Pancreatic duct stenting by the rendezvous technique from the minor to major papilla for severe pancreatitis due to papillary stenosis after endoscopic papillectomy

A pancreatic duct (PD) stent placement after endoscopic papillectomy (EP) is recommended to prevent papillary stenosis [1]. However, there are cases in which pancreatitis due to papillary stenosis develops after stent removal, making endoscopic PD drainage difficult [2, 3].

A 74-year-old man underwent EP for a duodenal papillary adenoma. After resection, a plastic stent was placed into the main PD and removed 8 days postoperatively (▶ Fig. 1). Eight months later, the patient had sudden abdominal pain, and contrast-enhanced computed tomography showed inflammation extending from the peripancreatic to subrenal pole (▶ Fig. 2). Endoscopic retrograde cholangiopancreatography was performed for PD drainage (▶ Fig. 3, ▶ Video 1). First, endoscopic transpapillary pancreatic duct stenting was attempted, but cannulation into the main pancreatic duct was difficult due to obstruction of the pancreatic duct orifice by post-EP scarring. We approached from the minor papilla but were unable to lead the guidewire into the tail side of the main PD. Therefore, we switched to stenting the main PD using the rendezvous technique from the minor to major papilla. We successfully approached the main PD via the Santorini duct and inserted the 0.025-inch guidewire through the stenosis of the pancreatic duct orifice into the duodenum. The guidewire was grasped with biopsy forceps, and finally a trans-papillary pancreatic stent was placed. The pancreatitis was quickly resolved.

The treatment of papillary stenosis is generally performed by pancreatic sphincterotomy or stenting, both of which are difficult when the obstruction is severe, as in this case. The endoscopic ultrasound-guided rendezvous method for PD stenting [3] is also available, however it is difficult and has a high risk of complications. In terms of safety, the rendezvous technique from the minor papilla is one of the most useful methods in cases of a difficult approach due to papillary stenosis.

E-Videos

▪ Fig. 1 Endoscopic papillectomy. a Frontal view. b Snaring of the duodenal papilla. c Excision surface. d Stenting of bile and pancreatic ducts. e Stent removal after 8 days.

▪ Fig. 2 Computed tomography findings of acute pancreatitis after 8 months of endoscopic papillectomy. a The fatty tissue concentration around the pancreatic parenchyma was elevated. b Inflammation extended beyond the inferior pole of the kidney.
Competing interests
The authors declare that they have no conflict of interest.

The authors
Shota Harai, Mitsuharu Fukasawa, Yoshimitsu Fukasawa, Shinichi Takano, Nobuyuki Enomoto
Department of Gastroenterology, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan

Corresponding author
Mitsuharu Fukasawa, MD
Department of Gastroenterology, Faculty of Medicine, University of Yamanashi, 1110, Shimokato, Chuo city, Yamanashi, 409-3898, Japan
Fax: +81-55-273-6748
fmitsu@yamanashi.ac.jp

References

Bibliography
Endoscopy
DOI 10.1055/a-1952-0436
ISSN 0013-726X
published online 2022
© 2022. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial license, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/licenses/by-nc-nd/4.0/)
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

Harai Shota et al. Pancreatic duct stenting… Endoscopy | © 2022. The Author(s).

Fig. 3 Drainage of the pancreatic duct by the rendezvous technique from the minor to the major papilla. a The post-endoscopic papillectomy ulcer scar: the biliary orifice was open (arrow) and the pancreatic duct orifice was not identified. b The catheter was inserted through the minor papilla, and a 0.025-inch guidewire tip was passed through the papillary stenosis. c The guidewire was caught with a snare and the rendezvous technique was performed. d Plastic stents were placed into the pancreatic and bile ducts.

Video 1 Pancreatic duct stenting by the rendezvous technique from the minor to major papilla.