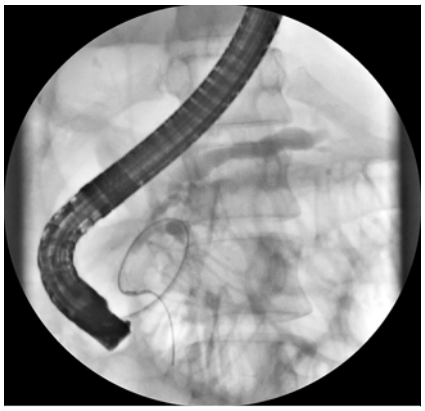
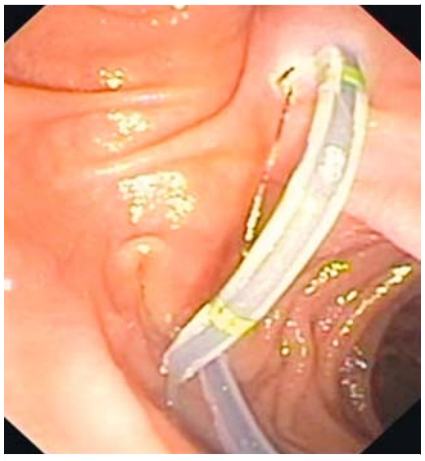
Thieme

Reverse sphincterotomy of the minor papilla via the major papilla for chronic pancreatitis with incomplete pancreas divisum



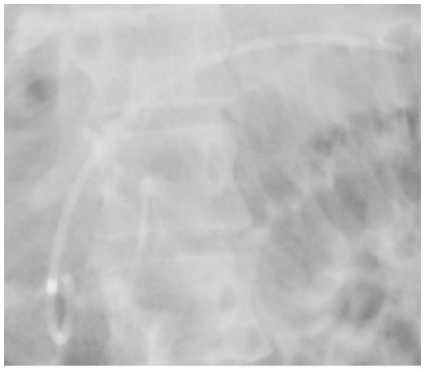
▶ **Fig. 1** Fluoroscopic image showing coiling of the guidewire in the direction of the accessory duct during cannulation for endoscopic retrograde cholangiopancreaticography in a 35-year-old man with incomplete pancreas divisum.



▶ **Fig. 2** Reverse sphincterotomy of the minor papilla.

A 35-year-old man presented with recurrent abdominal pain due to chronic alcoholic pancreatitis. Magnetic resonance cholangiopancreatography showed a dilated tortuous main pancreatic duct with incomplete pancreas divisum.

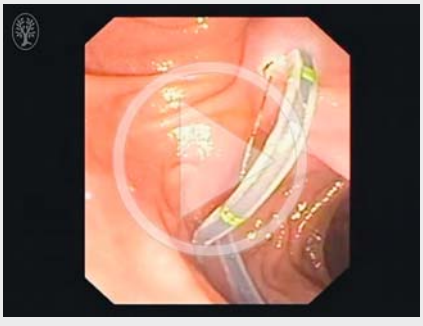
Endoscopic retrograde cholangiopancreatography (ERCP) was carried out and the major papilla was cannulated with a cannulatome and 0.035-inch guidewire. After contrast opacification of the main pancreatic duct, when deep cannulation was attempted, the guidewire became coiled in the direction of the accessory duct (▶ **Fig. 1**). Cannulation via the minor papilla was therefore tried, but it was unsuccessful. The cannulatome with the guidewire was then used for cannulation via the major papilla; the guidewire was negotiated into the minor pancreatic duct and through the minor papilla, followed by the cannulatome over the guidewire. Reverse sphincterotomy of the minor papilla was performed and the cannulatome and guidewire were removed (▶ **Fig. 2**, ▶ **Video 1**). This was followed by deep pancreatic duct cannulation via the minor papilla, which showed a dilated, tortuous duct with ectatic side-branches. A 7-Fr, 10-cm single-pigtail stent was deployed into the pancreatic duct across the minor papilla (▶ **Fig. 3**). The patient improved symptomatically and was asymptomatic at the 6 month follow-up.



▶ **Fig. 3** The pancreatic duct stent in situ: fluoroscopic image.

Minor papilla sphincterotomy is a routinely performed endoscopic therapy for pancreatitis associated with pancreas divisum. It was first described by Cotton in 1980 [1]. Pancreas divisum is a common anatomical variant of the pancreatic duct. Warshaw et al. proposed its anatomical classification into three types: (i) classic pancreas divisum; (ii) pancreas di-

VIDEO 1



▶ Video 1: Reverse sphincterotomy of the minor papilla in a 35-year-old man with incomplete pancreas divisum.

visum with an absent ventral duct; and (iii) incomplete or partial pancreas divisum (the least common type) [2]. Endoscopic sphincterotomy of the minor papilla is an effective treatment in patients with pancreas divisum and various techniques have been described, for example standard pull-type, needle-knife, and wire-assisted access methods [3]. Reverse sphincterotomy is a very rarely used sphincterotomy technique that can be used effectively to treat acute recurrent pancreatitis or chronic pancreatitis associated with partial pancreas divisum.

Endoscopy_UCTN_Code_TTT_1AR_2AC

Competing interests

None

The Authors

Radhika Chavan, Rakesh Kalapala, Zaheer Nabi, Sundeep Lakhtakia, D. Nageshwar Reddy
Asian Institute of Gastroenterology, Hyderabad, India

Corresponding author

Rakesh Kalapala, MD
Asian Institute of Gastroenterology, Somajiguda, Hyderabad 500082, India
Fax: +91-40-23324255
drkalapala@gmail.com

References

[1] Cotton PB. Congenital anomaly of pancreas divisum as cause of obstructive pain and pancreatitis. Gut 1980; 21: 105 – 114
[2] Warshaw AL, Simeone JF, Schapiro RH et al. Evaluation and treatment of the dominant dorsal duct syndrome (pancreas divisum redefined). Am J Surg 1990; 159: 59 – 64, discussion 64 – 66
[3] Testoni PA, Mariani A, Aabakken L et al. Papillary cannulation and sphincterotomy techniques at ERCP: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. Endoscopy 2016; 48: 657 – 683

Bibliography
DOI http://dx.doi.org/10.1055/s-0043-100759
Endoscopy 2017; 49: E119–E120

Stuttgart · New York
ISSN 0013-726X