

Title:

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Villous atrophy, an endoscopic and diagnostic challenge

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CASE REPORT

A 57-year-old female presented with a five-year history of non-bloody diarrhea, reaching

10 to 20 daily depositions without abdominal cramping and a weight loss of 25 kg. Past

medical history was significant for rheumatoid arthritis treated with rituximab during the

last six 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 the 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)



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 diagnosis compatible with autoimmune enteropathy was considered.

Treatment based on prednisone 40 mg and cyclosporine 100 mg BID with serum levels between 100 to 200 was established, obtaining an absolute resolution of symptoms accompanied by a 5 kg weight gain after 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

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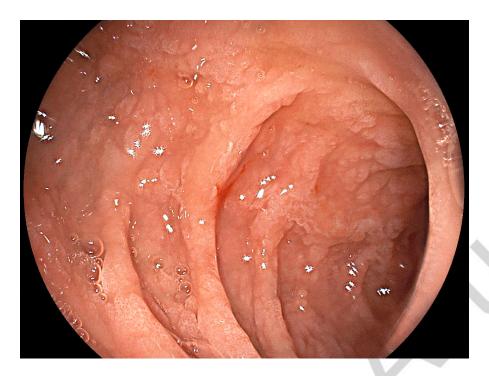


Fig. 1. Endoscopic image of the second part of the duodenum with absent intestinal villi and scalloping mucosa.

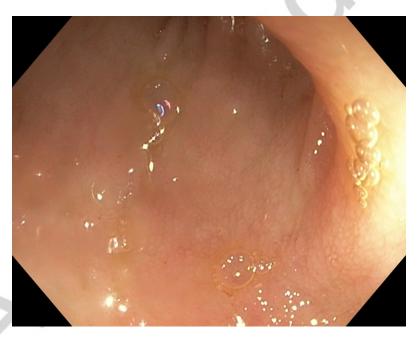


Fig. 2. Distal ileum with flattening villi and mucosal distortion.



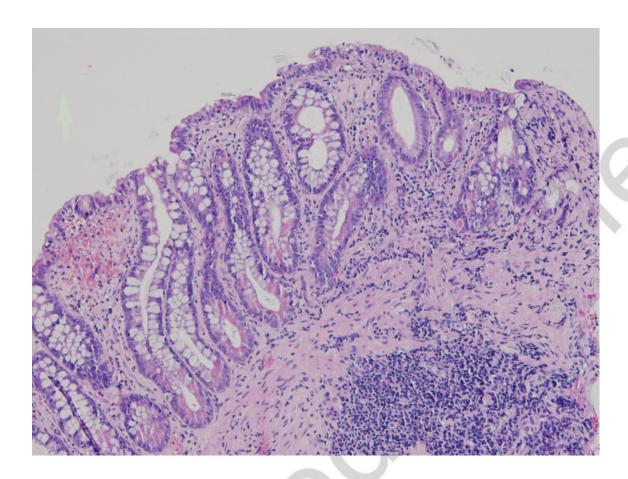


Fig. 3. 20x hematoxylin and eosin staining of ileal biopsies showing total villous atrophy, the lamina propria with numerous plasma cells, and a slight increase in intra-epithelial lymphocytes.