Seiko Hamada
Nobuaki Shime

Emphysematous pancreatitis

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S. Hamada · N. Shime (✉)
National Hospital Organization Kyoto Medical Center, Kyoto,
Japan
e-mail: shime@koto.kpu-m.ac.jp

N. Shime
Hiroshima University, Hiroshima, Japan

A 63-year-old man with a 5-year history of diabetes was admitted to an intensive care unit (ICU) with epigastric pain, vomiting, and an increased serum amylase level of 5039 U/L. Computed tomography (CT) revealed acute gallstone pancreatitis, and the patient urgently underwent endoscopic retrograde biliary and pancreatic drainage. Contrast-enhanced CT on day 3 showed necrotic pancreatitis without gas. Progressive abdominal pain and fullness, however, subsequently developed. CT on day 12 depicted an exacerbation to emphysematous necrosis in the pancreas and a large amount of acute necrotic collection with air in the retroperitoneal space (Fig. 1), leading to a diagnosis of emphysematous pancreatitis. Endoscopic ultrasound-guided aspiration using two tubes for lavage and drainage through the stomach was performed. Gram-staining of the aspirates revealed gram-negative bacilli and gram-positive cocci/rods, while only *Enterococcus faecalis* was isolated by aerobic/anaerobic culture. His clinical course improved

Fig. 1 CT showing an accumulation of air in the pancreas and retroperitoneal space with a necrotic collection

after administration of ampicillin and he was discharged from the ICU on day 17.

The two main origins of pancreatic gas are polymicrobial infections due to gas-forming organisms, such as *Enterobacteriaceae* or anaerobes, and fistulas between the pancreas and digestive tract [1]. In this case, however, neither the gas-forming organisms nor signs of fistula formation in CT and esophagogastroduodenoscopy were detected.

Reference

1. Kvinlaug K, Kriegler S, Moser M (2009) Emphysematous pancreatitis: a less aggressive form of infected pancreatic necrosis? *Pancreas* 38:667–671. doi: [10.1097/MPA.0b013e3181a9f12a](https://doi.org/10.1097/MPA.0b013e3181a9f12a)