

Title:

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DOI: 10.17235/reed.2021.7897/2021

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Giménez Francés Clara, Tamayo Rodríguez María Encarnación, Albarracín Marín-Blázquez Antonio. Non-occlusive mesenteric ischemia as a complication of dialysis. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.7897/2021.

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CC 7897

Non-occlusive mesenteric ischemia as a complication of dialysis

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Keywords: Portal pneumatosis. Non-occlusive mesenteric ischemia. Dialysis.

Conflicts of interest: the authors declare no conflicts of interest.

Dear Editor,

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

An urgent intervention was performed and a 40-centimeter terminal ileum segment was found with signs of ischemia. A resection of the affected segment was performed, with good postoperative and post-discharge outcome. The pathology study of the

segment confirmed intestinal necrosis.

Portal pneumatosis (PN) is an infrequent finding, traditionally considered an unfortunate prognostic sign associated with intestinal ischemia (1), which can be fatal in up to 90 % of cases if the cause is mesenteric ischemia associated with sepsis (2). Nonocclusive mesenteric ischemia is a serious complication with significant morbidity in dialysis patients, caused by intestinal hypoperfusion, without the embolic mechanism of classic mesenteric ischemia. Indeed, the damage to the intestinal mucosa is secondary to hypotension, hypovolemia, and vascular arteriosclerosis (3). In this case, the CAT scan showed significant calcifications throughout the vascular tree and the patient had presented continuous hypotension (60/30 mmHg) during the dialysis session.

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

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Accepted Article

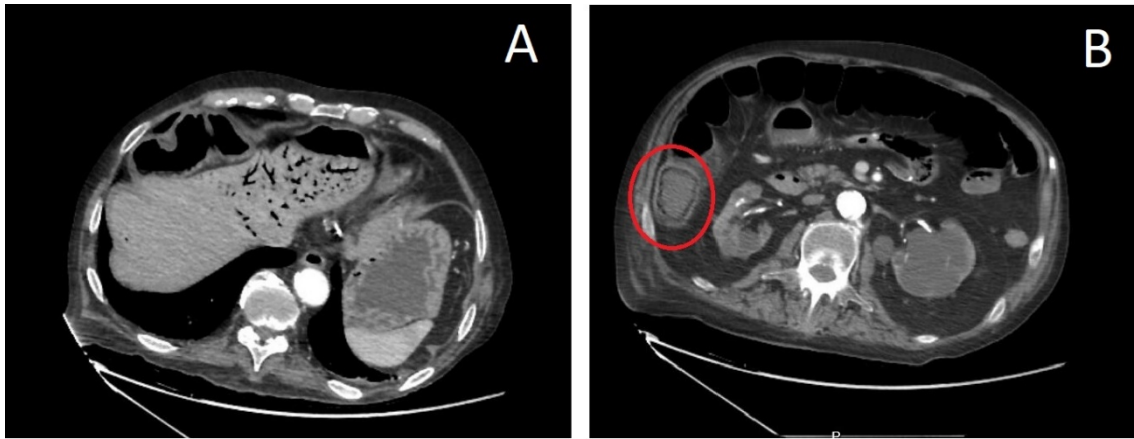


Fig. 1. A. CT image of the portal pneumatosis. B. Segment of the ileum (red circle) with signs of intestinal pneumatosis.

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