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## Non-occlusive mesenteric ischemia as a complication of dialysis

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*Conflict of interest: the authors declare no conflict of interest.*

Dear Editor,

We present the case of an ex-smoker, 69-year-old man whose medical background includes hypertension, chronic renal failure, atrial fibrillation anticoagulation, and chronic lower limb arterial ischemia. He suffered from abdominal pain associated with nausea and vomiting after hemodialysis session. The analysis showed c-protein reactive of 7 mg/L, 14,500 leukocytes with neutrophilia and 2.8 lactate. A computerized axial tomography (CAT) scan was performed, it was reported portal pneumatosis and distal ileum segment with intestinal pneumatosis, compatible with non-occlusive mesenteric ischemia.

Urgent intervention was performed, finding a 40-centimeters terminal ileum segment with signs of ischemia. Resection of the affected segment was performed, presenting a good postoperative evolution and after medical discharge. The anatomopathological study of the segment confirmed intestinal necrosis.

Portal pneumatosis (PN) is an infrequent finding, traditionally considered an unfortunate prognostic sign associated with intestinal ischemia<sup>1</sup>, which can be related to mortality up to 90% if the cause is mesenteric ischemia associated with sepsis<sup>2</sup>.

Nonocclusive mesenteric ischemia is a serious complication with significant morbidity in dialysis patients, caused by intestinal hypoperfusion, without the embolism mechanism of classic mesenteric ischemia. Indeed, the damage to the intestinal mucosa is secondary to hypotension, hypovolemia and vascular system may be affected due to arteriosclerosis<sup>3</sup>. In this case, the CAT scan showed significant

calcifications throughout the vascular tree, and during the dialysis session, the patient had presented continuous hypotension—60/30 mmHg.

The prognosis of this clinical entity depends on the etiology rather than the presence of portal pneumatosis. Even if the initial treatment is conservative<sup>5</sup>, both in our case and in others described in the literature<sup>4</sup> in which intestinal necrosis cannot be ruled out, exploratory laparotomy may be recommended.

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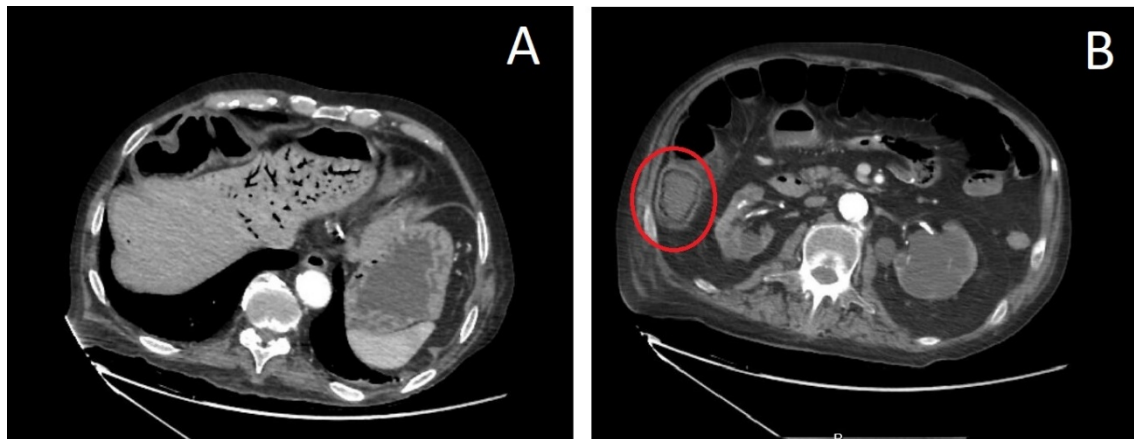


Figure 1A: CAT image of portal pneumatosis. 1B: ileum segment (red circle) with signs of intestinal pneumatosis.