Usefulness of a screw tip stent retriever as a dilator during side-by-side placement of multiple stents for malignant hilar biliary obstruction

In malignant hilar biliary obstruction, an additional stent placement is often difficult after the placement of fully covered self-expandable metal stents (FCSEMSs) in a side-by-side fashion. An 86-year-old man who had a history of Billroth-I gastrectomy presented with a malignant hilar biliary obstruction from unresectable gallbladder duct cancer. The left, right anterior, and right posterior bile ducts were obstructed (Fig. 1).

Initially, we attempted to place a 6-mm FCSEMS (HANAROSTENT Biliary FullCover NEO, M.I. Tech Co., Ltd., Seoul, Korea) at the right anterior branch. Subsequently, we attempted to deploy a 6-mm FCSEMS to the left bile duct to facilitate the deployment of a plastic stent at the right-posterior branch in a side-by-side fashion. However, during multiple stenting, none of the devices used, namely the tapered cannulation catheter, balloon dilator, and sheath dilator, were able to easily pass over the stenosis, despite adjusting the scope position, because of interference with the jagged surface of the fully covered self-expandable metal stents and bending of the inferior bile duct due to the Billroth-I gastrectomy (Fig. 2).

Clockwise rotation of the Soehendra stent retriever (SSR; COOK Medical Inc., Winston-Salem, NC, USA) generated a propulsive force in addition to pushing the catheter from the back end. The spiral motion of the SSR tip allowed it to easily pass over the jagged SEMS surface and stricture (1–4) (Fig. 3, Fig. 4, Fig. 5, Video 1). After the SSR dilated the stricture, the counterclockwise rotation allowed easy retraction without compromising the SEMSs. Finally, we succeeded in placing multiple stents in a side-by-side fashion. Thus, the use of the SSR as a dilator is one of the viable options when it becomes difficult to pass over and dilate the malignant stricture owing to interference with SEMSs or anatomical problems.
Endoscopy_UCTN_Code_TTT_1AS_2AF

Competing interests

Akio Katanuma received honoraria as lecture fee from Olympus Co., Tokyo Japan. Any other authors have no conflicts of interest to declare.

The authors

Haruka Toyonaga, Tsuyoshi Hayashi, Akio Katanuma
Center for Gastroenterology, Teine Keijinkai Hospital, Hokkaido, Japan

Corresponding author

Haruka Toyonaga, MD
Center for Gastroenterology, Teine-keijinkai Hospital, 1-40-1-12 Maeda, Teine-ku, Sapporo 006-8555, Japan
Fax: +81-11-685-2967
toyonaga.pc@gmail.com

References


Bibliography

Endoscopy
DOI 10.1055/a-1757-9208
ISSN 0013-726X
published online 2022
© 2022. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

Video 1 This video demonstrates the use of the Soehendra stent retriever is one of the options when it is difficult to dilate the stricture during the placement of multiple SEMSs in a side-by-side fashion.

Fig. 5 Finally, we succeeded in placing multiple stents in a side-by-side fashion without compromising them.

Video 1

Toyonaga Haruka et al. Usefulness of a... Endoscopy | © 2022. Thieme. All rights reserved.

https://eref.thieme.de/e-videos

Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos