Endoscopic ultrasound-guided transmural gallbladder drainage with a lumen-apposing metal stent using an electrocautery enhanced delivery system

A 77-year-old woman with multiple co-morbidities was referred for symptomatic chronic calculous cholecystitis. She was not a surgical candidate for cholecystectomy and refused percutaneous gallbladder drainage. Endoscopic ultrasound (EUS)-guided transmural gallbladder drainage with a lumen-apposing metal stent (LAMS) using an electrocautery enhanced delivery system was performed (Video 1).

The echoendoscope was advanced to the duodenal bulb. The gallbladder was accessed with a needle, and contrast injection confirmed the location. A guidewire was coiled within the gallbladder lumen. A 15-mm LAMS with an electrocautery enhanced delivery system was used to dissect a transmural tract into the gallbladder. The stent was deployed with the distal flange in the gallbladder and the proximal flange in the duodenal bulb. Dilation of the stent to 15 mm was performed using a controlled radial expansion balloon. Following dilation, pus and dark bile were seen draining from the gallbladder (Fig. 1).

The patient was discharged home the next day without any abdominal pain. She had no recurrence of abdominal pain at 6-month follow-up. The use of LAMS with an electrocautery enhanced delivery system minimizes the risks associated with dilation of the transmural tract prior to stent placement, including gallbladder decompression, bile leak, and stent migration [1,2]. EUS-guided transmural gallbladder drainage using LAMS has also been described for internal gallbladder drainage in patients with percutaneous cholecystostomy catheters who are poor candidates for cholecystectomy [3]. EUS-guided transmural gallbladder drainage is safe, feasible, and effective for decompressing the gallbladder in patients who are poor surgical candidates.

Endoscopy_UCTN_Code_TTT_1AS_2AD

Competing interests: Dr. Kahaleh has received consulting grants from BSC, Pinnaclce, and Xlumina, and research grants from FSC, GORE, Cook, Olympus, Maunaeka, and Merritt.

Nikhil A. Kumta, Marina Lordello Passos, Gustavo Luis Rodela Silva, Aleksey Novikov, Michel Kahaleh

Division of Gastroenterology and Hepatology, Weill Cornell Medical College, Cornell University, New York, New York, United States

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0042-117634
Endoscopy 2016; 48: E327
© Georg Thieme Verlag KG Stuttgart - New York
ISSN 0013-726X

Corresponding author
Michel Kahaleh, MD
Division of Gastroenterology and Hepatology
Weill Cornell Medical College
New York
NY 10021
United States
Fax: +1-646-962-0110
mkahaleh@gmail.com

Fig. 1 Fluoroscopic image of a lumen-apposing metal stent (yellow arrow) between the gallbladder and duodenum for endoscopic management of cholecystitis.

Video 1
Endoscopic ultrasound-guided transmural gallbladder drainage with a lumen-apposing metal stent using an electrocautery enhanced delivery system.

Endoscopy_UCTN_Code_TTT_1AS_2AD