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## CASE AND RESEARCH LETTER

## **Olmesartan Associated Enteropathy as an Inflammatory Bowel Disease Mimicker in a Patient With Hidradenitis Suppurativa**



## **Enteropatía asociada a olmesartán, un simulador de enfermedad inflamatoria intestinal en un paciente con hidradenitis supurativa**

*To the Editor,*

Hidradenitis suppurativa (HS) is a chronic inflammatory, disfiguring and difficult-to-treat disorder of the terminal pilosebaceous-apocrine unit characterized by the development of multiple deep-seated nodules, abscesses, draining sinus tracts and scars.<sup>1</sup> HS and its comorbidities have a devastating impact on quality of life.<sup>1</sup> HS is associated with higher overall comorbidity burden than exists for healthy populations.<sup>2</sup> HS and inflammatory bowel disease often coexist and they may also share overlapping cytokine signatures with response to corresponding targeted therapies.<sup>2</sup> It has been reported that the risk of Crohn's disease (CD) among patients with HS is 3 times greater.<sup>2</sup> The risk of ulcerative colitis (UC) in patients with HS it is also increased compared to healthy populations,<sup>2,3</sup> so screening of inflammatory bowel disease is mandatory in patients with HS who present with chronic diarrhea. It is widely known that patients with HS had also a significantly higher prevalence of arterial hypertension, diabetes, and dyslipidemia,<sup>2</sup> which require treatment. Olmesartan is a commonly prescribed angiotensin II receptor blockade antihypertensive drug recently associated with a seronegative sprue-like enteropathy. Patients typically present with severe diarrhea and weight loss.<sup>4</sup> Discontinuation of the drug leads to a dramatic recovery and hence, dermatologist and other physicians involved in HS patient's care need to be aware of olmesartan associated enteropathy (OAE) to avoid unnecessary testing.<sup>4</sup> Therefore, in patients with HS who present with chronic diarrhea, OAE should be considered in the

differential diagnosis specially with inflammatory bowel disease, coeliac disease, and antibiotics-associated diarrhea.<sup>5</sup>

A 65-year-old man with HS (Hurley stage III), treated with doxycycline 50 mg daily for 1 year, with an optimal disease control, was admitted to the hospital referring an intractable chronic non-bloody diarrhea, and considerable weight loss for 2 months. Medical history was notable for hypertension being treated with olmesartan for 6 months. Workup for all potential infectious causes and coeliac disease was negative. A computerized tomography (CT) scan was performed and did not reveal any malignancy. Colonoscopy and ileocolonic biopsies ruled out both inflammatory bowel disease and microscopic colitis, and revealed mild villous atrophy. An upper endoscopy was performed, and was also normal. Based on these results, and after a detailed review of the patient's drug intake, the possibility of OAE was considered. Olmesartan was stopped and the symptoms completely resolved.

Olmesartan is an angiotensin receptor blocker widely used for the treatment of arterial hypertension. In the last few years olmesartan has been linked to rare instances of severe sprue-like enteropathy called OAE.<sup>4,5</sup> The enteropathy typically presents with moderate to severe diarrhea and weight loss with variable degrees of asthenia, nausea and abdominal pain a few months after the drug onset. Small intestinal histological findings resemble those of coeliac disease with flattening and atrophy of the duodenal villous.<sup>6-8</sup> However, serologic antibodies of coeliac disease are negative, there is little or no response to a gluten-free diet, and unlike CD, granulomas are not observed in the biopsy. Some cases OAE were also accompanied by serum aminotransferase elevations and fatty liver, which, along with the diarrhea, resolved drug withdrawal. Although the pathogenesis of OAE has not been completely determined yet, the involvement of cell-mediated immunity has been suggested.<sup>6-8</sup>

To conclude, diarrhea can be a frequent symptom in patients with hidradenitis suppurativa, and despite the high association with inflammatory bowel disease and antibiotic-associated diarrhea, OAE and, olmesartan withdrawal must be considered in patients with HS and arterial hypertension complaining of chronic diarrhea and taking this drug, before proposing more invasive tests.

**Author's contribution**

All authors have contributed to this research.

**Conflict of interest**

The authors declare they have no conflict of interest.

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