Mesenteric ischaemia with massive hepatic portal venous gas

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DESCRIPTION

A 67-year-old man with a history of hypertension and atrial fibrillation treated with vitamin K antagonists presented a melaena following non-steroidal anti-inflammatory medication for an acute gout attack. Laboratory findings revealed an international normalised ratio >10, requiring vitamin K administration. Gastroscopy disclosed an erosive oesophagitis (stage III) and a pyloric ulcer (Forrest IIa) treated by proton pump inhibitors. Two days later, he presented an abdominal obstruction syndrome, with abdominal distension, absence of gas and faeces, and fecaloid vomiting. CT scan showed an absence of bowel parietal enhancement, a diffuse pneumatosis intestinalis (figure 1A) and a massive hepatic portal venous gas (HPVG; figure 1A). There was a significant atheromatous obstruction of the upper mesenteric artery ostium (figure 1B). A refractory septic shock with disseminated intravascular coagulation did not allow surgical management, and the patient died a few hours later.

HPVG is a rare imaging finding, associated with intestinal ischaemia in 43–70% of cases.^{1 2} In our patient, mesenteric thrombosis had probably been partly triggered by anticoagulant antagonisation,

and HPVG worsened by endoscopic procedure. CT scan is the best imaging modality choice for positive and aetiological diagnosis.² Mortality rate remains as high as 30–40%, despite urgent laparotomy required in most patients.^{1 3}

Learning points

- ▶ CT scan is considered as the most accurate imaging modality to diagnose hepatic portal venous gas, a rare imaging finding.
- ▶ Mesenteric ischaemia is the most frequent cause of hepatic portal venous gas.
- ▶ Urgent laparotomy is required in most cases, and mortality remains as high as 40%.

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Competing interests None.

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Figure 1 Abdominal CT scan disclosing a diffuse pneumatosis intestinalis (A, arrow) and massive hepatic portal venous gas (A, arrow head), linked with an atheromatous obstruction of the upper mesenteric artery ostium (B, asterisk).

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