

DEN Video Article

Dilation of pancreatic duct stenosis using a newly designed drill dilator

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BRIEF EXPLANATION

PANCREATIC DUCT STENOSIS is usually dilated via mechanical dilation (e.g., wire-guided balloons,

bougies, or a Soehendra stent retriever).^{1–3} However, pancreatic duct strictures due to pancreatic cancers are often too stenotic to allow the passage of conventional endoscopic devices. Herein, we report a dilation method for pancreatic

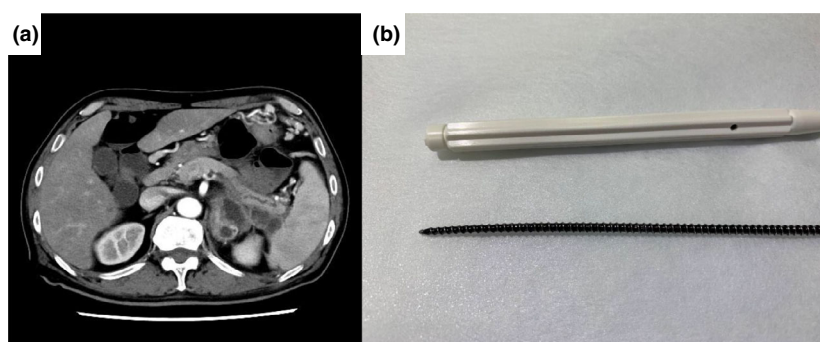


Figure 1 (a) Computed tomography image before the procedure revealed a pancreatic duct dilation at the tail side, obstructive pancreatitis, and peripancreatic abscess. (b) The picture shows the magnification of the tip and distal end of the newly designed drill dilator, Tornus 25. This device has spiral threads around the shaft and a rotatable handle at the distal end. A 0.025 inch guidewire is available.

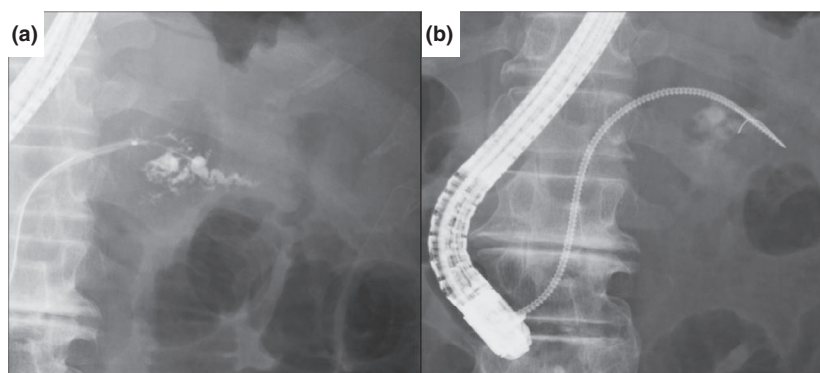


Figure 2 (a) The pancreatography revealed a main pancreatic duct stenosis and dilation of the pancreatic duct at the tail side. (b) The drill dilator passes through the pancreatic duct stenosis.

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duct stenosis using a newly designed drill dilator. A 68-year-old man with pancreatic tail cancer was admitted with fever during chemotherapy. Computed tomography (CT) revealed a dilated main pancreatic duct (MPD) at the tail side, obstructive pancreatitis, and a peripancreatic abscess (Fig. 1a). An endoscopic ultrasound-guided cyst drainage (EUS-CD) procedure was performed. Nonetheless, a stent could not be placed, and aspiration was performed only because there were many small abscesses. The abscesses did not shrink after the treatment, so a transpapillary pancreatic duct stent placement was performed. Pancreatography revealed an MPD stenosis due to pancreatic cancer. It also revealed dilation of the branched pancreatic duct and the MPD at the tail side (Fig. 2a). To dilate the pancreatic duct stenosis, a guidewire was inserted. However, a cannula and a bougie catheter (ES dilator, 7F soft type; Zeon Medical, Tokyo, Japan) could not pass. To dilate the severe stenosis, a newly designed drill dilator (Tornus ES for 0.025 inch; 7F-size, stainless steel, Asahi Intecc, Aichi, Japan) was used (Fig. 1b). The spiral threads around the shaft of the device enabled it to easily pass through the MPD stenosis with a clockwise rotation (Fig. 2b). After dilation with this dilator, a 5F-sized plastic stent was successfully placed beyond the MPD stenosis (Video S1). No adverse events occurred. The

patient's fever went down and the inflammatory response was reduced significantly. A week later, CT revealed shrinkage of the abscess. Using this dilator, endoscopic treatment of pancreatic duct stenosis may become easier.

Authors declare no conflict of interest for this article.

REFERENCES

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SUPPORTING INFORMATION

ADDITIONAL SUPPORTING INFORMATION may be found in the online version of this article at the publisher's web site.

Video S1 The dilation method for pancreatic duct stenosis using a newly designed drill dilator.