Migrated endoclip removal after cholecystectomy under digital single-operator cholangioscopy guidance

Laparoscopic cholecystectomy is now an established treatment for cholecystolithiasis or acute cholecystitis [1–3], but adverse events such as endoclip migration into the biliary tract may occur [4]. Usually, migrated endoclips can be removed by standard bile duct stone removal techniques. However, if endoclips have migrated into the intrahepatic bile duct, removal of the endoclip is sometimes challenging. In addition, bile duct injury may occur during removal [5]. Herein, we describe technical tips for the safe removal of a migrated endoclip under direct digital single-operator cholangioscopy guidance.

A 56-year-old man who had undergone cholecystectomy without any adverse events 1 month previously was found during a follow-up computed tomography (CT) scan to have a common bile duct stone. He was therefore admitted for removal of this stone. Endoscopic retrograde cholangiopancreatography (ERCP) was attempted; however, it was observed that there had been endoclip migration into the intrahepatic bile duct (Fig. 1a). Unsuccessful attempts were made to remove the endoclip using standard techniques, such as a balloon or a basket catheter, and he was therefore admitted to our hospital for removal of the migrated endoclip under direct visualization with cholangioscopy.

First, an intraductal cholangioscope (SPY-DS; Boston Scientific, Natick, Massachusetts, USA) was inserted into the common bile duct (Fig. 1b) and the migrated endoclip was clearly observed (Fig. 2a). This migrated clip was grasped by a SPY-Bite device (Fig. 2b) and successfully removed into the duodenum without any adverse events (Fig. 2c; Video 1). Following this, the SPY-Bite was exchanged for a large...
grasping forceps and the clip was extracted.

Our technique for removal of a migrated endoclip proved to be safe in this patient. Direct visualization with the intraductal cholangioscope was helpful in this case because of the four-way bending of the device.

Endoscopy_UCTN_Code_TTT_1AR_2AK

Competing interests

None

The authors

Takeshi Ogura, Atsushi Okuda, Akira Miyano, Nobu Nishioka, Kazuhide Higuchi
2nd Department of Internal Medicine, Osaka Medical College, Osaka, Japan

Corresponding author

Takeshi Ogura, MD
2nd Department of Internal Medicine, Osaka Medical College, 2-7 Daigakuchou, Takatsukishi, Osaka 569-8686, Japan
Fax: +81-726-846532
oguratakeshi0411@yahoo.co.jp

References


Bibliography

DOI https://doi.org/10.1055/s-0043-124758
Published online: 12.1.2018
Endoscopy 2018; 50: E74 – E75
© Georg Thieme Verlag KG
Stuttgart - New York
ISSN 0013-726X

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