Endoscopic ultrasonography-guided antegrade diathermic dilation for the treatment of complete obstruction of a pancreaticogastrostomy

An 18-year-old woman presented to our hospital with acute pancreatitis. She had undergone a duodenum-preserving resection of the pancreatic head 3 months earlier for the treatment of a solid pseudopapillary neoplasm of the pancreas. Esophagogastroduodenoscopy revealed complete pancreaticogastrostomy obstruction (Video 1). We attempted endoscopic treatment to avoid surgical procedures but could not precut the anastomosis with a needle knife because the orifice of the pancreatic duct could not be detected (Video 2). Subsequently, we performed the EUS-guided rendezvous procedure. Using a 19-gauge needle, we punctured the pancreatic duct and placed a 0.025-inch guidewire (Fig. 3). An ultra-tapered endoscopic retrograde cholangiopancreatography catheter and a 6-Fr wire-guided diathermic dilator (Cysto-Gastro-Set; Endo-Flex, GmbH, Voerde, Germany) were used to dilate the needle tract (Video 1). Dilation of the tract was successful, but neither a 0.035-inch nor a 0.025-inch guidewire could be passed through the pancreaticogastrostomy obstruction (Video 1). Computed tomography showed the pancreas attached to the stomach and the axis of the pancreatic duct crossing the gastric wall. We used the diathermic dilator to pierce the obstruction and obtain transgastric access to place a guidewire in the stomach (Video 1). Afterward, we exchanged the echoendoscope for a duodenoscope. Finally, a retrograde 7-Fr plastic stent was placed across the obstruction following diathermic and balloon dilation of the tract without serious complications (Video 2). One of the most common problems encountered during EUS-guided rendezvous is difficulty placing a guidewire across the obstruction [1]. We have reported the use of transpapillary and EUS-guided diathermic dilation for severe, refractory benign or malignant strictures of the bile and pancreatic ducts [2–5]. Used with caution, diathermic dilation is useful to treat complete obstruction of a pancreaticogastrostomy that cannot be pierced with conventional techniques.

Competing interests: None

Hiroshi Kawakami, Masaki Kuwatani, Kazumichi Kawakubo, Yoshimasa Kubota, Yoko Abe, Shuhei Kawahata, Kimitoshi Kubo, Naoya Sakamoto
Department of Gastroenterology and Hepatology, Hokkaido University Graduate School of Medicine, Sapporo, Japan

Endoscopic ultrasonography (EUS)-guided rendezvous is a new and challenging technique. We present a case in which we successfully used a diathermic dilator to treat a complete pancreaticogastrostomy obstruction.

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Fig.1 Endoscopic image showing complete obstruction of the pancreaticogastrostomy before diathermic dilation.

Video 1
Endoscopic ultrasonography-guided rendezvous procedure in which antegrade diathermic dilation is used to treat complete obstruction of a pancreaticogastrostomy.

Video 2
Retrograde pancreatic stenting across the obstruction following diathermic and balloon dilation of the tract.
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Corresponding author
Hiroshi Kawakami, MD, PhD
Department of Gastroenterology and Hepatology
Hokkaido University Graduate School of Medicine
Kita 15, Nishi 7, Kita-ku
Sapporo 060-8638
Japan
Fax: +81-11-706-7867
hiropon@med.hokudai.ac.jp