Two-step pancreatic duct stenting with endoscopic ultrasonography and balloon-assisted enteroscopy for pancreaticojejunal anastomotic stricture

A 75-year-old woman was referred to our hospital for treatment of pancreaticojejunal anastomotic stricture (PJS) after pancreaticoduodenectomy for pancreatic head cancer. Although balloon-assisted enteroscopy was performed, the PJS could not be cannulated by a catheter owing to occlusion. Endoscopic ultrasonography (EUS)-guided pancreatic drainage was performed via the stomach at the main pancreatic duct (MPD) adjacent to the PJS using a 7-Fr plastic stent because puncture of the distal MPD was difficult (▶Fig.1, ▶Fig.2, ▶Video 1). Three months later, computed tomography (CT) revealed dilation of the MPD due to the insufficient length of the stent passed through the MPD (▶Fig.3). Therefore, we planned to place another stent into the MPD from the jejunal side using balloon-assisted enteroscopy. Although the previous stent was unfortunately dislodged during scope insertion, the pancreaticojejunal anastomosis was easily detected and a 0.025-inch guidewire could be inserted. However, the guidewire was directed only toward the stomach via the fistula. Thus, we used the uneven double-lumen cannula (Piolax Medical Devices Inc., Yokohama, Japan) and succeeded in placing another guidewire into the distal MPD (▶Fig.4). Finally, a 7-Fr plastic stent was placed (▶Fig.5, ▶Video 1). One month later, CT revealed disappearance of the MPD dilation.

This is the first report of two-step pancreatic duct stenting with EUS and balloon-assisted enteroscopy for PJS. When PJS and the puncture site under EUS are adjacent and a placed stent does not function adequately, this two-step approach is very effective. The uneven double-lumen cannula has also been reported as an “uneven method” for patients with bile duct cannulation difficulties [1]. When the previous fistula is easily cannulated, but not the targeted MPD, the uneven double-lumen cannula is also useful for selective insertion.

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Competing interests

The authors declare that they have no conflict of interest.

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