Endoscopic ultrasound-guided drainage of a post-hepatectomy abscess using a lumen-apposing self-expandable metal stent with electrocautery-enhanced delivery system

Endoscopic ultrasound (EUS)-guided drainage of pancreatic fluid collections and of the gallbladder and bile duct after failure of standard procedures is becoming an attractive minimally invasive alternative to percutaneous drainage [1–3]. These procedures have been facilitated by the development of a specifically designed lumen-apposing self-expandable metal stent (LA-SEMS) and electrocautery-enhanced delivery system (Hot Axios; Boston Scientific Corp., Marlborough, Massachusetts, USA), which allows the procedure to be performed in one step, mostly under EUS guidance without fluoroscopy [4].

We report on a patient in whom drainage of an abdominal abscess that developed after laparoscopic hepatectomy was performed using the LA-SEMS, thus sparing him from percutaneous drainage and/or repeat surgery.

A 70-year-old man with alcohol-related liver cirrhosis underwent left hepatectomy as treatment for recurrent hepatocellular carcinoma. A month later, he developed persistent abdominal pain with fever. An abdominal computed tomography scan revealed an abscess located between the remnant right liver lobe and the stomach (Fig. 1). EUS-guided drainage was offered to the patient and he signed an informed consent form. Using a therapeutic linear echoendoscope, the 7-cm collection was located and the presence of interposing vessels was excluded using Doppler. Direct transgastric penetration into the collection using the Hot Axios device was accomplished by applying pure cut cautery, and was followed by EUS-guided deployment of a 10×10-mm LA-SEMS (Fig. 2, Video 1), with drainage of purulent material (Fig. 3, Video 1). No complications occurred. The patient was discharged completely asymptotically the following day.

Removal of the stent was performed 4 weeks later, and complete resolution of the abscess was observed. Intra-abdominal abscess formation after laparoscopic hepatectomy has been reported to occur in up to 10% of cases [5]. The case presented shows that this novel LA-SEMS is safe, easy to use, and highly effective, and should be considered when intra-abdominal abscesses accessible to EUS are detected.

Endoscopy UCTN Code TTT_1AS_2AC

Competing interests: Dr. Larghi is a consultant for Boston Scientific Corp.
Fabia Attili¹,², Shyam Dang¹,³, Mihai Rimbaș⁴, Luca Di Maurizio¹,², Giuseppe Maria Ettorre²,⁵, Adolfo Francesco Attili²,⁶, Alberto Larghi¹,²

¹ Digestive Endoscopy Unit, Catholic University, Rome, Italy  
² Salvator Mundi, International Hospital, Rome, Italy  
³ University of Arkansas Medical Sciences, Little Rock, Arkansas, United States  
⁴ Department of Gastroenterology, Colentina Clinical Hospital, Carol Davila University of Medicine, Bucharest, Romania  
⁵ Division of General Surgery and Liver Transplantation, S. Camillo Hospital, Rome, Italy  
⁶ Department of Clinical Medicine, Division of Gastroenterology, “Sapienza” University of Rome, Rome, Italy

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0042-109051
Endoscopy 2016; 48: E222–E223 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

Corresponding author
Alberto Larghi, MD, PhD  
Digestive Endoscopy Unit  
Catholic University  
Largo A. Gemelli 8  
00168, Rome  
Italy  
Fax: +39-06-30156581
alberto.larghi@yahoo.it

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.