Endoscopic ultrasound-guided gallbladder drainage by transjejunal lumen-apposing metal stent placement in a patient with mini-gastric bypass

Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) using lumen-apposing electrocautery-enhanced metal stent (EC-LAMS) is a safe and effective treatment option in patients with acute cholecystitis who are unfit for surgery [1]. We present the case of a 64-year-old woman who presented to the emergency department with a grade III cholecystitis [2] (Fig. 1). The patient had dilated cardiomyopathy with an implanted cardioverter-defibrillator, decompensated type II diabetes, and had undergone mini-gastric bypass surgery for obesity control 10 years ago. She was deemed unfit for surgery at this time and endoscopic drainage was proposed [3] (Video 1). EUS revealed an over-distended gallbladder attached to the efferent loop of the gastrojejunal anastomosis. EUS-GBD was therefore performed by transmural placement of an EC-LAMS (Hot Axios, 10 × 10 mm; Boston Scientific, Marlborough, Massachusetts, USA) (Fig. 2), allowing the release of a significant amount of purulent bile from the gallbladder into the jejunal efferent loop (Video 1). After the procedure, the patient’s general status progressively improved (Fig. 3); however, 2 weeks after the procedure, fever persisted and a second endoscopic procedure was planned. Using a duodenoscope, the efferent limb was reached and the LAMS was still in place draining purulent bile; however, the stent lumen was partially clogged by biliary debris. Under endoscopic guidance, a stone extraction balloon catheter was placed into the stent and the debris was removed. A 7-Fr nasogallbladder drainage tube was then placed through the stent (Fig. 4).

In the following days, the fever resolved and inflammatory markers returned to normal levels. The nasogallbladder drainage tube was removed and the patient was discharged home. At 3-month follow-up, the patient remained asymptomatic with improvement in general status, allowing surgery to proceed. The EC-LAMS was removed using a gastroscope and snare without complications, and an elective cholecystectomy was planned.
Competing interests

The authors declare that they have no conflict of interest.

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References


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Video 1 Endoscopic ultrasound-guided gallbladder drainage by transjejunal placement of a lumen-apposing metal stent.

► Fig. 3 Computed tomography demonstrating the correct positioning of the electrocautery-enhanced lumen-apposing metal stent between the jejunal afferent loop and the gallbladder lumen.

► Fig. 4 Computed tomography documenting nasogallbladder drainage tube placed through the metal stent into the gallbladder lumen.