

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 The stent was withdrawn (► **Video 1**).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.

Endoscopy_UCTN_Code_CPL_1AK_2AG

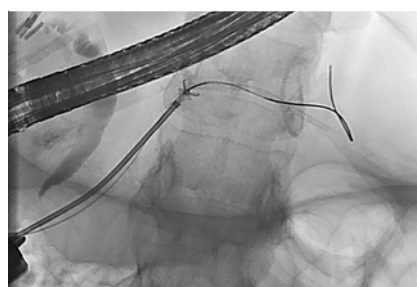
Funding

National Institutes of Health
T32DK007634

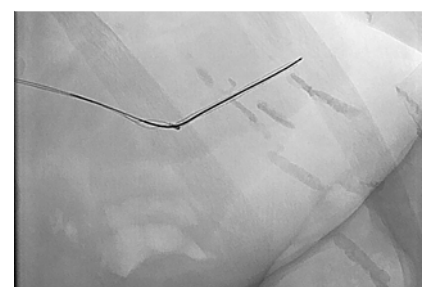
Theodore W. James receives research and training support by a grant from the National Institutes of Health (T32DK007634). Todd H. Baron declares no relevant funding for this work.



► **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.



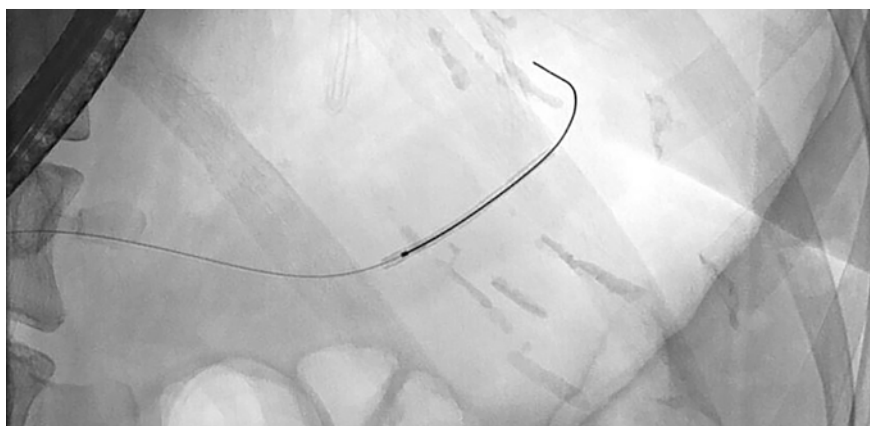
► **Fig. 3** Radiographic image during attempted grasping of the stent with a small basket over a wire. The stent is now in the pancreatic tail and the guidewire is through the stent lumen.

Competing interests

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

The authors

Theodore W. James, Todd H. Baron
Division of Gastroenterology and Hepatology,
University of North Carolina, Chapel Hill, North Carolina, United States



► **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.

- [2] Gong B, Sun B, Hao LX et al. Usefulness of an algorithm for endoscopic retrieval of proximally migrated 5Fr and 7Fr pancreatic stents. *Hepatobiliary Pancreat Dis Int* 2011; 10: 196–200
- [3] Baron TH, Dean LS, Morgan DE et al. Proximal migration of a pancreatic duct stent: endoscopic retrieval using interventional cardiology accessories. *Gastrointest Endosc* 1999; 50: 124–125
- [4] Yao W, Huang Y, Chang H et al. Endoscopic retrieval of a migrated pancreatic stent under direct pancreatoscopy by use of a 'snare over in-stent wire guide' method. *VideoGIE* 2018; 3: 272–274
- [5] Rana SS, Sharma R, Gupta R. Successful retrieval of proximally migrated pancreatic duct stent by EUS-guided retrograde extrusion through the papilla. *Endosc Ultrasound* 2019; 8: 348–349

Bibliography

DOI <https://doi.org/10.1055/a-1089-7252>
 Published online: 29.1.2020
 Endoscopy 2020; 52: E267–E268
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0013-726X



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

ENDOSCOPY E-VIDEOS

<https://eref.thieme.de/e-videos>



Endoscopy E-Videos is a free 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.

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

Corresponding author

Todd H. Baron, MD
 130 Mason Farm Road, CB 7080, Chapel Hill,
 NC 27599-0001, United States
 Fax: +1-994-974-0744
todd_baron@med.unc.edu

References

- [1] Matsumoto K, Katanuma A, Maguchi H. Endoscopic removal technique of migrated pancreatic plastic stents. *J Hepatobiliary Pancreat Sci* 2014; 21: E34–E40