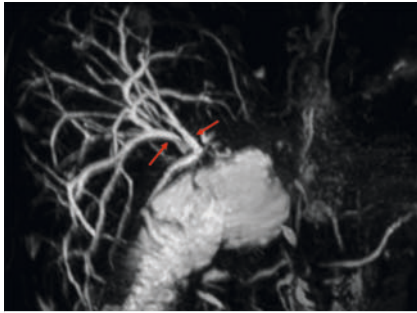


## Successful cannulation using a novel rotatable sphincterotome in a hepaticojejunal anastomotic stricture with a steep angle

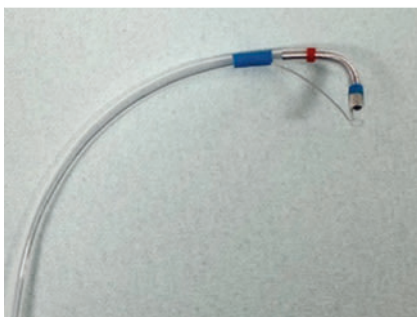
OPEN  
ACCESS



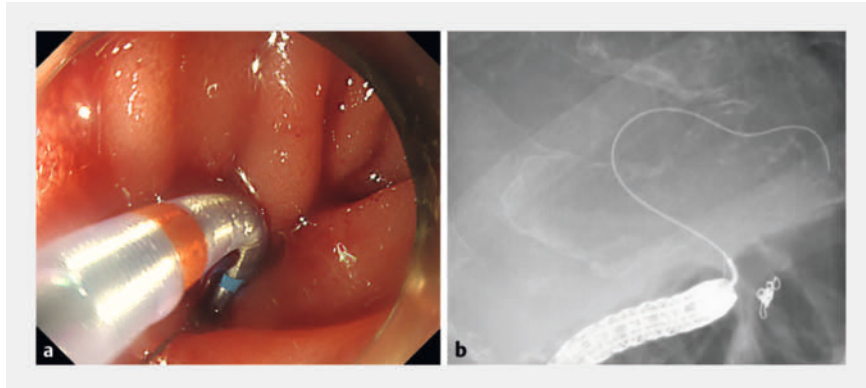
► **Fig. 1** Magnetic resonance imaging revealing slight biliary dilation (red arrow) in the intrahepatic bile duct.



► **Fig. 2** Endoscopic findings revealing the occurrence of a hepaticojejunal anastomotic stricture in the hepaticojejunal anastomosis (red arrow).



► **Fig. 3** A novel rotatable sphincterotome with a tip diameter of 1.8 mm.



► **Fig. 4** Endoscopic and fluoroscopic findings. Biliary cannulation is achieved by seeking the guidewire while angulating the sphincterotome.

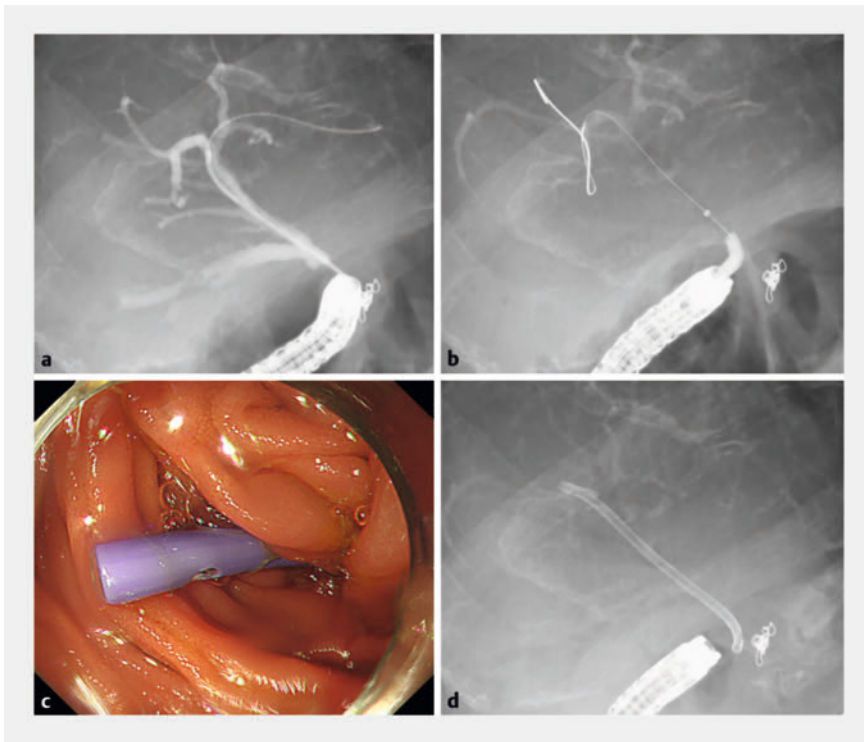
Balloon enteroscopy-assisted endoscopic retrograde cholangiopancreatography (ERCP) is useful in patients with a hepaticojejunal anastomotic stricture [1–3]. However, biliary cannulation for such a stricture is challenging especially in cases with a steep angle, because the balloon enteroscope has no elevator function to angulate the cannulation catheter. We report a case of successful cannulation using a novel rotatable sphincterotome in a patient with a hepaticojejunal anastomotic stricture at a steep angle.

A 68-year-old man who underwent hepaticojejunostomy with Roux-en-Y owing to hilar bile duct cancer was referred to our facility because of recurrent cholangitis. Magnetic resonance imaging revealed a slight biliary dilation in the intrahepatic bile duct (► **Fig. 1**). Therefore, ERCP was performed using a short-type single-balloon enteroscope (SIF-H290; Olympus, Tokyo, Japan) with a working length of 152 cm and a working channel diameter of 3.2 mm [2] (► **Video 1**). After reaching the hepaticojejunal anastomosis, we observed the occurrence of a hepaticojejunal anastomotic stricture (► **Fig. 2**). Biliary cannulation using a conventional catheter was unsuccessful. The steep angle to the bile duct made biliary cannu-



► **Video 1** Successful cannulation using a novel rotatable sphincterotome in a patient with a hepaticojejunal anastomotic stricture at a steep angle.

lation difficult. Therefore, we used a rotatable sphincterotome (Seeking Tome ZERO; MTW Endoskopie, Wesel, Germany) with a 1.8-mm tip diameter to achieve biliary cannulation (► **Fig. 3**). Guidewire seeking was attempted while angulating the sphincterotome. This allowed successful biliary cannulation (► **Fig. 4**). Cholangiography revealed the absence of stones. Subsequently, dilation of the stricture using a 4-mm dilation balloon



► **Fig. 5** Endoscopic and fluoroscopic findings. **a** Cholangiography revealing the absence of stones. **b** Cholangiography revealing the dilation of the stricture using a 4-mm dilation balloon catheter. **c, d** Endoscopic findings and cholangiography showing the plastic stent placement.

catheter (REN; Kaneka, Tokyo, Japan) was performed, followed by plastic stent placement (► **Fig. 5**).

Compared to a previously reported rotatable sphincterotome [4,5], this novel sphincterotome can be rotated even if there is hardly distance to the target site because it lacks a nose between the blade and the tip, which was helpful for our case. This novel rotatable sphincterotome can improve the success rate of biliary cannulation in difficult cases of hepaticojejunal anastomotic stricture.

Endoscopy\_UCTN\_Code\_TTT\_1AR\_2AC

### Acknowledgement

We would like to thank Editage ([www.editage.com](http://www.editage.com)) for English language editing.

### Conflict of Interest

The authors declare that they have no conflict of interest.

### The authors

Yuki Tanisaka<sup>1</sup>, Masafumi Mizuide<sup>1</sup>, Akashi Fujita<sup>1</sup>, Takahiro Shin<sup>1</sup>, Kei Sugimoto<sup>1</sup>, Ryuhei Jinushi<sup>1</sup>, Shomei Ryozaawa<sup>1</sup>

1 Department of Gastroenterology, Saitama Medical University International Medical Center, Hidaka, Japan

### Corresponding author

Yuki Tanisaka, MD

Department of Gastroenterology, Saitama Medical University International Medical Center, 1397-1, Yamane, Hidaka, Saitama 350-1298, Japan  
tanisaka1205@gmail.com

### References

- [1] Yane K, Katanuma A, Maguchi H et al. Short-type single-balloon enteroscope- assisted ERCP in postsurgical altered anatomy: Potential factors affecting procedural failure. *Endoscopy* 2017; 49: 69–74. doi:10.1055/s-0042-118301
- [2] Tanisaka Y, Ryozaawa S, Mizuide M et al. Usefulness of the “newly designed” short-type

single-balloon enteroscope for ERCP in patients with Roux-en-Y gastrectomy: a pilot study. *Endosc Int Open* 2018; 6: E1417–E1422

- [3] Tanisaka Y, Ryozaawa S, Itoi T et al. Efficacy and factors affecting procedure results of short-type single-balloon enteroscopy-assisted ERCP for altered anatomy: a multi-center cohort in Japan. *Gastrointest Endosc* 2022; 95: 310–318.e1
- [4] Kurita A, Kudo Y, Yoshimura K et al. Comparison between a rotatable sphincterotome and a conventional sphincterotome for selective bile duct cannulation. *Endoscopy* 2019; 51: 852–857
- [5] Takenaka M, Yoshikawa T, Okamoto A et al. Novel sphincterotomy device that orientates blade along the axis of the bile duct in patients with Roux-en-Y anastomosis. *Endoscopy* 2019; 51: E132–E134

### Bibliography

Endoscopy 2024; 56: E336–E337

DOI 10.1055/a-2291-9720

ISSN 0013-726X

© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited.

(<https://creativecommons.org/licenses/by/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany



### ENDOSCOPY E-VIDEOS

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



E-Videos is an open access online section of the journal *Endoscopy*, reporting on interesting cases

and new techniques in gastroenterological endoscopy. All papers include a high-quality video and are published with a Creative Commons CC-BY license. Endoscopy E-Videos qualify for HINARI discounts and waivers and eligibility is automatically checked during the submission process. We grant 100% waivers to articles whose corresponding authors are based in Group A countries and 50% waivers to those who are based in Group B countries as classified by Research4Life (see: <https://www.research4life.org/access/eligibility/>).

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