Placement of a novel fully covered metallic stent for refractory pancreatic duct stricture

Fig. 1 Fully covered metallic stent with long suture (6 mm × 6 cm, Niti-S Biliary S-Type Stent Long Suture; TaeWoong Medical, Seoul, Korea; Century Medical Inc., Tokyo, Japan).

Fig. 2 The pancreatic duct stricture was seen in the pancreatic head (arrows).

Fig. 3 The fully covered metallic stent delivery system (8 Fr) was inserted into the pancreatic duct.

Plastic stent placement under endoscopic retrograde cholangiopancreatography is performed widely for the treatment of benign pancreatic stricture [1]. However, this technique may have several disadvantages such as short stent patency and persistent stricture compared with fully covered metallic stents (FCMS) [2,3]. Therefore, although FCMS placement for benign

pancreatic stricture is still controversial as a result of a relatively high rate of stent migration (especially distal migration), the FCMS has a potential clinical impact in patients with symptomatic chronic pancreatitis. This report describes the placement of a novel FCMS (6 mm × 6 cm, Niti-S Biliary S-Type Stent Long Suture; TaeWoong Medical, Seoul, Korea; Century

Medical Inc., Tokyo, Japan) in patients with chronic pancreatitis who have refractory pancreatic duct stricture (● Fig. 1). This novel FCMS has a long removal suture, and therefore, if distal stent migration does occur, the stent can be removed easily by grasping the suture thread.

A 66-year-old man was admitted to the Osaka Medical College Hospital with abdominal pain caused by pancreatic stent occlusion. He had undergone placement of a 10-Fr plastic stent 1 month earlier for pancreatic duct stricture caused by chronic pancreatitis. Despite several stent exchanges, the pancreatic duct stricture persisted. Therefore, it was decided to place a novel FCMS.

First, the plastic stent was removed, and contrast medium was injected into the main pancreatic duct. A pancreatic duct stricture of the pancreatic head was seen (● Fig. 2). Next, the novel metallic stent delivery system (8 Fr) was inserted through the stenosis site (● Fig. 3), and the stent was successfully placed (● Fig. 4, ● Video 1). No adverse events occurred and the patient was discharged. After 6 months, no late adverse events, including stent migration, were observed.

This stent may be a safer device because if the stent migrates it can be retrieved easily by grasping the long suture thread. However, results from a prospective study with long term follow-up are needed to confirm this.

Video 1

The contrast medium was injected into the pancreatic duct, and a stricture was seen in the pancreatic head. A fully covered metallic stent delivery system was inserted, and the stent was successfully placed.

Endoscopy_UCTN_Code_TTT_1AR_2AZ

Competing interests: None

Takeshi Ogura¹, Yoshitaka Kurisu², Kazuhiro Yamamoto³, Daisuke Masuda¹, Akira Imoto¹, Shinya Fukunishi¹, Kazuhide Higuchi¹

¹ 2nd Department of Internal Medicine, Osaka Medical College, Osaka, Japan

² Department of Pathology, Osaka Medical College, Osaka, Japan

³ Department of Radiology, Osaka Medical College, Osaka, Japan

Fig. 4 The stent was successfully placed from the pancreatic body to the head across the stricture site.
a Fluoroscopic image. **b** Endoscopic image.

References

- 1 Adler DG, Lichtenstein D, Baron TH et al. The role of endoscopy in patients with chronic pancreatitis. *Gastrointest Endosc* 2006; 63: 933–937
- 2 Park do H, Kim MH, Moon SH et al. Feasibility and safety of placement of a newly designed, fully covered self-expandable metal stent for refractory benign pancreatic strictures: a pilot study (with video). *Gastrointest Endosc* 2008; 68: 1182–1189
- 3 Moon SH, Kim MH, Park do H et al. Modified fully covered self-expandable metal stents with antimigration features for benign pancreatic duct strictures in advanced chronic pancreatitis, with a focus on the safety profile and reducing migration. *Gastrointest Endosc* 2010; 72: 86–91

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1391652>
Endoscopy 2015; 47: E206–E207
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

Corresponding author

Takeshi Ogura, PhD, MD
 2nd Department of Internal Medicine
 Osaka Medical College
 2-7 Daigakuchou, Takatsukishi
 Osaka 569-8686
 Japan
 Fax: +81-52-7635233
oguratakeshi0411@yahoo.co.jp