limb (Figure 2).

Matsushita et al. described using an open biopsy forceps technique for endoscopic removal of migrated stents in four patients [1]. However, if a migrated metal stent is located at the tip of a Roux-en-Y intestinal limb, this method is not suitable. Kuno et al. used the double-balloon technique to access the afferent duodenal loop in a patient with a Roux-en-Y gastrojejunostomy; they carried out endoscopic mucosal resection of an early cancer in the terminal part of the afferent loop using the double-balloon technique [2]. The double-balloon enteroscope is the only instrument that is capable of passing through a Roux-en-Y anastomosis.

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