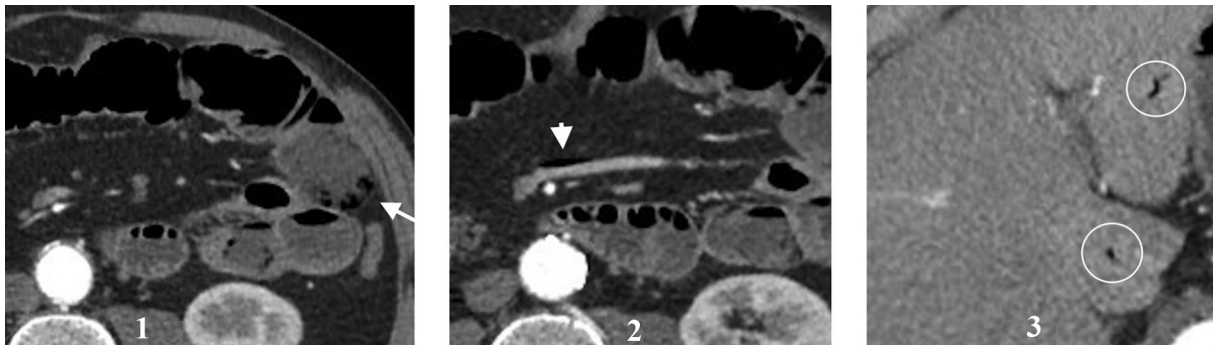


Transient Parietal and Porto-mesenteric Pneumatosis in Self-limited Embolic Segmentary Jejunal Ischemia

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A 54-year-old man was admitted to our Emergency Department complaining of palpitations and abdominal pain. An atrial fibrillation was detected and immediately treated with pharmacological cardioversion. Due to persistent abdominal pain the patient underwent contrast-enhanced computed tomography (CECT). It showed dilated proximal jejunal loops with air fluid levels and a segmentary eccentric parietal hypoperfusion associated with intraparietal air bubbles, also called parietal pneumatosis (Fig. 1, arrow). Air bubbles were also detected along superior mesenteric vein branches (Fig. 2, arrowhead) and portal intrahepatic branches (Fig. 3, circles), respectively called mesenteric and portal pneumatosis. These findings were consistent with the diagnosis of segmentary embolic mesenteric ischemia. Due to a normal blood cell count, low serum lactate (1,2 mmol/L), the absence of clinical sign of peritonitis and the shortage of the involved ischemic intestinal segment, a non-operative management was adopted with intravenous broad-spectrum antibiotic therapy, fluid infusion, electrolytes abnormalities correction and parenteral nutrition [1]. The patient experienced pain improvement in a few days. Follow-up CECT performed at 7 days post admission revealed complete resolution of both parietal findings (Supplementary file, Fig. 4a,) and mesenteric (Supplementary file, Fig. 4b, arrowhead) and portal (Supplementary file, Fig. 4c) pneumatosis, suggesting that ischemic processes self-limited to superficial parietal layers, without transmural irreversible involvement [2].

This case confirms that imaging findings in arterial mesenteric ischemia, particularly parietal and porto-

mesenteric pneumatosis, are not necessarily correlated to irreversible parietal necrosis and a combination of clinical, laboratory and imaging findings is mandatory for a prognostic stratification of patients [3].

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REFERENCES

1. Ronza FM, Di Gennaro TL, Buzzo G, Piccolo L, Della Noce M, Giordano G, Posillico G, Pietrobono L, Mazzei FG, Ricci P, Masala S, Scaglione M, Tamburrini S. Diagnostic role of multi-detector computed tomography in acute mesenteric ischemia. *Diagnostics (Basel)*. 2024;14(12):1214. doi:10.3390/diagnostics14121214
2. Ronza FM, Di Gennaro TL, Patanè V, Tamburrini S. Abscess-like evolution of non-occlusive caecum ischemia. *J Gastrointestin Liver Dis*. 2025;34(1):13. doi:10.15403/jgld-6056
3. Garzelli L, Ben Abdallah I, Nuzzo A, Zappa M, Corcos O, Dioguardi Burgio M, Cazals-Hatem D, Rautou PE, Vilgrain V, Calame P, Ronot M. Insights into acute mesenteric ischaemia: an up-to-date, evidence-based review from a mesenteric stroke centre unit. *Br J Radiol*. 2023;96(1151):20230232. doi:10.1259/bjr.20230232