Endoscopic ultrasound-guided pancreatic duct drainage using a novel fine-gauge electrocautery dilator

► **Fig. 1** Photograph showing the novel fine-gauge electrocautery dilator (Fine025), which is wire-guided and coaxial with the 0.025-inch guidewire. The distal end of the outer dilator has a metal tip, the top of which is 3-Fr.

► **Fig. 2** Computed tomography scan showing the stone in the main pancreatic duct at the pancreatic head (red arrow).

► **Fig. 3** Radiographic image during endoscopic ultrasound-guided pancreatic duct drainage showing the guidewire, which had been passed through the needle into the main pancreatic duct, and the stone at the pancreatic head (red arrow).

► **Video 1** Endoscopic ultrasound-guided pancreatic duct drainage is performed using a novel fine-gauge cautery dilator in a patient with a stricture of the pancreatic duct and stone at the pancreatic head.

Endoscopic ultrasound-guided pancreatic duct drainage (EUS-PD) is an alternative technique that can be performed after endoscopic transpapillary pancreatic duct drainage fails [1]. During EUS-PD procedures, needle tract dilation remains a challenge. Recently, a novel fine-gauge electrocautery dilator (Fine025; Medico's Hirata Inc., Osaka, Japan) has become available in Japan (► **Fig. 1**). The distal end of the outer dilator contains a metal tip. The top of this tip is only 3 Fr, allowing a smaller burning effect [2]. We describe EUS-PD using this dilator in a patient with hard pancreatic parenchyma.

A 64-year-old man was admitted to our hospital for acute pancreatitis due to a pancreatic head stone (► **Fig. 2**). After the acute pancreatitis had improved using conservative therapy, endoscopic transpapillary treatment was attempted for the stone. However, a guidewire could not be passed because of the stricture of the pancreatic duct and the stone. As acute pancreatitis could have reoccurred, we decided to perform EUS-PD. The dilated main pancreatic duct

(MPD) was first viewed using an echo-endoscope, then the MPD was punctured using a 19-gauge needle (Sono Tip Pro Control; Medi-Globe, Rosenheim, Germany). A 0.025-inch guidewire (VisiGlide 2; Olympus Medical Systems, Tokyo, Japan) was inserted into the MPD through the needle (► **Fig. 3**). Dilation of the needle tract using a mechanical dilator (ES dilator; Zeon Medical Co. Ltd., Tokyo, Japan) was difficult because the pancreatic parenchyma and the MPD wall were very hard. A novel fine-gauge electrocautery dilator (Fine025) was then used. Dilation of the tract was successful; a 7-Fr plastic stent (Type IT; Gadelius Medical Co. Ltd., Tokyo, Japan) was placed from the MPD to the stomach (► **Video 1**).

This case suggests that this fine-gauge electrocautery dilator can be useful for tract dilation during EUS-PD procedures. Further studies on a large number of cases will be needed to validate its safety and efficacy.

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Competing interests

None

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References

- [1] Tyberg A, Sharaiha RZ, Kedia P et al. EUS-guided pancreatic drainage for pancreatic strictures after failed ERCP: a multicenter international collaborative study. *Gastrointest Endosc* 2017; 85: 164–169
- [2] Ogura T, Nakai Y, Itoi T. Novel fine gauge electrocautery dilator for EUS-guided hepaticogastrostomy (with video). *J Hepatobiliary Pancreat Sci* 2019; 26: E3–E4

Bibliography

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