Use of a transpapillary stent as a guidepost for endoscopic ultrasound-guided pancreatic duct drainage in the treatment of disconnected pancreatic duct syndrome

Disconnected pancreatic duct syndrome (DPDS) is an important complication in patients with acute necrotising pancreatitis that leads to recurrent pancreatic fluid collection. Endoscopic treatments including transpapillary and/or ultrasound-guided drainage are typically used and are minimally invasive [1–3]. Although bridging the pancreatic duct (PD) over a disruption with a stent is ideal, it is a technically challenging procedure [4,5]. Herein, we report a pincer method to bridge the PD via endoscopic ultrasound-guided pancreatic duct drainage (EUS-PD) using a transpapillary stent as a guidepost.

A 71-year-old man was diagnosed with DPDS caused by severe acute pancreatitis. A pancreatic fistula had been worsening with pain (▶ Fig. 1a), and there was dilation upstream of the pancreatic duct (PD) (yellow arrow) (▶ Fig. 1b). According to endoscopic retrograde pancreatography, the dorsal duct was completely disrupted in the body of the pancreas (yellow circle) with complete divisum (▶ Fig. 2). The upstream dorsal duct could not be visualised (complete PD disruption), so we placed a 6-French double-pigtail plastic stent (PS) via the minor papilla. Pancreatic fluid collection causes obstructive jaundice, and we also placed biliary stents.

▶ Fig. 1 A 71-year-old man was diagnosed with disconnected pancreatic duct syndrome caused by severe acute pancreatitis. a A pancreatic fistula had been worsening with pain (yellow circle). b There was dilation upstream of the pancreatic duct (PD) (yellow arrow).

▶ Fig. 2 According to endoscopic retrograde pancreatography, the dorsal duct was completely disrupted in the body of the pancreas (yellow circle) with complete divisum. The upstream dorsal duct could not be visualised (complete PD disruption), so we placed a 6-French double-pigtail plastic stent (PS) via the minor papilla. Then we performed EUS-PD from upstream of the dilated dorsal duct to bridge the disruption (▶ Fig. 3a). A 71-year-old man was diagnosed with DPDS caused by severe acute pancreatitis. A pancreatic fistula had been worsening with pain (▶ Fig. 1a), and there was dilation upstream of the PD (▶ Fig. 1b), so we performed transpapillary drainage.

▶ Fig. 3 We performed endoscopic ultrasound-guided pancreatic duct drainage from upstream of the dilated dorsal duct to bridge the disruption. a The prior double-pigtail PS could be used as a guidepost (yellow triangle). b We successfully bridged from the upstream dorsal duct to the minor papilla.
the duodenum into the pancreatic fistula area is limited. However, while accessing from the distal PD, the prior PS from the duodenum laid out the appropriate path. This pincer method might facilitate complete bridging of the PD over a disruption in patients with DPDS.

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Competing interests

The authors declare that they have no conflict of interest.

The authors

Yasuki Hori, Akihisa Kato, Itaru Naitoh, Kazuki Hayashi, Michihiro Yoshida, Kenta Kachi, Hiromi Kataoka
Department of Gastroenterology and Metabolism, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Corresponding author

Yasuki Hori, MD
Department of Gastroenterology and Metabolism, Nagoya City University Graduate School of Medical Sciences, 1 Kawasumi, Mizuho-cho, Mizuho-ku Nagoya 467-8601, Japan
Fax: +81-52-852-0952
yhori@med.nagoya-cu.ac.jp

References


Bibliography

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