

Direct peroral ultraslim endoscopy-guided biliary drainage in a patient with cystic duct carcinoma and an occluded self-expandable metallic stent

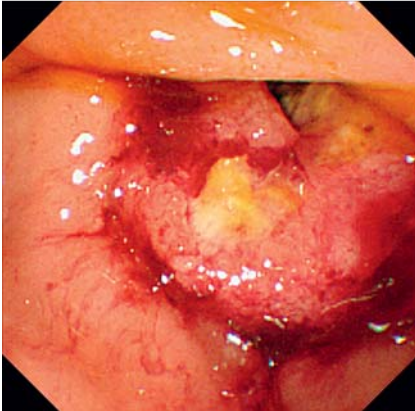


Fig. 1 Endoscopic view of duodenal invasion originating from a cystic duct carcinoma in a 72-year-old man.

Direct biliary drainage using ultraslim endoscopes has been developed for treating acute cholangitis. We present a case wherein direct biliary drainage with ultraslim endoscopy was successfully used in the setting of an occluded a partially covered self-expandable metallic stent (PC-SEMS) in a patient with unresectable cystic duct carcinoma and duodenal stenosis.

A 72-year-old man presented with acute cholangitis due to locally advanced cystic duct carcinoma. He had undergone PC-SEMS placement for distal biliary obstruction 11 months previously, followed by chemotherapy. This was the third time he had experienced sludge-related PC-SEMS obstruction. Esophagogastroduodenoscopy revealed rapid tumor growth with asymptomatic gastric outlet obstruction (Fig. 1) that had not been observed at the most recent PC-SEMS occlusion (1 month previously). A standard duodenoscope could not pass through the obstructed gastric outlet; therefore, we attempted direct biliary drainage using an ultraslim endoscope (GIF XP260N; Olympus Medical Systems, Tokyo, Japan) (Fig. 2). The outer diameters of the endoscopy insertion tube and of the distal end were 5.0 mm and 5.5 mm, respectively; the instrument channel diameter was 2.0 mm. Direct peroral cholangioscopy was performed through the PC-SEMS. We confirmed that the PC-SEMS dysfunction

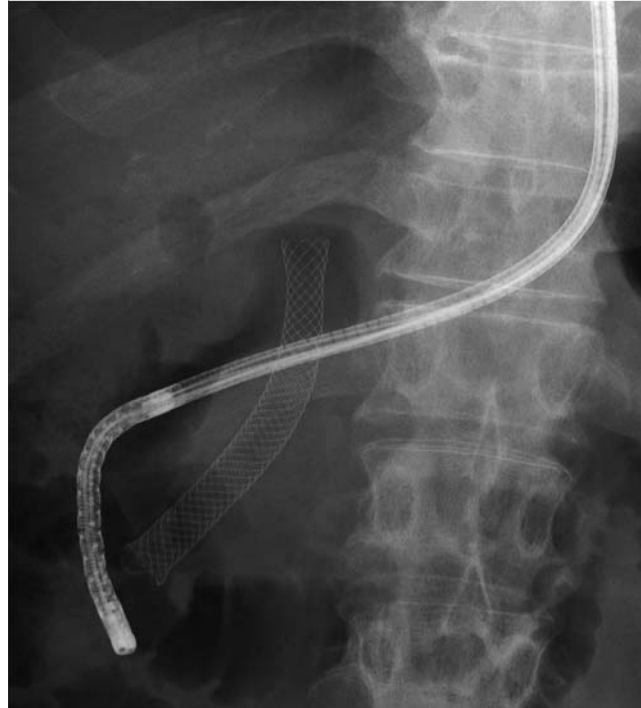


Fig. 2 Radiograph showing an ultraslim endoscope passing through the obstructed gastric outlet.

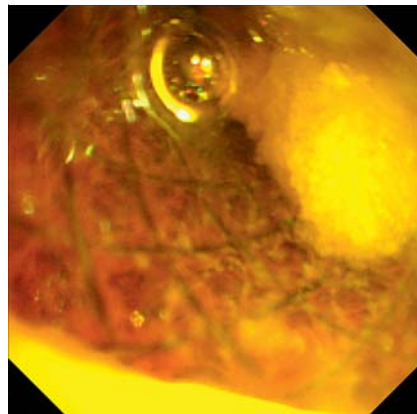


Fig. 3 Endoscopy using an ultraslim device shows debris and food impaction in the partially covered self-expandable metallic stent.

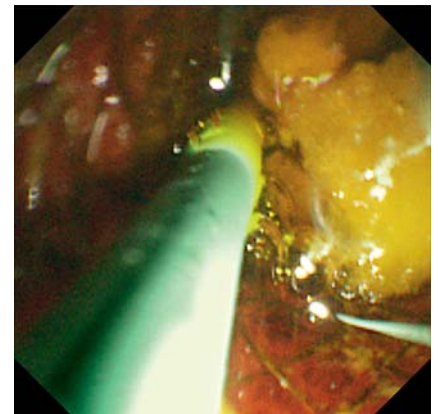


Fig. 4 Endoscopic image showing a 5-Fr nasobiliary drainage catheter that was used to obtain a retrograde cholangiogram.

was caused by sludge and food impaction (Fig. 3, Video 1). A 5-Fr nasobiliary drainage catheter was used to obtain a retrograde cholangiogram (Fig. 4, Video 1), which revealed tumor overgrowth (Fig. 5, Video 1). Finally, two cut 5-Fr nasobiliary drainage catheters were successfully placed through the PC-SEMS under direct peroral cholangioscopy guidance, without any complications (Fig. 6, Video 1).

Direct peroral cholangioscopy-guided biliary drainage using ultraslim endoscopes has recently been employed for treating acute cholangitis [1–3]. Itoi et al. reported

Video 1

Peroral direct biliary drainage technique using an ultraslim endoscope and a 5-Fr nasobiliary drainage catheter.



Fig. 5 Radiograph showing tumor overgrowth over a partially covered self-expandable metallic stent.

References

- 1 Itoi T, Kawai T, Itokawa F et al. Initial experience of transnasal endoscopic biliary drainage without conscious sedation for the treatment of acute cholangitis (with video). *Gastrointest Endosc* 2008; 67: 328–332
- 2 Itoi T, Kawai T, Sofuni A et al. Efficacy and safety of 1-step transnasal endoscopic nasobiliary drainage for the treatment of acute cholangitis in patients with previous endoscopic sphincterotomy (with videos). *Gastrointest Endosc* 2008; 68: 84–90
- 3 Lee YN, Moon JH, Choi HJ et al. Direct biliary drainage using transnasal endoscopy for patients with severe-to-moderate acute cholangitis. *J Gastroenterol Hepatol* 2013; 28: 739–743

Bibliography

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the utility of direct peroral cholangioscopy into the distal side of a PC-SEMS using ultraslim endoscopy [2]. To our knowledge, this is the first report of the use of an ultraslim endoscope for direct peroral cholangioscopy-guided biliary drainage in a patient with gastric outlet obstruction. This should be recognized as a treatment option for patients with cholangitis and gastric outlet obstruction.

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Competing interests: None

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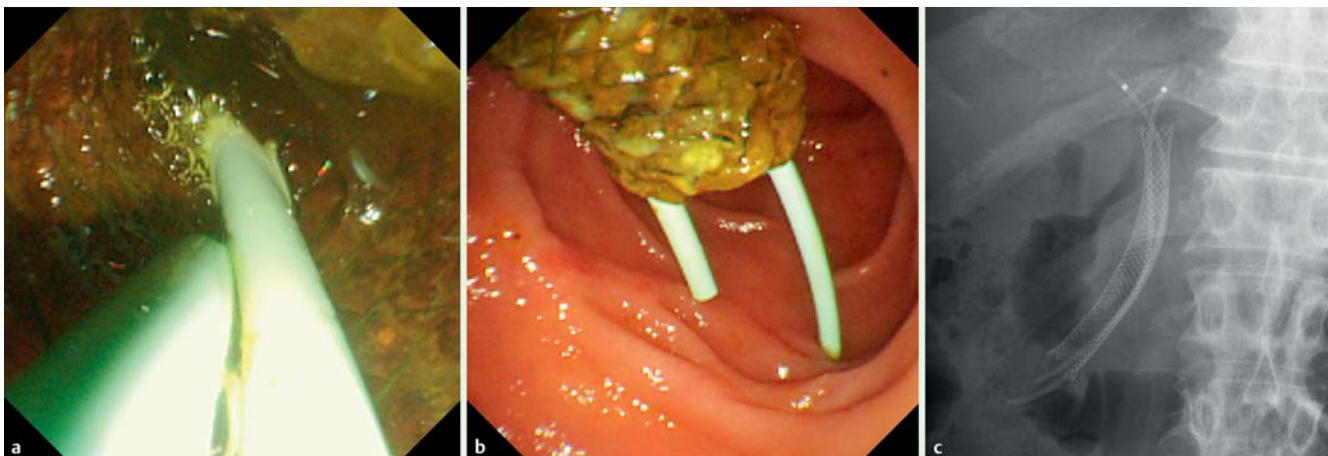


Fig. 6 Two cut 5-Fr nasobiliary drainage catheters placed side by side through the occluded partially covered self-expandable metallic stent (PC-SEMS): a, b endoscopic views; c radiographic image.