Use of a scissors forceps for the endoscopic removal of a distally migrated self-expandable metallic stent adhering to the duodenal mucosa

Fig. 1 A self-expandable metallic stent has migrated distally and is adhering to the duodenal mucosa in a patient with cancer of the pancreatic head and liver metastasis.

Fig. 2 The self-expandable metallic stent cannot be removed because it strongly adheres to the duodenal mucosa.

Fig. 3 The retriever loop is covered by the duodenal mucosa as a result of epithelial hyperplasia.

Fig. 4 A scissors forceps is used to cut the wire loop.

Fig. 5 The wire loop has been successfully cut with the scissors forceps.

Fig. 6 Ulceration is seen in the duodenum after removal of the self-expandable metallic stent.

Covered self-expandable metal stents (SEMS) occasionally migrate [1], and various techniques for their removal have been reported [2–5]. However, the use of a scissors forceps for the endoscopic re-

moval of a distally migrated SEMS that has adhered to the duodenal mucosa has not been previously reported. An 82-year-old man was admitted to our hospital because of cancer of the pancre-

atic head with liver metastasis. We inserted a fully covered, 10×60-mm WallFlex stent (Boston Scientific, Natick, Massachusetts, USA) across the duodenal papilla. The patient was readmitted because of the passage of tarry stool 1 year after insertion of the SEMS. Duodenal endoscopy revealed tumor invasion of the duodenum and distal migration of the SEMS, which adhered to the duodenal mucosa (Fig. 1).

We attempted to remove the SEMS by grasping the body of the stent with a large, mounted rat-tooth forceps. The proximal end of the SEMS was removed from the common bile duct. However, the distal end of the SEMS could not be removed because it strongly adhered to the duodenal mucosa (Fig. 2). The distal wire loop (retriever loop) was covered by the duodenal mucosa as a result of epithelial hyperplasia, which had caused a mucosal bridge to form (Fig. 3), and partial mucosal ulceration was observed. Therefore, we used a scissors forceps (FS-5U-1; Olympus Optical Co., Tokyo, Japan) to cut the wire loop (Fig. 4). After the wire loop had been successfully cut (Fig. 5), the SEMS was easily removed from the duodenal mucosa, and ulceration was evident (Fig. 6).

Argon plasma coagulation (APC) is reportedly a useful procedure for cutting a SEMS [5]; however, APC of the wire loop of a SEMS located close to a site of duodenal ulceration may cause duodenal perforation. In contrast, when a scissors forceps is used, there is no risk for perforation, and cutting with a scissors forceps may be a useful technique in these situations.

Endoscopy_UCTN_Code_TTT_1AO_2AZ

Competing interests: None

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DOI <http://dx.doi.org/10.1055/s-0034-1391298>
Endoscopy 2015; 47: E98–E99
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X

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