Successful removal of a pancreatic duct stone in a patient with Whipple resection, using a short single-balloon enteroscope with a transparent hood

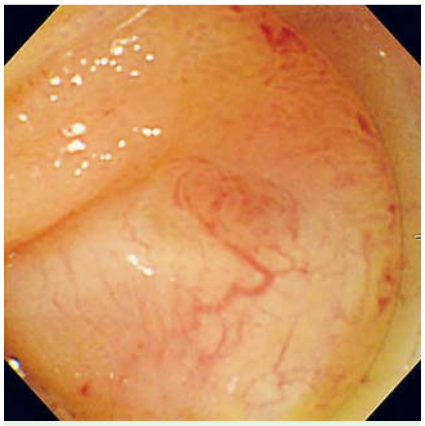

Fig. 1 Endoscopic view showing a small pancreaticojejunal anastomotic site in a 74-year-old woman with mild acute pancreatitis and history of Whipple resection.

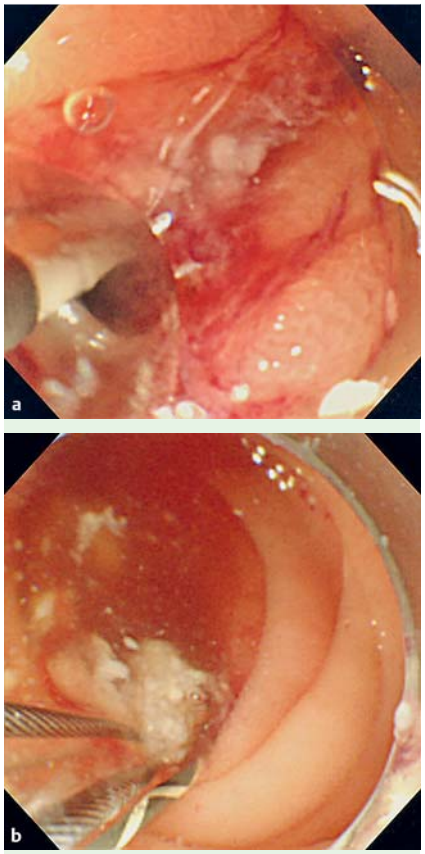

Fig. 3 **a** The anastomotic site was dilated with a 6-mm balloon. **b** The stone was removed from the pancreatic duct with a basket and retrieval balloon.

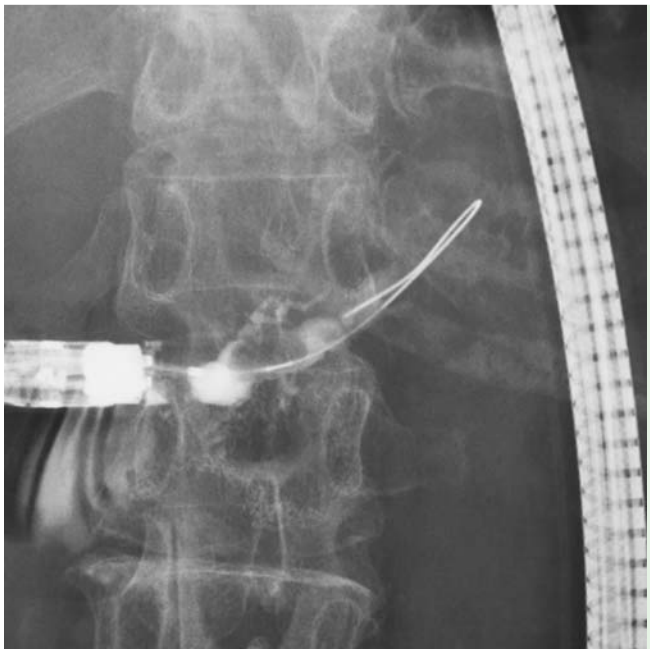

Fig. 2 Endoscopic retrograde pancreatography through the anastomotic site showing a stone in the remnant of the main pancreatic duct.

Endoscopic retrograde cholangiopancreatography (ERCP) is a challenging procedure, especially in indications involving the pancreatic duct in patients with Whipple resection [1–3]. Identification of the pancreaticojejunal anastomotic site is difficult because of the location and small size of the anastomosis, and interference from the jejunal folds. We proposed that a transparent hood would be effective for retraction of the folds to a suitable distance from the intestinal wall. Here, we report on the successful removal of a pancreatic duct stone in a patient with Whipple resection, using a prototype short, single-balloon enteroscope (SBE; working length, 152 cm; outer diameter 9.2 mm; working channel diameter 3.2 mm; SIF-Y0004-V01, Olympus Medical Systems, Tokyo, Japan) with a transparent hood.

A 74-year-old woman admitted for mild acute pancreatitis had a history of pancreaticoduodenectomy for bile duct cancer. Computed tomography revealed the remnant of a dilated pancreatic duct and a stone. A therapeutic intervention involving the short SBE was carried out. The pancreatic duct was successfully cannulated using a standard ERCP catheter and a 0.025-inch guidewire (**Fig. 1**, **Video 1**). A pancreatogram confirmed the presence of a stone in the main pancreatic duct (**Fig. 2**, **Video 2**). The anastomotic site was dilated using a 6-mm balloon, and the stone was removed from the pancreatic duct with a basket and a retrieval balloon (**Fig. 3**, **Video 3**), without any complication. In our patient, the transparent hood was effective in identifying the anastomotic site. We have found that the short SBE can be used as a therapeutic intervention along with various conventional ERCP accessories [4,5].

Video 1

Pancreatic duct cannulation was achieved using a standard endoscopic retrograde cholangiopancreatography (ERCP) catheter and a 0.025-inch guidewire.

Video 2

Pancreatography confirmed the presence of a stone in the main pancreatic duct.

Video 3

The anastomotic site was dilated using a 6-mm balloon, and the stone was removed from pancreatic duct with a basket and retrieval balloon.

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Competing interests: None

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Bibliography
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