

# Successful retrieval of proximally migrated pancreatic duct stent by EUS-guided retrograde extrusion through the papilla

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A 38-year-old male, a known case of alcohol-related chronic pancreatitis, was being treated with pancreatic endotherapy for abdominal pain. The main pancreatic duct (PD) was dilated in the body and tail of the pancreas because of the presence of tight stricture in the head of the pancreas. The last endoscopic retrograde pancreatography (ERP) was performed 2 years ago. The PD stricture was dilated, and a 5-Fr, 10-cm stent was placed across the stricture after pancreatic sphincterotomy. Subsequently, the abdominal pain subsided and he was lost to follow-up. He presented 2 years later with a recurrence of abdominal pain. On ERP, the previously placed PD stent was not visible at the papilla and had migrated proximally. Repeated attempts to remove the migrated stent including the use of grasping forceps as well as snare failed [Figure 1]. Therefore, another 5-Fr, 15-cm stent was placed across the stricture as well as the proximal end of the migrated stent after dilatation of the stricture.

Two weeks later, EUS-guided retrieval of the migrated stent was attempted. The proximal end of the migrated stent was punctured through the stomach using a

19G needle [Figure 2]. After the stent was punctured with the needle, the stylet was pushed back to make the needle tip blunt and prevent damage to the PD. Thereafter, the needle was pushed down in the axis of PD to push the inward migrated stent out of the




**Figure 1.** Inward migrated pancreatic stent. Failed attempt at retrieval of stent using grasping forceps

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**How to cite this article:** 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;8:348-9.

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Quick Response Code: 	Website: <a href="http://www.eusjournal.com">www.eusjournal.com</a>
	DOI: 10.4103/eus.eus_30_19

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**Received:** 2018-12-07; **Accepted:** 2019-04-10; **Published online:** 2019-06-20



**Figure 2.** EUS-guided puncture of the proximally migrated pancreatic stent through the stomach

papilla. This led on to outward movement of the stent and ultimately extrusion of the stent. The needle was slowly pulled back by pushing the sheath outward to disengage the stent. The previously placed longer stent restricted the space available for movement of the migrated stent in downward axis and directed the force of push along the axis of PD. Thereafter, EUS scope was removed, and both the stents were retrieved using a duodenoscope and grasping forceps. The PD was cannulated [Figure 3], and two 7-Fr stents were placed across the stricture.

Proximal stent migration is a major concern of PD stenting as it is associated with PD damage as well as the risk of infective complications. They are usually retrieved endoscopically using various techniques and accessories.<sup>[1,2]</sup> Endoscopic retrieval is usually successful in the majority of patients.<sup>[1,2]</sup> However, in some patients, repeated attempts to remove the migrated stent fail and these patients usually require surgery for the removal of migrated stent. Various endoscopic alternatives including using pancreatoscopy to retrieve these stents have been suggested with varying success rates.<sup>[2,3]</sup> EUS-guided hybrid procedures with ERP have also been described for the retrieval of inward migrated stents.<sup>[4,5]</sup> We have described a new technique of EUS-guided retrograde extrusion of inward migrated PD stent.



**Figure 3.** Pancreatic duct cannulated after the removal of both the stents

#### *Declaration of patient consent*

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

#### *Financial support and sponsorship*

Nil.

#### *Conflicts of interest*

There are no conflicts of interest.

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