Endoscopic approach for a pinhole-like benign stenosis in a pancreaticojejunal anastomosis using a double-balloon endoscope with a clear long cap attachment

The usefulness of therapeutic modalities using double-balloon endoscopy for biliary disease in postoperative patients has been widely reported [1–3], while papers published about its use in pancreatic disease are scarce, despite an increasing demand for such treatment. This is the first report of successful double-balloon endoscopy-assisted endoscopic retrograde pancreatography (DB-ERP) using a clear long cap for a pinhole-like benign stricture in the pancreaticojejunal anastomosis after pancreaticoduodenectomy.

A 63-year-old woman who had undergone pancreaticoduodenectomy for a lower bile duct cyst with abnormal confluence suffered recurrent pancreatitis 1 year after surgery. Obstructive pancreatitis due to stenosis in the pancreaticojejunal anastomosis was suspected on imaging (▶Fig. 1). The main pancreatic duct (PD) was mildly dilated, which posed a risk for intervention by endoscopic ultrasound (EUS), so we decided to perform DB-ERP instead. A clear long cap (▶Fig. 2) was attached in an attempt to make any endoscopic maneuvers smoother. The expected advantages of this were: to allow it to be pressed against the intestinal wall, so that even sutures covered by mucosa could be easily detected; to allow the pancreaticojejunal anastomosis to be shown in the vertical direction, instead of the normal tangential direction; to allow a certain distance to be maintained between the endoscope and the pancreaticojejunal anastomosis, which would enable smooth endoscopic procedures and blind maneuvers to be avoided.

First, the pancreaticojejunal anastomosis was identified by fluoroscopic image, and the sutures fixing the pancreas and jejunum were then detected endoscopically (▶Fig. 3a). By careful observation in the area of the sutures, the scar-like
mucosa and the pinhole-like stricture of the pancreaticojejunal anastomosis were successfully identified (▶ Fig. 3b). Pancreatography and deep cannulation were performed successfully, and were followed by anastomotic dilation and PD stenting (▶ Video 1). Following the successful completion of DB-ERP, the patient was discharged on the fourth day, without experiencing any major complications or any further pancreatitis. EUS intervention is reported to be effective for pancreatic diseases [4, 5], yet it is invasive for postoperative cases and only used selectively. In conclusion, double-balloon endoscopy approaches can be safely used in patients with a mildly dilated PD, and DB-ERP using a clear long cap is effective for pancreaticojejunal anastomosis stenosis in symptomatic patients.

Endoscopy_UCTN_Code_TTT_1AR_2AK

Competing interests

The authors declare that they have no conflict of interest.

The authors

Takeshi Kasai1,2, Masaaki Shimatani1,2, Toshiyuki Mitsuyama1,2, Takeshi Yamashina1,2, Masataka Kano1,2, Takakuni Yuba1,2, Makoto Naganuma2

1 Division of Gastroenterology and Hepatology, Kansai Medical University Medical Center, Moriguchi, Osaka, Japan
2 The Third Department of Internal Medicine, Kansai Medical University, Hirakata, Osaka, Japan

Corresponding author

Masaaki Shimatani, MD, PhD
Division of Gastroenterology and Hepatology, Kansai Medical University Medical Center, 10-15, Fumizono-cho, Moriguchi, Osaka, 570-8507, Japan
shimatam@hirakata.kmu.ac.jp

References


Bibliography

Endoscopy
DOI 10.1055/a-1883-9514
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

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Kasai Takeshi et al. Endoscopic approach for ... Endoscopy | © 2022. The Author(s).