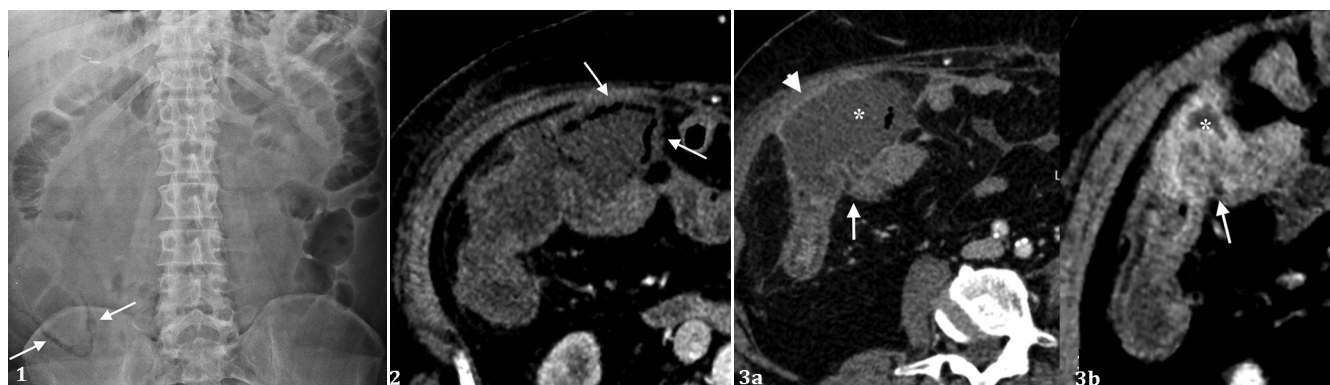


Abscess-like Evolution of Non-occlusive Caecum Ischemia

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A 61-year-old man with end-stage chronic kidney disease experienced sudden abdominal pain 24 hours post-hemodialysis. Abdominal plain X-ray revealed a radiolucency rim all around the dilated caecum lumen, due to air collections within the caecum wall, a condition known as caecum pneumatosis (Fig. 1). Contrast-enhanced computed tomography (CECT) confirmed caecum pneumatosis and demonstrated hypoenhancing caecum walls (Fig. 2) with preserved patency of mesenteric vessels lumen. These findings were consistent with the diagnosis of post-hemodialysis non-occlusive mesenteric ischemia (NOMI) involving caecum at a late/necrotic stage [1].

Due to the absence of clinical signs of overt peritonitis and/or perforation and considering the patient's high intraoperative mortality risk (ASA-4), a non-operative management was adopted. The patient was referred to the Intensive Care Unit and immediately started intravenous broad-spectrum antibiotic therapy, fluid infusion, electrolytes abnormalities correction and parenteral nutrition. The patient's clinical condition remained stable for 36 hours post-admission, then a progressive improvement in both clinical symptoms and blood tests was observed until discharge, which occurred 45 days later. Throughout the hospitalization, hemodialysis sessions were well-tolerated without any acute or delayed adverse effects. Follow-up CECT scans performed at 10- and 40-days post-admission revealed a spontaneous evolution of wall necrosis resembling an abscess-like formation. Initially, the caecum walls disappeared, and ill-defined fluid collection

(asterisk) partially surrounded by a hyperemic peritoneal layer (arrowhead) (Fig. 3a). Subsequently, a thick enhancing rim composed by granulation tissue and fibrosis completely bordered the collection (asterisk), which also showed size reduction (Fig. 3b). In Fig. 3 the arrows indicate the spared ileo-caecal valve.

Notably, intestinal continuity was preserved as the necrosis spared the ileocecal valve, allowing for regular passage of intestinal contents when enteral nutrition was resumed. This spontaneous abscess-like evolution of caecum necrosis, to the best of our knowledge, has not been previously described in the literature [2].

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