A 55-year old man with a large infected walled-off area of pancreatic necrosis (WON) was referred to us for endoscopic drainage. Endoscopic ultrasound (EUS) revealed a significant amount of solid debris. Under EUS guidance, the WON was punctured (● Fig. 1) and, after tract dilation, two 10-Fr double-pigtail stents and a nasocystic catheter were placed to drain the cavity. The patient’s pain improved but his fever persisted. A week later, the nasocystic catheter was removed and the stents were exchanged for three 10-Fr stents. Despite three sessions of stent exchange, his fever persisted and a computed tomography (CT) scan revealed a persistent collection with air pockets that had formed because of the drainage of liquid debris (● Fig. 2).

After interdisciplinary consultation, an endoscopic necrosectomy was performed (● Fig. 3a) and solid necrotic material was removed using Dormia and net baskets. After the procedure had been completed, a small rent was noticed in the wall of the WON (● Fig. 3b). Four 10-Fr double-pigtail transmural stents were placed in the cavity. Post-necrosectomy abdominal radiographs showed air under the dome of the diaphragm (● Fig. 4). The patient was experiencing mild abdominal discomfort, but no guarding or rigidity on examination, so a nasojejunal tube was also placed for enteral feeding. A contrast-enhanced CT scan confirmed the presence of a pneumoperitoneum with minimal ascites and an air-filled WON cavity (● Fig. 5), but there was no leakage of enteral contrast.

The patient’s fever resolved and a repeat abdominal radiograph taken on day 7 showed the disappearance of the air under the diaphragm. The nasojejunal tube was removed, the stents were exchanged for two 10-Fr 3-cm stents, and the patient was discharged.

Endoscopic treatment of a WON involves using more aggressive techniques such as dilation of a large tract, placement of multiple or metal stents, aggressive irrigation, and direct debridement of necrotic tissue [1]. Direct endoscopic necrosectomy is a more aggressive technique for endoscopic drainage of a WON that is associated with an increased frequency of complications, including pneumoperitoneum and bleeding [2].

Endoscopy_UCTN_Code_CPL_1AL_2AD
Competing interests: None

Surinder S. Rana, Deepak Gunjan, Deepak K. Bhasin
Department of Gastroenterology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

Fig. 4 Abdominal radiograph showing air under the diaphragm, consistent with a pneumoperitoneum, and the transmural pigtail stents in situ.

Fig. 5 Computed tomography (CT) scan showing intraperitoneal air (arrows), consistent with a pneumoperitoneum, but minimal ascites, and the air-filled cavity from the walled-off area of necrosis.

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1392506
Endoscopy 2015; 47: E391–E392
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Surinder Singh Rana, MD
Department of Gastroenterology
Postgraduate Institute of Medical Education and Research (PGIMER)
Chandigarh - 160012
India
Fax: 91-172-2744401
drsurinderrana@yahoo.co.in
sonalisurinder@yahoo.co.in