Simultaneous side-by-side self-expanding metal stent placement using a two-channel endoscope for a bilioenteric stricture after Child’s resection

Recently, balloon enteroscope-assisted endoscopic retrograde cholangiopancreatography (ERCP) has been attempted to treat malignant choledochojejunostomal anastomotic stenosis. The development of short-type balloon enteroscopes with large-channel diameter has increased the number of instruments that can be used, allowing complex surgical procedures to be performed [1–3]. However, bilateral biliary drainage is technically very difficult in patients whose right and left bile ducts have been displaced. Patients’ quality of life can be markedly compromised if percutaneous transhepatic cholangiodrainage is also required.

We describe a 69-year-old man with extrahepatic bile duct cancer who underwent a Child’s resection. Simultaneous side-by-side placement of self-expanding metal stents (SEMSs) was performed using a two-channel endoscope for treatment of his malignant choledochojejunostomal anastomotic stricture. The malignant stricture had recurred 14 months after surgery, and obstructive jaundice had developed. A three-dimensional magnetic resonance cholangiopancreatography (MRCP) image obtained at the time of the recurrence shows general displacement of the left and right bile ducts.

A two-channel endoscope (GIF-ZT240: Olympus Medical Systems, Tokyo, Japan) was inserted into the site of choledochojejunostomy, taking 13 minutes (Fig. 2). Guidewires were placed into the left and right bile ducts from each channel. Zilver
635 biliary SEMSs (8-mm, 6-Fr delivery system; Cook Medical, Tokyo, Japan) were simultaneously placed side-by-side, instead of partially stent-in-stent (Video 1; Fig. 3), taking 52 minutes. Radiography on the day following stent insertion showed good patency of the two SEMSs (Fig. 4), and biliary drainage was promptly performed.

We believe it should be easily possible to perform plastic stent-in-stent placement at the time of re-intervention. Simultaneous side-by-side SEMS placement using a two-channel endoscope is a useful procedure for internal drainage in patients with a Child’s resection who require bilateral biliary drainage where this is impossible using a balloon enteroscope.

Competing interests: None

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References