

Endoscopic ultrasound-guided antegrade dilation using a drill dilator for hepaticojejunostomy stricture with cholangioscopic findings

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In obstructive jaundice due to hepaticojejunostomy stricture (HJS), drainage has been performed by endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) [1–3]. Various techniques have been reported for dilation of the HJS site, including antegrade balloon dilation, self-expandable metal stent deployment, and electrocautery dilation. However, these procedures have the disadvantages of insufficient efficacy, high cost, and risk of bleeding, respectively. A novel drill dilator has recently become available in Japan (Tornus ES; Asahi Intecc, Aichi, Japan) (► Fig. 1) [4]. This device enables the tract to be easily dilated using a clockwise rotation without using pushing force. We herein describe successful dilation for HJS, with cholangioscopic findings.

An 80-year-old woman who had undergone pancreaticoduodenostomy for pancreatic head cancer 1 year previously was admitted to our hospital with obstructive jaundice. Although there was no sign of recurrence of pancreatic cancer, obstructive jaundice due to HJS was observed. We therefore performed EUS-HGS with antegrade dilation at the site of HJS using a balloon catheter, with stent exchange scheduled in 3 months' time. The endoscopic retrograde cholangiopancreatography (ERCP) catheter was inserted into the biliary tract through the EUS-HGS route, and contrast medium was injected. However, the HJS could not be sufficiently treated (► Fig. 2) because the ERCP catheter could not be advanced across the HJS site into the intestine (► Fig. 3). Therefore, we attempted antegrade dilation using the drill dilator, which was successful (► Fig. 4). The cholangioscope was inserted into the HJS site to check for adverse events following the procedure and confirmed sufficient dilation with no bleeding (► Fig. 5). Finally, a plastic stent was deployed (► Video 1).



► Fig. 1 The novel drill dilator (Tornus ES; Asahi Intecc, Aichi, Japan).



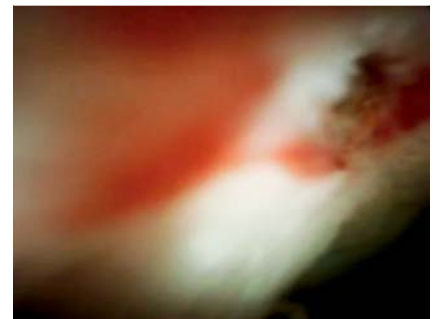
► Fig. 2 Cholangiography reveals hepaticojejunostomy stricture.



► Fig. 3 The endoscopic retrograde cholangiopancreatography catheter cannot be advanced across the hepaticojejunostomy stricture site into the intestine.



► Fig. 4 Antegrade dilation using the drill dilator is attempted and performed successfully.



► Fig. 5 Cholangioscopy confirms that the hepaticojejunostomy stricture site is sufficiently dilated and that there is no bleeding.

In conclusion, EUS-guided antegrade dilation for HJS using the drill dilator appears to be effective and safe. Further evaluation is necessary to confirm these findings.

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Competing interests

The authors declare that they have no conflict of interest.

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Video 1 Cholangioscopic findings after antegrade dilation.

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