Endoscopic ultrasound-guided transesophageal drainage of a mediastinal pancreatic pseudocyst using a novel lumen-apposing metal stent

There have been a few previous reports of transesophageal endoscopic ultrasound (EUS)-guided drainage of pancreatic fluid collections (PFC). In these reports the drainage modality has been a single aspiration or deployment of a plastic stent [1–4]. We report a patient who underwent transesophageal EUS-guided drainage of a mediastinal PFC using a novel lumen-apposing metal stent.

A 37-year-old man with a history of right-sided pneumothorax and four episodes of acute pancreatitis was referred for drainage of a PFC. He was experiencing abdominal pain and cysts of increasing size had been seen on his imaging procedures. Computed tomography (CT) scanning revealed an 80×50-mm PFC, which had herniated into the mediastinum adjacent to the lower esophagus.

The PFC was accessed from the lower esophagus using a linear echoendoscope and a novel access device (NAVIX; Xlumena Inc., Mountain View, California, USA) that enables dilation of a tract up to 10 mm and placement of a guide wire. Once the cystoesophagostomy had been created, a fully covered metal stent with bilateral anchor flanges that can appose nonadherent lumens (AXIOS, 10×10 mm; Xlumena) was placed across the tract (Fig. 1, Fig. 2 and Video 1) and 900 mL of fluid was aspirated. An immediate chest radiograph revealed a tension pneu-
mothorax on the right side, which required intercostal drainage. The thoracic surgeon who performed the drainage procedure felt that this was a complication of the orotracheal positive pressure.

By day 7, the patient reported resolution of his abdominal pain and a repeat CT scan revealed a marked reduction in the size of the PFC (Fig. 3). The AXIOS stent was removed (Fig. 4) and the patient was discharged with marked improvement in the pneumothorax. Follow-up imaging after 6 weeks showed complete resolution of the lesion by both EUS and CT scanning (Fig. 5). The patient remains asymptomatic 4 months later.

EUS-guided transesophageal drainage of PFCs has become an alternative to surgery or percutaneous drainage [1–4]. We describe the first case of transesophageal EUS-guided drainage of a PFC using a novel lumen-apposing metal stent. The procedure was technically successful and led to complete resolution of the lesion, although a pneumothorax occurred as an immediate complication.

Endoscopy_UCTN_Code_TTT_1AS_2AC

Competing interests: None

J. B. Gornals¹, C. Loras¹, R. Mast², J. M. Botargues¹, J. Busquets³, J. Castellote¹

¹ Department of Digestive Diseases, Hospital Universitari de Bellvitge-IDIBELL, Barcelona, Spain
² Department of Radiology, Hospital Universitari de Bellvitge-IDIBELL, Barcelona, Spain
³ Department of Surgery, Hospital Universitari de Bellvitge-IDIBELL, Barcelona, Spain

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0032-1309384
Endoscopy 2012; 44: E211–E212
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
J. B. Gornals, MD
Endoscopy Unit
Department of Digestive Diseases
Hospital Universitari de Bellvitge IDIBELL (Bellvitge Biomedical Research Institute)
Feixa Llarga Str. s/n
08907 L’Hospitalet de Llobregat
Barcelona
Spain
Fax: +34-93-2607681
jgornals@bellvitgehospital.cat

Video 1
Transesophageal endoscopic ultrasound (EUS)-guided mediastinal pseudocyst drainage using a lumen-apposing metal AXIOS stent.