The novel basket catheter for retrieval of a migrated biliary inside stent

Many techniques have been reported for endoscopic retrieval of migrated biliary stents [1–4]. However, available devices such as forceps and snares are not suitable to grasp the migrated nylon thread attached to the biliary inside stent. The novel basket catheter (RASEN; Kaneka Medical, Osaka, Japan) with an 8-wire spiral structure is rotatable and effective in removing small biliary stones (Fig. 1). We describe the technical tips for retrieval of a migrated inside-stent using the RASEN basket catheter. A 69-year-old man with unresectable cholangiocarcinoma was admitted to our hospital owing to obstructive jaundice. At first, the inside stent was inserted in the anterior segmental branch for treatment of obstructive jaundice. However, he underwent endoscopic retrograde cholangiopancreatography 7 days later for additional biliary stent insertion in the posterior segmental branch owing to insufficient improvement in his jaundice symptoms. Although the posterior segmental branch was easily contrasted, the bile duct stricture was severe and required dilation using a thin balloon catheter (6-mm REN; Kaneka Medical). When insertion of the second biliary stent was attempted, the first stent migrated to the anterior segmental branch, and not only the distal end of the stent but also the nylon thread attached to the inside stent were not visible on the endoscopic image (Fig. 2a, b). We attempted to retrieve the migrated inside stent using the RASEN basket catheter. We inserted and opened the basket in the common bile duct and pulled it while slowly rotating it. Subsequently, we could easily grasp the nylon thread (Fig. 2c) and gently pull it. After returning the stent position without breaking the nylon thread, we released it in the duodenum. Finally, the second stent was inserted into the posterior segment branch without migration of the first stent (Fig. 2d, Video 1). The RASEN basket catheter is very effective for removing small biliary stones.
A migrated biliary inside stent was successfully removed using a novel basket catheter.

**Endoscopy_UCTN_Code_TTT_1AR_2AZ**

**Competing interests**

The authors declare that they have no conflict of interest.

**The authors**

Akihisa Ohno, Nao Fujimori, Keisuke Hirahata, Takahiro Ueda, Yu Takamatsu, Takamasa Oono

Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi Higashi-ku, Fukuoka City, Fukuoka, Japan

Fax: +81-92-642-5287
fujimori.nao.239@m.kyushu-u.ac.jp

**Corresponding author**

Nao Fujimori, MD
Department of Medicine and Bioregulatory Science, Graduate School of Medical Sciences, Kyushu University, 3-1-1 Maidashi Higashi-ku, Fukuoka City, Fukuoka, Japan

**References**


**Video 1**

A migrated biliary inside stent was successfully removed using a novel basket catheter.

**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

Bibliography

Endoscopy

DOI 10.1055/a-1711-4161
ISSN 0013-726X
published online 2021
© 2021, Thieme. All rights reserved.

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.