Magnetic compression anastomosis (MCA) is a revolutionary method of performing choledochocholedochostomy without surgery in patients with biliary obstruction [1–5]. Herein, we report the successful treatment, using MCA, of a case of complete biliary obstruction after partial hepatectomy.

A 64-year-old man who had undergone right partial hepatectomy for a metastatic liver tumor from rectal cancer was admitted to another hospital with bile leakage. Although the bile leakage was treated by endoscopic nasobiliary drainage, there was prolonged liver dysfunction, and computed tomography showed dilatation of the right-posterior intrahepatic bile duct (▶ Fig. 1). Endoscopic retrograde cholangiopancreatography and percutaneous transhepatic biliary drainage (PTBD) were attempted but recanalization was not possible (▶ Fig. 2). Therefore, the patient was referred to our hospital.

Initially, an 18-Fr PTBD catheter was placed. A cylindrical neodymium magnet, 5 mm in diameter, was pushed to the tip of the PTBD catheter and inserted in the intrahepatic bile duct using biopsy forceps (▶ Video 1). Next, another magnet, 3 mm in diameter, was inserted up to the tip of the inner part of the outer sheath of the guidewire (VisiGlide 2; Olympus, Tokyo, Japan) for delivery (▶ Fig. 3). Then, the outer sheath with the magnet was inserted via the papilla and the magnet was pushed out using biopsy forceps. The magnets were advanced to sites immediately before and after the obstruction. Then, the two magnets were positioned so that they attracted each other (▶ Fig. 4, ▶ Video 1). A plas-
A magnet was inserted up to the tip of the lumen of the outer sheath of the guidewire for delivery.

The two magnets attracted each other.

Recanalization was achieved and the magnets were endoscopically removed (inset).

Corresponding author
Kenjiro Yamamoto, MD
Department of Gastroenterology and Hepatology, Tokyo Medical University, 6-7-1 Nishishinjuku, Shinjuku-ku, Tokyo 160-0023, Japan
Fax: +81-3-53816654
ken.yamamoto5544@gmail.com

References

Competing interests
None

The authors
Xue-Mei Jiang1, Kenjiro Yamamoto2, Takayoshi Tsuchiya2, Atsushi Sofuni2, Shuntaro Mukai2, Yuichi Nagakawa3, Takao Ito1
1 Department of Gastroenterology, Central South University Xiangya School of Medicine Affiliated Haikou Hospital, Haikou, China
2 Department of Gastroenterology and Hepatology, Tokyo Medical University, Tokyo, Japan
3 Third Department of Surgery, Tokyo Medical University, Tokyo, Japan

Bibliography
DOI https://doi.org/10.1055/a-0588-4653
Published online: 9.4.2018
Endoscopy 2018; 50: E144–E145
© 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