Case (538) Emphysematous pancreatitis: a severe complication of

acute pancreatitis

Authors L. Llana Álvarez, A. Bravo Soberón, C. Oterino Serrano, A.

Sánchez Martín.

Centre U. H. La Paz.

CASE PRESENTATION

A 73-year-old man with hypertension and lateral sclerosis amyotrophic presented to the emergency department with persistent, severe epigastric pain radiated through to the back, associating nausea and vomiting. The most remarkable findings in physical examination were a blood pressure of 207/87 and severe pain and abdominal tenderness. An aortic dissection or an aneurysm rupture were the suspected diagnosis, so consequently an emergency CT scan is done. It showed fat stranding and peripancreatic fluid collections consistent with pancreatitis and reactive thickening in the duodenum. The radiologic diagnosis was interstitial edematous pancreatitis. Then it was noticed raised serum amylase in blood tests, of 2947 UI/I.

The patient was managed with IV fluid and analgesic drugs. Next day the patient remained more symptomatic with worsening pain and abdominal lividity. A new CT scan was requested, revealing extensive hypoattenuating pancreatic gland body consistent with necrosis (> 60%), and gas collections within the pancreatic bed, as well as more fluid collections in the peripancreatic tissue. Partial splenic vein thrombosis and secondary spleen infarcts were also depicted. Features were consistent with emphysematous pancreatitis. Despite fluid and anti-microbial treatment, the patient died shortly after the scan was performed.

DISCUSSION

Emphysematous pancreatitis is a rare complication of pancreatitis but carries a high mortality rate. Gas-forming organisms from the bowel may enter the pancreas to cause emphysematous pancreatitis. Typical routes of entry include haematogenous and lymphatic spread, as well as direct invasion from reflux through the ampulla of Vater, or transmural passage from the adjacent transverse colon.

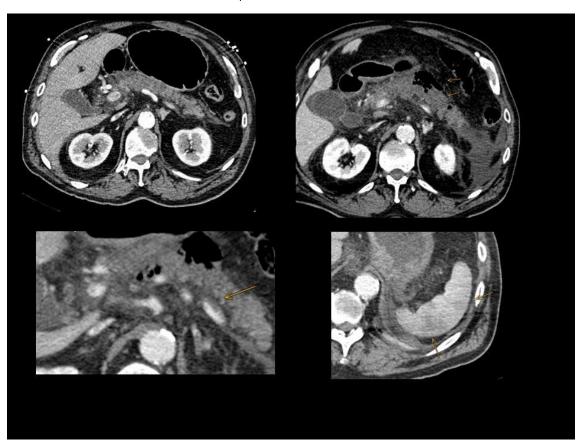
Gas within the pancreas may also occur through other processes and is not in itself indicative of infection, for example, following endoscopic instrumentation or sphincterotomy or with enteric fistula formation with reflux from the adjacent hollow viscus. The prognosis of emphysematous pancreatitis is extremely poor and early radiological detection may influence survival.

CT is the modality of choice for investigating this condition because of its sensivity and specificity in detecting gas bubbles. Management of emphysematous pancreatitis consists of fluid resuscitation and agressive antimicrobial therapy, percutaneous drainage of the the therapy, and if there is no clinical response to support measures, surgical resection of the infected necrotic tissue.

CONCLUSION

Emphysematous pancreatitis is a rare, potentially fatal variant of severe acute pancreatitis with gas in the pancreatic bed.

It is easily diagnosed on computed tomography and all patients require aggressive antimicrobial treatment and even surgical intervention. The clinical course and prognosis is not different from that of infected pancreatic necrosis.



BIBLIOGRAPHY

- Daly JJ, Alderman DF, Conway WF. General case of the day. RadioGraphics 1995;15:489-92.
- Grayson DE, Abbott RM, Levy AD, Sherman PM. Emphysematous infections of the abdomen and pelvis: a pictorial review. Radiographics 2002;22:543-61