Removal of a proximally migrated 5-Fr pancreatic stent with a 5–4–3-Fr catheter using a wedge technique

A 44-year-old woman underwent pancreatic sphincterotomy with placement of a 5-Fr, 3-cm pancreatic duct stent (Geenen Sof-Flex; Cook Endoscopy, Winston-Salem, NC, USA). The stent did not pass spontaneously and migrated upstream (► **Fig. 1**). Attempts to grasp the stent with a pediatric biopsy forceps failed (► **Fig. 2**), but inadvertently advanced the stent toward the pancreatic tail. A 0.018-inch wire was advanced through the stent lumen. A 5-Fr stent retriever was not available. Attempts to retrieve the stent with over-the-wire snare and basket failed (► **Fig. 3**). Finally, a 5–4–3-Fr biliary catheter (Contour; Boston Scientific, Marlborough, MA, USA) was forcefully wedged into the stent lumen (► **Fig. 4**). The stent was withdrawn (► **Video 1**).

Retrieval of proximally migrated pancreatic duct stents can be technically difficult despite the variety of accessories available [1–3]. Pancreatotomy-assisted removal is limited when the pancreatic duct is small [4]. Endoscopic ultrasound-guided transgastric pancreatic puncture is also an option [5]. We believe our technique was successful because the stent material was pliable and expandable, allowing the catheter to wedge into the stent. This provided sufficient axial tension to securely retrieve the stent.

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► **Fig. 1** Scout radiograph at the time of ERCP showing the plastic stent in the pancreatic head.

► **Fig. 2** Radiographic image during attempted grasping of the stent with a forceps. The stent is now in the pancreatic body with a guidewire alongside.

► **Fig. 3** Radiographic image during attempted grasping of the stent with a small basket over a wire. The stent is now in the pancreatic tail and the guidewire is through the stent lumen.

Competing interests

Theodore W. James declares that he has no conflict of interest.
Todd H. Baron: Boston Scientific, Olympus, Cook Endoscopy.

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► **Fig. 4** Radiographic image with a 5–4–3-Fr catheter wedged inside the stent lumen. The radiopaque tip is seen inside the stent. The stent was withdrawn from the duct leaving the wire in place. A prophylactic pancreatic duct stent with external pigtail was placed at the end of the procedure.

► **Video 1** Removal of a proximally migrated 5-Fr pancreatic stent with a 5–4–3-Fr catheter using a wedge technique.

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