

## Use of intraductal cholangioscopy devices to retrieve migrated pancreatic stents

The incidence of proximal pancreatic stent migration is unknown, though early studies report up to 5%, with recently reported success rates of <80% for stent retrieval using conventional techniques [1]. Stent retrieval remains challenging owing to characteristically small pancreatic duct diameters, strictures, tortuous distal pancreatic duct course, stent location proximal to the genu, and small-caliber stents.

Novel retrieval techniques for proximally migrated pancreatic stents have included pancreatoscopy to achieve guidewire cannulation of the stent lumen [2, 3] or facilitate retrieval using SpyByte forceps (Boston Scientific, Marlborough, Massachusetts, USA), though duct diameter must be large enough to accommodate a SpyScope for such techniques. For ducts of small or normal diameter, proximally migrated stents can be cannulated with a guidewire, over which mini-snare can be passed to retrieve the stent [4, 5]. We describe two cases in which a SpySnare and SpyBasket, used without the accompanying SpyScope, were used to retrieve proximally migrated pancreatic stents in normal diameter ducts (►Video 1).

A 52-year-old woman was referred for retrieval of a proximally migrated prophylactic 5-Fr pancreatic stent. On pancreatography the stent's distal tip was proximal to the genu with the proximal tip in the body or tail. A pancreatic sphincterotomy was performed using a papillotome over a guidewire. The stent lumen was cannulated with a 0.035-inch guidewire, over which a SpySnare was advanced to capture and retrieve the stent. A 44-year-old woman with history of relapsing pancreatitis presented for repeat endotherapy. The previously placed pancreatic stent was not visible endoscopy-



► Video 1 Use of SpyScope devices to retrieve migrated pancreatic stents.

cally, and stent migration proximal to the genu was confirmed on fluoroscopy. A 4-mm balloon was used to dilate a distal pancreatic duct stricture. The stent lumen was cannulated with a curved 0.035-inch guidewire. Despite previous unsuccessful retrieval attempts using SpySnare, the pancreatic stent was successfully captured and retrieved using SpyBasket.

Endoscopy\_UCTN\_Code\_CPL\_1AK\_2AI

### Competing interests

None

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DOI <https://doi.org/10.1055/a-1066-4453>  
Published online: 13.12.2019  
*Endoscopy* 2020; 52: E202–E203  
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Stuttgart · New York  
ISSN 0013-726X

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