CLINICAL IMAGE IN GASTROENTEROLOGY

Fatal pancreatic inflammation: Extensive emphysematous pancreatitis diagnosed by computed tomography

Inflamación pancreática letal: pancreatitis enfisematoso extensa diagnosticada por tomografía computarizada

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An 82-year-old diabetic woman presented with clinical symptoms of vomiting and abdominal pain. At the emergency service, blood test results showed serum amylase and lipase levels of 2,141 IU/l and 12,864 IU/l, respectively. The patient had no history of a previous biliary endoscopic procedure. After a few hours, she began to present with signs of shock. An abdominal-pelvic CT scan was carried out to rule out complications. In the axial view at the level of the pancreas and the upper poles of the kidneys, emphysema in the pancreatic parenchyma was identified that extended into the left perirenal and mesenteric fat, associated with ascitic fluid (fig. 1). Pneumobilia was identified at the hepatic level, along with the presence of a large quantity of intra-abdominal gas (fig. 2). In the coronal reconstruction, gas in the gallbladder at both the parietal and endoluminal levels was better visualized, as well as in the biliary tract and the portal branches (fig. 3). The process was so extensive that it caused pneumoperitoneum and it spread into the periesophageal mediastinum, resulting in emphysema of the subcutaneous tissue of the neck (fig. 4).

We were facing a case of emphysematous pancreatitis, a rare and severe complication of acute pancreatitis, with a mortality rate above 35%. It is characterized by the...
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Figure 2  Axial view at the hepatic level, showing pneumobilia and the presence of a large quantity of intra-abdominal gas.

Figure 3  Coronal section of the same patient, with better visualization of the gas in the gallbladder, at both the parietal and endoluminal levels, and in the biliary tract and the portal branches.

presence of gas in and/or around the pancreatic gland due to a necrotizing infection caused by gas-producing bacteria. The patient was admitted to the intensive care unit, where she presented with multiple organ failure, and died 6 hours after having the imaging study and

Figure 4  The process was so extensive that it caused pneumoperitoneum and spread into the periesophageal mediastinum, causing emphysema of the subcutaneous tissue of the neck.

34 hours after having arrived at the emergency service. The speed with which the disease was established could be explained by the patient’s history of diabetes mellitus, which could have attenuated the symptomatology, delaying the diagnosis, or by the possibility that the pancreatitis was accompanied by perforation of a hollow viscus, albeit no definitive radiologic signs confirming that hypothesis were identified.

Financial disclosure

No financial support was received in relation to this article.

Conflict of interest

The authors declare that there is no conflict of interest.