

Title:

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Authors:

Jorge Collado-Saenz, Ramón Baeza-Trinidad, Rafael Daroca-Pérez

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## Olmesartan-induced enteropathy associated with antiphospholipid syndrome

Jorge Collado-Saenz, Ramón Baeza-Trinidad, Rafael Daroca-Pérez

Internal Medicine Department. Hospital Universitario San Pedro. Logroño, Spain

Correspondence: Jorge Collado-Saenz

e-mail: jcollados@riojasalud.es

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Chronic diarrhea.

Dear Editor,

A 66-year-old male was admitted with a six-month history of diarrhea and unintentional weight loss of 14 kg. He had a history of arterial hypertension treated with olmesartan for several years. Laboratory data showed a creatinine value of 4.1 mg/dl, blood pH of 7.15, bicarbonate of 13 mmol/l and C-reactive protein of 70 mg/dl.

Subtotal villous atrophy and abundant inflammatory infiltrate in the lamina propria were observed in the duodenal endoscopic biopsies. Antinuclear antibodies (ANA) were positive at 1/1,280 titer and the genes HLA-DQ2 and HLA-DQ8 were present with negative celiac disease antibodies. Immunological, hormonal and serological tests, stool cultures and abdominal computed tomography (CT) were performed, with no abnormal findings, so the patient was diagnosed with olmesartan-induced enteropathy (OIE). Olmesartan was suspended and oral budesonide was initiated. The symptoms began to subside 48 hours after starting budesonide.

During admission, the patient presented pain and paleness in his right lower limb. An acute arterial embolism was seen on CT and was surgically removed. Antiphospholipid antibodies (aPL) and lupus anticoagulant were positive, therefore, he was diagnosed with probable



antiphospholipid syndrome (APS), and was treated with acenocumarol. After two weeks of treatment, the patient was finally discharged with partial reversal of histological changes. Six months after discharge, the patient remained asymptomatic and treatment was discontinued.

## Discussion

Immune-mediated enteropathies (IME) are characterized by an excessive response of the intestinal immune system against non-pathogenic antigens. OIE is an IME described in patients treated with angiotensin II receptor blocker (ARB). Most common clinical manifestations are chronic diarrhea, weight loss and malabsorption. Duodenal biopsy is characterized by some grade of villous atrophy and intraepithelial lymphocytosis close to normal limits (1). Diagnosis confirmation requires clinical resolution of diarrhea once the drug is discontinued, after excluding other causes of villous atrophy such as celiac disease (2,3).

APS is an autoimmune disorder associated with thrombosis or obstetric complications in the presence of persistent aPL. Although OIE has been associated with other autoimmune disorders such as Sjöegren syndrome, uveitis or cholangitis, the presence of aPL or its relation to APS has never been previously described (4). Recently, different drugs have been reported as triggers for APS, not including any ARB (5).

In conclusion, OIE should be suspected in patients with chronic diarrhea. In the absence of more precise data on the association between OIE and other autoimmune diseases, it could be prudent to be attentive to its coexistence.

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