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Clinical Image

Gastric ischemia complicating acute pancreatitis

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A 50-year-old patient with excessive alcohol use and no other clinical history presented to the emergency department with epigastric pain and hematemesis. The initial biological tests showed were leucocytes: 17 500/mm^3, neutrophils: 90.9%, CRP: 7 mg/l, platelets: 88 G/l, lipase: 708 UI/l, total bilirubin: 43 μmol/l, arterial blood lactate: 16 mmol/l, bicarbonate: 17 mmol/l, CPK: 7818 UI/l (peak: 18 155 UI/l) and LDH: 2089 UI/l. Upper digestive tract endoscopy showed a hypoperfused aspect of the mucosa from the esogastric junction to the third segment of the duodenum. A CT-scan performed at the time of admission showed edematous-interstitial pancreatitis and thrombosis of the splenic vein.

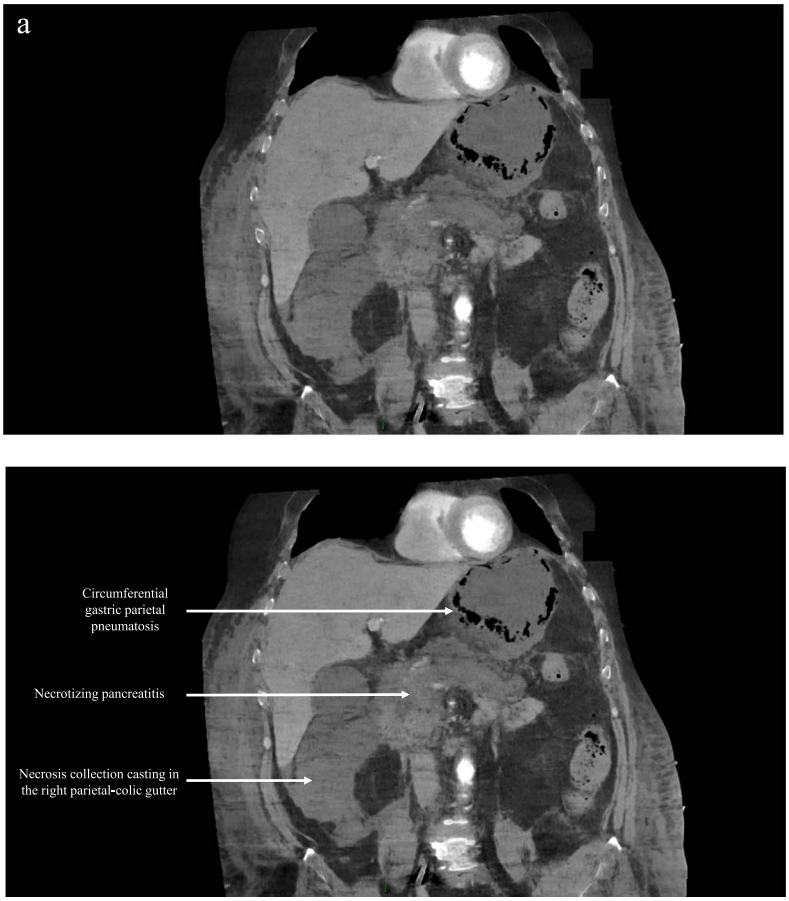

Figure 1. (**a**) Frontal view: gastric pneumatosis (arrow n°1) associated with absence of enhancement of the gastric wall by the constrate product at portal time. Pancreatic necrosis (arrow n°2) complicated by necrosis flows (arrow n°3). (**b**). Day 1: arterial time: (a) splenic and gastric ischemia, (b) celiac trunk without gastric vascularization and (c) hepatic artery permeability. (**c**). Day 6: coronal view. Arterial time. Renal and digestive arterial vascularization *Of note: reduction of blood contrast favored by inflammatory shock*.

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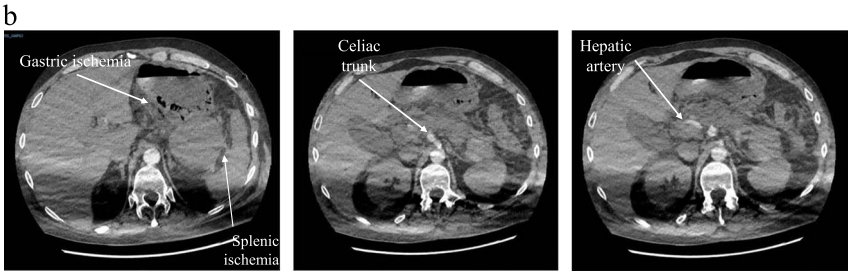

Figure 1. Continued.

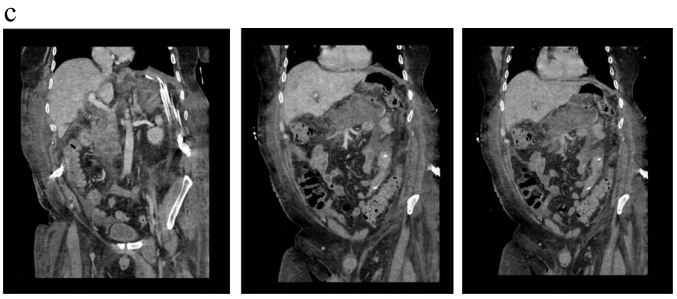

Figure 1. Continued.

The context of probable inhalation led to the introduction of empirical antibiotic therapy with piperacillin and tazobactam. Respiratory tract aspirates showed the presence of *Enterobacter cloacae* and *Klebsiella oxytoca*, leading to modification of the antibiotics to Cefepime. The initial inflammatory and septic shock required the introduction of norepinephrine (peak: 3.5 μg/kg/min) concomitantly with vascular expansion by crystalloids (3500 ml on Day 1). Three dialyses were performed in the first 3 days. Curative anticoagulation was initiated.

Secondary hemodynamic deterioration at D6 led to a new CT-scan (Figure 1), which revealed necrotizing pancreatitis of the entire organ, with a collection due to necrosis casting in the right paracolic gutter, associated with a diffuse parietal enhancement defect of the stomach and circumferential gastric parietal pneumatosis subsequent to contiguous vascular thrombosis. Biological analysis at that time showed leucocytes: 26 600/mm^3, neutrophils: 89.6%, arterial blood lactate: 2.1 mmol/l and bicarbonate: 17 mmol/l. Of note, the administration of anticoagulation therapy with heparin during this period was not curative. The patient underwent a total gastrectomy without the restoration of digestive continuity. A splenectomy and cholecystectomy were performed at the same time due to ischemia. The clinical evolution was initially unfavorable, requiring a second surgery due to perforation of the esophagus by the gastric tube on D6 and cardiac arrest and septic shock (*E. cloacae* and *Enterococcus faecium* bacteremia) on D43. The subsequent course was favorable, allowing transfer for rehabilitation. The restoration of digestive tract continuity (esojejunal anastomosis and bile-duodenum anastomosis) was carried out after 7 months, followed by the closure of the lateral esophagostomia 1 month later.

Very few cases of gastric ischemia complicating acute pancreatitis have been previously reported [1–5].

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