Endoscopic tapered sheath-assisted removal of a proximally migrated pancreatic stent

Endoscopic pancreatic stenting is beneficial for patients with a variety of pancreatic conditions; however, proximal migration of the stent occurs occasionally and removal is technically demanding [1, 2]. It is sometimes quite challenging to pass stent-removal devices such as forceps, baskets, and snares across a stricture, particularly in cases in which the migrated stent is located further away from the pancreatic duct stricture [3]. We present an impressive case in which a new endoscopic tapered sheath (EndoSheather; Piolax, Inc., Kanagawa, Japan) (▶ Fig. 1) [4] contributed successfully to the removal of a proximally migrated stent in a patient with a distal stricture. This novel device allowed the stricture to be passed and devices to be inserted easily through an indwelling outer sheath, providing a bridge to the target space even in the deep pancreatic tail.

An 84-year-old woman with a pancreatic head intraductal tubulopapillary neoplasm developed abdominal pain caused by a pancreatic duct stricture. Placement of a 7 Fr plastic stent (7 cm) across the stricture improved her symptoms. However, the pancreatic stent migrated beyond the stricture (▶ Fig. 2). A conventional balloon catheter failed to remove the stent. None of the devices used to grab the migrated stent could access the proximal duct due to the severe stricture. Therefore, the new endoscopic sheath, with a tapered inner catheter tip to allow easy passage across the stricture, was inserted into the pancreatic duct over a 0.025-inch guidewire. Only the inner catheter was removed, leaving the outer sheath near the target position. Subsequently, the retrieval basket was inserted smoothly through the outer sheath to reach the migrated stent. The migrated stent was grasped with the basket and successfully dragged out to the duodenum without adverse events (▶ Fig. 3, Video 1).
This technique may be a useful option for removing a proximally migrated pancreatic stent that is beyond the stricture or deep in the pancreatic duct.

Competing interests

The authors declare that they have no conflict of interest.

Corresponding author

Michihiro Yoshida, MD, PhD
Department of Gastroenterology and Metabolism, Nagoya City University Graduate School of Medical Sciences, 1 Kawasumi, Mizuho-cho, Mizuho-ku, Nagoya 467-8601, Japan
mityoshi@med.nagoya-cu.ac.jp

References


The authors

Akihisa Kato*1, Makoto Natsume1*, Michihiro Yoshida1*, Katsuyuki Miyabe2, Yasuki Hori1, Itaru Naithoh1, Kazuki Hayashi1
1 Department of Gastroenterology and Metabolism, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan
2 Department of Gastroenterology, Japanese Red Cross Aichi Medical Center Nagoya Daini Hospital, Nagoya, Japan

* These authors contributed equally to this work.