Successful endoscopic ultrasound-guided hepaticogastrostomy with use of a novel drill dilator for challenging tract dilation

When endoscopic retrograde cholangiopancreatography (ERCP) fails, patients with benign biliary disease, such as common bile duct (CBD) stones or hepatojejunostomy stricture, are currently treated using the transhepatic approach after fistula creation by endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) [1]. During EUS-HGS, tract dilation is required prior to stent deployment. Various devices have been reported for this purpose [2–4]; however, tract dilation can be challenging if the intrahepatic bile duct (IHBD) is not dilated and the bile duct wall is hard because of frequent episodes of cholangitis. A novel drill dilator (Tornus ES; Asahi Intecc Co., Ltd., Seto, Japan) that can overcome these difficulties has become available in Japan [5]. This device guarantees tract dilation owing to its design based on screw mechanics. We describe a case of successful EUS-HGS in which the novel dilator was used for a challenging tract dilation.

A 59-year-old man presented with frequent episodes of cholangitis due to CBD stones. He had previously undergone distal gastrectomy with Roux-en-Y anastomosis for gastric cancer, EUS-HGS was considered to be an option. EUS revealed a hypoechoic area around the IHBD owing to his frequent episodes of cholangitis (Fig. 2). The diameter of the IHBD was 0.7 mm, and the IHBD was gently punctured using a 19G needle. After the successful puncture, contrast medium was injected. A 0.025-inch guidewire was then deployed into the CBD (Fig. 3a). Tract dilation was attempted with a balloon catheter, but the device could not be inserted into the biliary tract. Therefore, a Tornus dilator was inserted into the echoendoscope and was successfully advanced across the stomach and bile duct wall using clockwise rotation (Fig. 3b). After the tract had been dilated, an 8.5-Fr stent delivery system was successfully inserted and a metal stent was then deployed (Fig. 3c; Video 1). In conclusion, the Tornus ES dilator appears to be useful as a dilation device, particularly when tract dilation is difficult, as was the case in the patient described.

Endoscopy_UCTN_Code_TTT_1AS_2AD

Competing interests

The authors declare that they have no conflict of interest.
The authors

Takeshi Ogura, Yuki Uba, Masahiro Yamamura, Jyunichi Kawai, Hiroki Nishikawa
2nd Department of Internal Medicine, Osaka Medical and Pharmaceutical University, Osaka, Japan

Corresponding author

Takeshi Ogura, MD, PhD
2nd Department of Internal Medicine, Osaka Medical and Pharmaceutical University, 2-7 Daigakuchou, Takatsukishi, Osaka 569-8686, Japan
oguratakeshi0411@yahoo.co.jp

References


Bibliography

Endoscopy
DOI 10.1055/a-1956-0763
ISSN 0013-726X
published online 2022
© 2022. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit.

Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/licenses/by-nc-nd/4.0/)

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