Endoscopic reintervention for stent dislodgment after endoscopic ultrasound-guided choledochoduodenostomy

Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) has been performed as an alternative drainage technique when endoscopic retrograde cholangiopancreatography (ERCP) fails [1, 2]. This report describes a case of complete dislodgement of a self-expanding metal stent (SEMS) after EUS-CDS that was successfully treated by endoscopic reintervention.

A 91-year-old man presented to us with fever. He had undergone EUS-CDS with insertion of a fully covered SEMS for obstructive jaundice due to duodenal carcinoma 2 months previously (Fig. 1a). Occlusion of the biliary SEMS was suspected because his liver enzymes were elevated; however, abdominal radiographs unexpectedly revealed complete dislodgement of the stent (Fig. 1b). During endoscopy, a small hole was found in the second portion of the duodenum, which was confirmed to be a choledochoduodenal fistula by fluoroscopic imaging (Fig. 2 and Video 1). Subsequently, we opted to perform endoscopic reintervention. A 0.035-inch guidewire (Hydra Jagwire; Boston Scientific Japan, Tokyo, Japan) was inserted into the intrahepatic bile duct through the fistula. A fully covered SEMS (10 mm × 6 cm; X-Suit NIR; Olympus Medical Systems Corp., Tokyo, Japan) was then placed across the fistula without any complications (Fig. 3b; Video 1).

In patients who have undergone EUS-CDS, stent migration can result in bile leakage into the retroperitoneum; if this occurs, percutaneous transhepatic biliary drainage or emergency surgery must be considered [3]. In our patient, formation of a choledochoduodenal fistula prevented biliary peritonitis even though the stent had been dislodged, and closure of the fistula induced obstructive jaundice. A cautious approach is required in such a situation to avoid damaging the fistula during the procedure of endoscopic reintervention.

Fig. 1 Radiographs in a 91-year-old man with duodenal carcinoma showing: a fully covered self-expanding metal stent (SEMS) after endoscopic ultrasound-guided choledochoduodenostomy, and a duodenal stent; b complete dislodgement of the biliary stent.

Fig. 3 Radiographs showing: a catheter advanced through the choledochoduodenal fistula; b a fully covered self-expanding metal stent (SEMS) placed across the fistula.

Video 1
Endoscopic reintervention with a fully covered self-expanding metal stent (SEMS) being inserted through the choledochoduodenal fistula.
Endoscopy_UCTN_Code_CPL_1AL_2AD

Competing interests: None

Sho Kitagawa, Kana Hatayama, Hiroyuki Miyakawa
Department of Gastroenterology, Sapporo Kosei General Hospital, Sapporo, Japan

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1392653
Endoscopy 2015; 47: E433–E434
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

Corresponding author
Sho Kitagawa, MD
Department of Gastroenterology
Sapporo Kosei General Hospital
Kita 3 Higashi 8, Chuo-ku
Sapporo 060-0033
Japan
Fax: +81-11-2715320
bossa0405@yahoo.co.jp