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Villous atrophy, an endoscopic and diagnostic challenge

Andrés Gómez-Aldana[1], Diana Carolina Gómez[2], Rocío López Panqueva[3]

Servicios de [1]Endoscopia y Trasplantes y [3]Patología. Fundación Santa Fe de Bogotá. Bogotá. [2]Sanitas EPS

Correspondence: andresgomezmd@hotmail.com

ABSTRACT

Villous atrophy is part of the diagnostic challenge for both pathologists and gastroenterologists, given its infrequent and the presence of multiple differential diagnosis. Here is a case of a patient with chronic diarrhea and endoscopic documentation of loss of villous architecture and histologic atrophy of the villi, ruling out autoimmune etiologies and immunodeficiencies, documenting an autoimmune enteropathy with a favorable response after the use of immunosuppressive therapy.

Clinical Case.

A 57-year-old woman presented with a 5-year history of non-bloody diarrhea, reaching 10 to 20 daily depositions without abdominal cramping, and loss weight of 25 kg. Past medical history was significant for rheumatoid arthritis treated with rituximab during the last 6 years. All her previous endoscopic and histological studies identified lymphocytic infiltration. Previously, she received treatment with Rifaximin, cholestyramine, and loperamide without improvement.

A new upper endoscopy and colonoscopy showed gross villous blunting. Histological examination of small intestine mucosa demonstrated severe ileal villous atrophy, crypt hyperplasia accompanied by dense mononuclear cell-rich inflammation of the lamina propria and increase in crypt apoptosis. Several diseases with similar microscopic findings such as celiac disease and inflammatory bowel disease were ruled out with negative

transglutaminase, perinuclear anti-neutrophil cytoplasmic (p-ANCA), and **anti-Saccharomyces cerevisiae** (ASCA) antibodies. Additionally, primary and secondary immunodeficiencies were also excluded with a normal CD4 count and HIV-negative test. Coproscopy test, stool culture, and Clostridium difficile were reported as normal. Therefore, according to the presence of these histologic changes and this clinical pattern, a compatible diagnosis of autoimmune enteropathy was considered.

A treatment based on prednisone 40 mg and cyclosporine 100 mg BID with serum levels between 100 to 200 was established, obtaining absolute resolution of symptoms accompanied by a 5 kilograms weight gain at the first month of therapy. Autoimmune enteropathy is an exclusion diagnosis in patients with villous atrophy; it is important to exclude autoimmune entities, as well as malabsorptive disorders before considering the treatment of chronic diarrhea.

REFERENCES

1. Elli L, Ferretti F, Vaira V. Demystifying autoimmune small bowel enteropathy. Curr Opin Gastroenterol. 2019; 35: 243-249. DOI: doi: 10.1097/MOG.0000000000000515.
2. Ahmed Z, Imdad A, Connelly JA et al.. Autoimmune Enteropathy: An Updated Review with Special Focus on Stem Cell Transplant Therapy. Dig Dis Sci. 2019; 64: 643-654. DOI: 10.1007/s10620-018-5364-1

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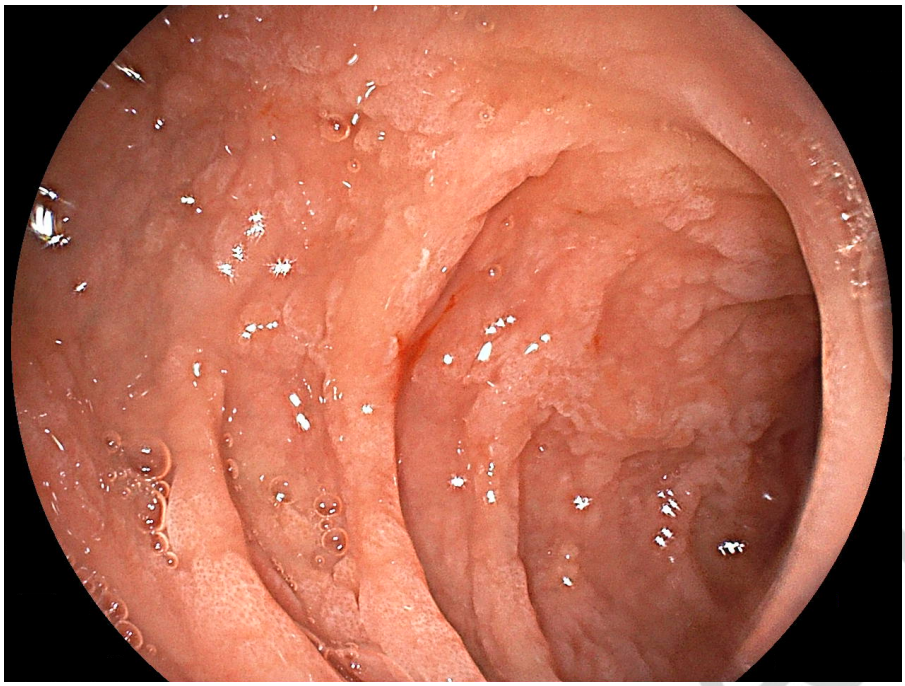

Fig 1: Endoscopic image of the second part of the duodenum with absent intestinal villi and scalloping mucosa.

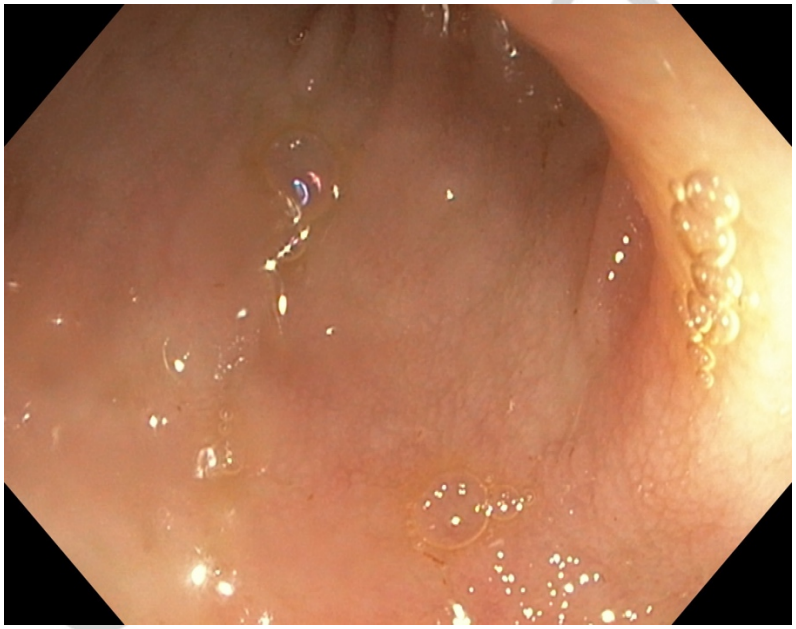

Fig 2. Distal Ileum with flattening villi and mucosal distortion

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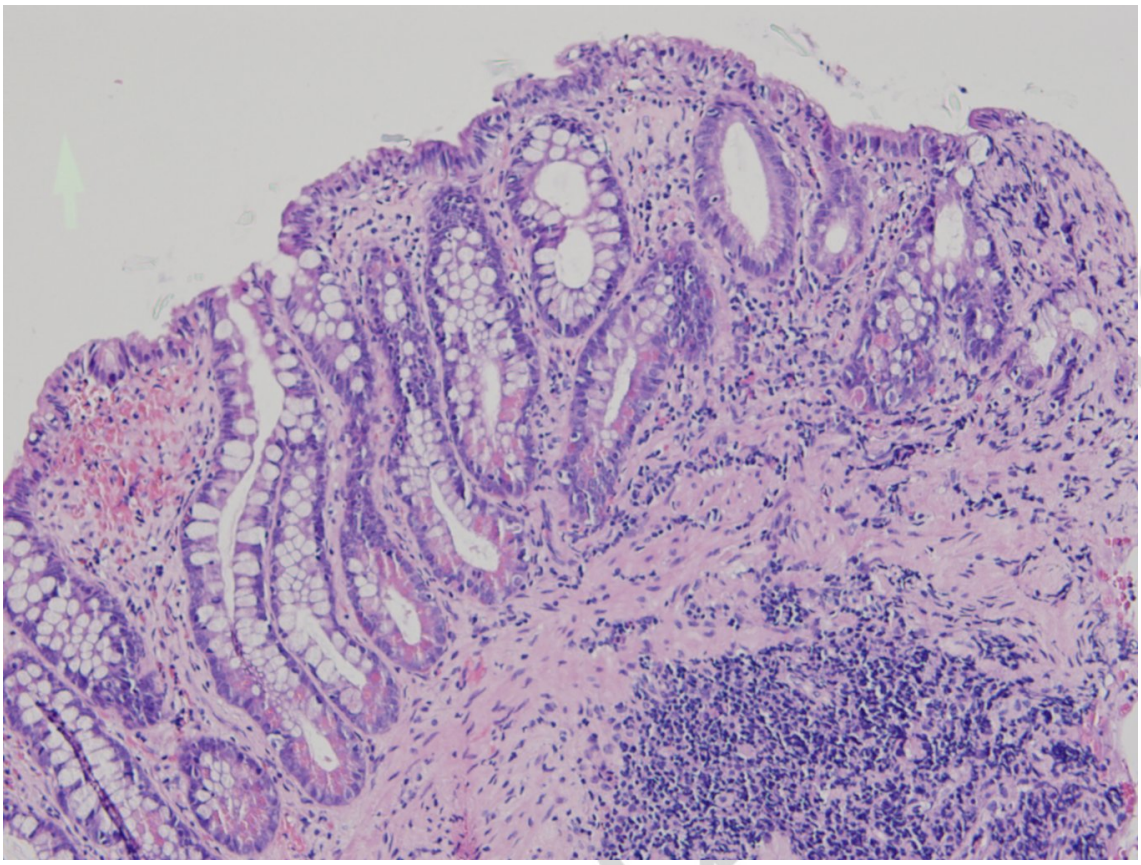

Fig 3: 20X Hematoxylin and eosin staining of ileal biopsies showing total villous atrophy, the lamina propria with numerous plasma cells, and a slight increase in intra-epithelial lymphocytes