

Title:

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Atrophic enteropathy refractory to a gluten-free diet: what should we consider?

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Dear Editor,

A 67-year-old female came to the clinic because of diarrhea for the past eight months and weight loss of 28 kg. She was under treatment with olmesartan for blood hypertension, with no other history of interest, and denied taking non-steroidal anti-inflammatory drugs (NSAIDs) or other medications. Blood tests revealed iron-deficiency anemia, albumin at 2.5 g/dl and normal anti-tissue transglutaminase immunoglobulin-A (tTG-IgA) antibodies. Further testing included: a) gastroscopy, which identified erosive pangastritis (histology with eosinophilic microabscesses and lymphoplasmacytic infiltrates in the absence of *Helicobacter pylori*) and scalloped duodenal mucosa, and biopsies, which revealed complete villous atrophy plus lymphoplasmacytic-neutrophilic infiltrates and eosinophils in the corion, thus suggesting celiac disease; b) a colonoscopy with evidence of ulcerative ileitis with inflammatory infiltration matching that identified in the duodenum; and c) positive genetics for celiac disease with HLA DQ2 positivity. Gluten suppression from the diet resulted in no clinical or histological improvement. A subsequent capsule endoscopy procedure identified small fibrinous erosions spread throughout the small bowel (Fig. 1) and a new histological assessment by experts was requested. This suggested a toxic

origin, such as in association with angiotensin II inhibitors. The patient discontinued olmesartan and reintroduced dietary gluten, which resulted in clinical improvement within one week. Five months later, a gastroscopy confirmed the histological resolution of gastric and duodenal findings and a second colonoscopy showed that the ileal lesions had disappeared. A diagnosis of olmesartan-related enteropathy was proposed.

Discussion

Olmesartan-associated sprue-like enteropathy is a rare condition that mimics disorders such as celiac disease or autoimmune enteropathy, both clinically and histologically. It may involve any portion of the gastrointestinal tract (1,2) and manifests with severe chronic diarrhea and weight loss and represents the second most common cause of seronegative intestinal villous atrophy. It should be considered in celiac patients that fail to respond to gluten-free diet (3-5). In the absence of specific histopathological data, its diagnosis requires suspicion based on a history of olmesartan use and the exclusion of other causes (5). The disappearance of any findings following discontinuation is supportive of this diagnosis.

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Fig. 1. Capsule endoscopy. Millimetric fibrinous erosions spread throughout the small bowel.

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