Case	(636) Gas in portal veins after haemodialysis: ischemia?
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CASE PRESENTATION

A 48-year-old man, allergic to iodinated contrasts, with hepatorrenal polycystic disease, bilateral nephrectomy and currently in haemodialysis. He was admitted to the Emergency Department due to acute abdominal pain, general condition worsening and vomiting after the haemodialysis session. On arrival, he was hypotensive, tachycardic, sweaty and afebrile. Physical examination showed intense and diffuse abdominal pain.

Because of the suspicion of acute abdomen without an identifiable cause a non-enhanced abdominal CT was performed due to iodinated contrasts allergy. The findings were portal gas in both hepatic lobes and in mesenteric vein branches, several loops of jejunum with wall thickening and pneumatosis. No significant findings were noticed in the remainder organs, except for those related to his underlying condition (hepatic cysts and bilateral nephrectomy).

The analytical showed no alterations, and after a while the patient became asymptomatic. However, according to the CT findings, an exploratory laparotomy was performed, which was normal.

DISCUSSION

Clinical and radiological findings made us postulate the most probable diagnosis was nonocclusive mesenteric ischemia.

In adult population, gas in the portal venous territory and pneumatosis are associated with a wide variety of entities: small bowell ischemia, digestive tract dilation, necrotic/ulcerated colorectal carcinoma, intra-abdominal or retroperitoneal abscesses and inflammatory bowel disease. The frecuency of nonocclusive mesenteric ischemia is higher in dyalisis population.

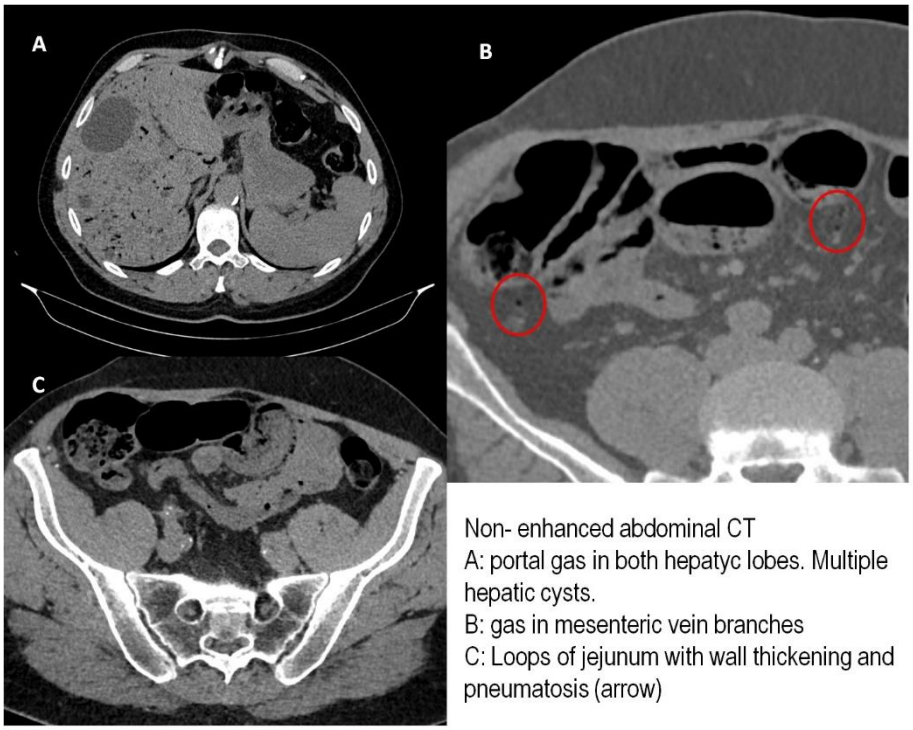
The triggering factors can be: rapid and excessive ultrafiltration during dialysis with subsequent arterial hypotension, or volume depletion due to other causes (diarrhea, vomiting, fever or acute states of decreased cardiac output).

The most common symptoms are abdominal pain 8-12 hours after dialysis, although it can also be during the HD session. In some cases, patients may present a complete recovery if the triggering causes are corrected without the need of surgery, that can be s. At other times, intestinal necrosis may occur.

CONCLUSION

The mesenteric ischemia is a pathology with a high mortality, and it should always be present in the differential diagnosis of acute abdominal pain in patients after a dialysis session.

It is very important to correlate the radiological findings with the clinical evolution of the patient to avoid unnecessary surgeries. Stable symptoms without lactate elevation must be present to choose a 'watchful waiting' strategy with short-term CT follow-up.



Non- enhanced abdominal CT
A: portal gas in both hepatyc lobes. Multiple hepatic cysts.
B: gas in mesenteric vein branches
C: Loops of jejunum with wall thickening and pneumatosis (arrow)

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