

Emergency endoscopic exploration of a pancreatic pseudocyst to retrieve a migrated pigtail stent

Endoscopic ultrasound (EUS)-guided drainage of pancreatic pseudocyst using double-pigtail plastic stents is a well-established technique with a high success rate (95%–100%). Early adverse events, namely bleeding and perforation, occur in up to 5% of the procedure [1–3].

A 38-year-old woman with a history of alcohol abuse was admitted to hospital because of dysphagia, abdominal pain, and vomiting. Computed tomography (CT) scan showed an encapsulated pancreatic fluid collection, and therefore EUS-guided drainage was performed. EUS-guided access to the collection was achieved with a 19-gauge needle (▶ Fig. 1) and a first guidewire was inserted. A cystotome was used, followed by hydrostatic dilation up to 8 mm. After insertion of a second guidewire, a double-pigtail 7-Fr, 5-cm plastic stent was delivered, but immediately after deployment the stent spontaneously migrated inside the collection (▶ Fig. 2). Blind retrieval was attempted without success with both foreign-body forceps and Dormia basket (▶ Fig. 3). Therefore a lumen-apposing metal stent (LAMS) was then deployed (▶ Fig. 4), and a slim gastroscope was advanced inside the pseudocyst (▶ Fig. 5). Exploration of the cavity allowed location of the migrated pigtail stent and retrieval using a pediatric biopsy forceps (▶ Video 1). Finally, a duodenoscope was used to remove the LAMS and to insert two 10-Fr double-pigtail plastic stents (▶ Fig. 6). Inadvertent plastic stent migration inside a cavity is an adverse event that may be difficult to manage. Massive dilation of the tract is not recommended as first-line treatment because of the risk of perforation. Deployment of a LAMS seems a safe and effective option for guaranteeing sustained access to the cavity and allowing the use of a slim endoscope to explore the cavity. In our patient the pseudocyst was not infected; therefore we decided to remove the



▶ Fig. 1 Endoscopic ultrasound (EUS)-guided puncture of a pancreatic pseudocyst using a 19-G needle.

metal stent in order to allow an early oral diet and reduce the risk of superinfection caused by food stasis. Nonetheless, use of a LAMS might prove very useful in the management of adverse events related to drainage of pseudocysts.

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Competing interests

None

The Authors

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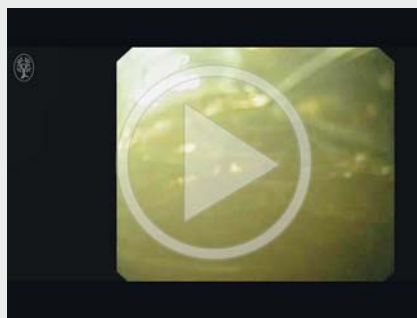
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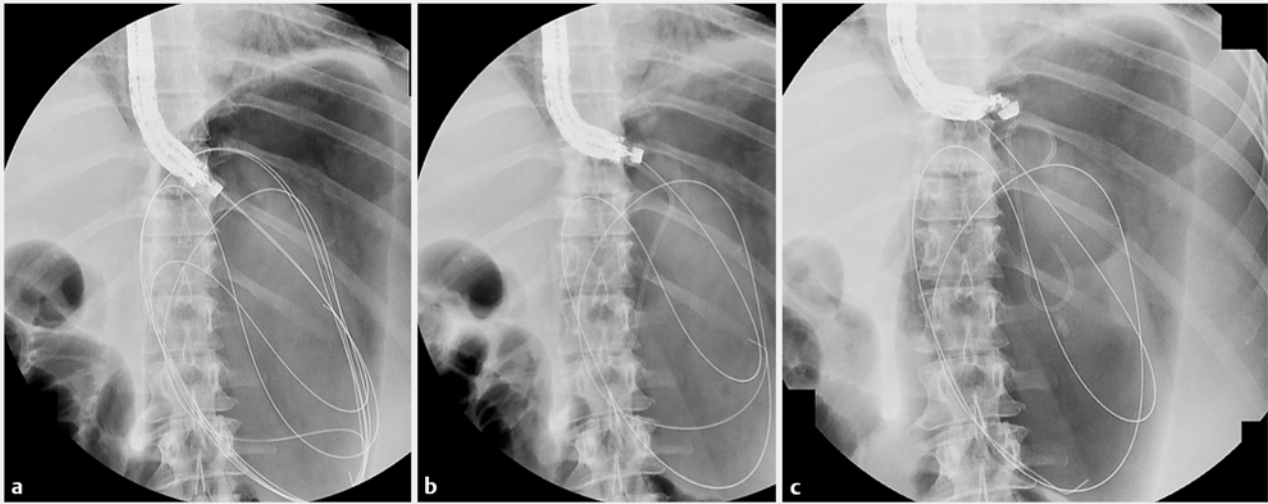
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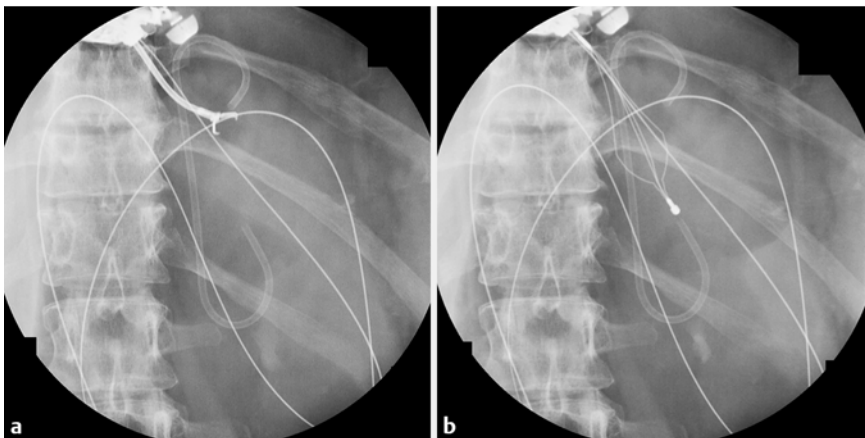
▶ VIDEO 1



▶ Video 1: Endoscopic pseudocyst exploration using a slim gastroscope through a lumen-apposing metal stent (LAMS): fluid aspiration, visualization of migrated double-pigtail stent, and its retrieval using a pediatric biopsy forceps.



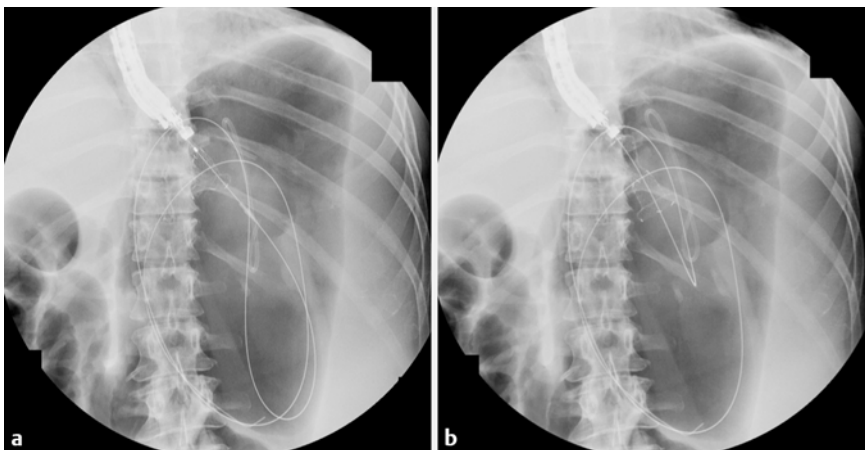
► **Fig. 2** **a** Double guidewires inside the pseudocyst. **b** Deployment of 5-cm 7-Fr double-pigtail plastic stent. **c** Immediately, the double-pigtail stent spontaneously migrated inside the cavity.



► **Fig. 3** Attempts at blind retrieval of the migrated double-pigtail stent, using: **a** foreign-body forceps, and **b** a Dormia basket.



► **Fig. 5** A gastroscopically advanced lumen-apposing metal stent (LAMS) into the pseudocyst cavity.



► **Fig. 4** **a, b** Deployment of a lumen-apposing metal stent (LAMS) to allow sustained access to the cavity of the pancreatic pseudocyst.



► **Fig. 6** Insertion of two 10-Fr, 5-cm double-pigtail plastic stents to drain the pancreatic pseudocyst.

References

- [1] Tyberg A, Karia K, Gabr M et al. Management of pancreatic fluid collections: A comprehensive review of the literature. *World J Gastroenterol* 2016; 22: 51 – 53
- [2] Bang JY, Hasan MK, Navaneethan U et al. Lumen apposing metal stents (LAMS) for drainage of pancreatic fluid collections: When and for whom? *Dig Endosc* 20.05 2016: Epub ahead of print. DOI: 10.1111/den.12681
- [3] Saftoiu A, Vilmann A, Vilmann P. Endoscopic ultrasound-guided drainage of pancreatic pseudocysts. *Endosc Ultrasound* 2015; 4: 319 – 323

Bibliography

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