Endosonography-guided gallbladder drainage in a patient with intestinal malrotation

Endosonography-guided gallbladder drainage (EUS-GBD) is increasingly performed in cholecystitis patients who are not candidates for surgery, with similar success rates and fewer adverse events compared to percutaneous drainage, and with good long-term outcomes [1–3]. EUS-GBD is also preferred over endoscopic transpapillar naso-gallbladder drainage (ET-GBD) as it is associated with higher success rates and lower rates of recurrent cholecystitis [4].

An 88-year-old bedridden man with a history of rheumatoid arthritis and cerebral infarction was admitted for treatment of interstitial pneumonia. After 2 months in hospital, he was referred to the gastroenterology department because of severe right upper quadrant pain. Contrast computed tomography (CT) revealed a severely inflamed gallbladder, intestinal malrotation, moderate ascites, and the Chilaiditi sign (Fig. 1). The patient was judged to be unfit to undergo surgery.
Percutaneous gallbladder drainage was not possible due to ascites and the presence of bowel between the diaphragm and the liver. As the patient was taking clopidogrel, ET-GBD was planned. Esophagogastroduodenoscopy was performed under fluoroscopic guidance and confirmed intestinal malrotation (▶ Fig. 2). While bile duct cannulation was, with some difficulty, achieved during endoscopic retrograde cholangiopancreatography, the guidewire could not be advanced into the gallbladder. EUS-GBD was therefore performed after temporary discontinuation of the clopidogrel therapy. A forward-viewing endosonoscope (TGF-UC260J; Olympus Corp., Tokyo, Japan) was used for the EUS-GBD due to the intestinal malrotation. While bile duct cannulation was, with some difficulty, achieved during endoscopic retrograde cholangiopancreatography, the guidewire could not be advanced into the gallbladder. EUS-GBD was therefore performed after temporary discontinuation of the clopidogrel therapy. A forward-viewing endosonoscope (TGF-UC260J; Olympus Corp., Tokyo, Japan) was used for the EUS-GBD due to the intestinal malrotation. While bile duct cannulation was, with some difficulty, achieved during endoscopic retrograde cholangiopancreatography, the guidewire could not be advanced into the gallbladder. EUS-GBD was therefore performed after temporary discontinuation of the clopidogrel therapy. A forward-viewing endosonoscope (TGF-UC260J; Olympus Corp., Tokyo, Japan) was used for the EUS-GBD due to the intestinal malrotation.

EUS-GBD was an attractive option in patients with intestinal malrotation, as ET-GBD is particularly difficult in this population. Use of a forward-viewing endosonoscope was beneficial for selecting the puncture point and deploying plastic stents in this patient.

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Competing interests

The authors declare that they have no conflict of interest.

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Video 1 Esophagastroduodenoscopy of malrotated duodenum under fluoroscopic guidance, endoscopic retrograde cholangiopancreatography, and endosonography-guided gallbladder drainage using a forward-viewing endosonoscope due to intestinal malrotation.

References


Bibliography

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