External pancreatic fistula treated by endoscopic ultrasound-guided drainage with a novel lumen-apposing metal stent mounted on a cautery-tipped delivery system

One of the most common causes of external pancreatic fistula is the iatrogenic manipulation of a complex pancreatic fluid collection concomitantly associated with a disconnected pancreatic duct [1,2]. This situation can lead to the development of a high output (up to 400 mL/d) external pancreatic fistula that is difficult to manage and sometimes requires surgery [3]. In 2012, a 40-year-old woman underwent laparoscopic cholecystectomy with a hepaticojejunual Roux-en-Y anastomosis for a congenital Todani’s type IV common bile duct cyst. Postoperative pancreatitis resulted in the development of a complex pancreatic fluid collection in the pancreatic head, which was drained percutaneously. Subsequently, an external pancreatic fistula formed with an output of 200 mL/d. In 2014, the patient was referred to us for further evaluation. Endoscopic retrograde cholangiopancreatography (ERCP) showed a normal main pancreatic duct that lacked a clear communication with the collection (Fig. 1). The injection of contrast through the percutaneous catheter revealed the presence of a 4-cm fluid collection (Fig. 2). Endoscopic ultrasound (EUS)-guided drainage with the placement of plastic stents was planned. At EUS, the collection was accessed from the duodenal bulb with a 19-gauge needle, after which a 0.035-inch guidewire was pushed away by the guidewire, and major vessels were interposed (Video 1). Based on our previous experience, we decided to replace the cystotome with a novel cautery-tipped stent delivery system that allows the single-step EUS-guided placement of a lumen-apposing fully covered metal stent (Hot AXIOS System; Xlumena, Mountain View, California, USA) [4]. The lesion was directly punctured and entered with the system, and an 8 × 8-mm lumen-apposing fully covered metal stent was delivered under complete EUS guidance (Video 1). The output significantly dropped the following day, allowing removal of the external catheter 2 days after the procedure. The patient was discharged and remains well 3 months later, without any symptoms.

Competing interests: Alberto Larghi is a consultant for xlumena.

Franco Orellana1,2,3, Fabia Attili1, Santiago Andrade Zurita1, Guido Costamagna1, Alberto Larghi1
1 Digestive Endoscopy Unit, Catholic University, Rome, Italy
2 Digestive Endoscopy Unit, Clinica Alemana de Santiago, Santiago, Chile
3 Digestive Endoscopy Unit, Hospital Militar de Santiago, Santiago, Chile

References

Video 1

Single-step endoscopic ultrasound-guided placement of a lumen-apposing fully covered metal stent (Hot AXIOS System) under endoscopic ultrasound guidance to drain an external pancreatic fistula.

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1391872
Endoscopy 2015; 47: E273
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

Corresponding author
Alberto Larghi, MD, PhD
Digestive Endoscopy Unit
Università Cattolica del Sacro Cuore
Largo A. Gemelli 8
00168 Rome, Italy
Fax: +39-06-30156580
alberto.larghi@yahoo.it

Orellana Franco et al. Endoscopic ultrasound-guided drainage of an external pancreatic fistula... Endoscopy 2015; 47: E273