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Whipple's Disease: A Rare Cause of Diarreha

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We describe the case of a 55-year-old man, with a personal history of dyslipidemia, hyperuricemia and obesity, on atorvastatin and allopurinol. He went to a Gastroenterology consultation due to diarrhea with several years of evolution, from 3 daily spills, worsening in the last weeks to 10-12 daily spills, of liquid feces, without blood, mucus or pus, accompanied by defecatory urgency and fecal incontinence. He denied other associated symptoms, such as nausea, vomiting, weight loss or fever. Physical examination showed an obese patient, colored and hydrated skin and mucosa, without palpable adenomegalies, abdomen without changes. Analytically, he presented ferropenia without anemia (Hemoglobin 13.6 g/dL, iron 71 ug/dL, transferrin saturation 4%, ferritin 9 ng/mL); sedimentation velocity 9; reactive C protein 0.02 mg/dL; albumin 4.1 g/dL. Work-up revealed glucose 127 mg/dL; normal protein electrophoresis and thyroid function; anti-transglutaminase antibodies, HIV 1/2, coprocultures and parasitological examination negative. He performed total ileocolonoscopy and abdominal ultrasound that were unremarkable, and upper endoscopy (UE) that revealed erosive gastropathy. Gastric biopsies were compatible with chronic atrophic gastritis, Helicobacter pylori positive (which was eradicated). Duodenal biopsies revealed villi distortion and the presence of macrophages in the lamina propria with dilated spaces compatible with lipomatosis, with cytoplasm filled with periodic acid-Schiff (PAS) positive granules (Figure 1, 2). The search for *Tropheryma Whipple* by PCR in duodenal biopsies was positive.

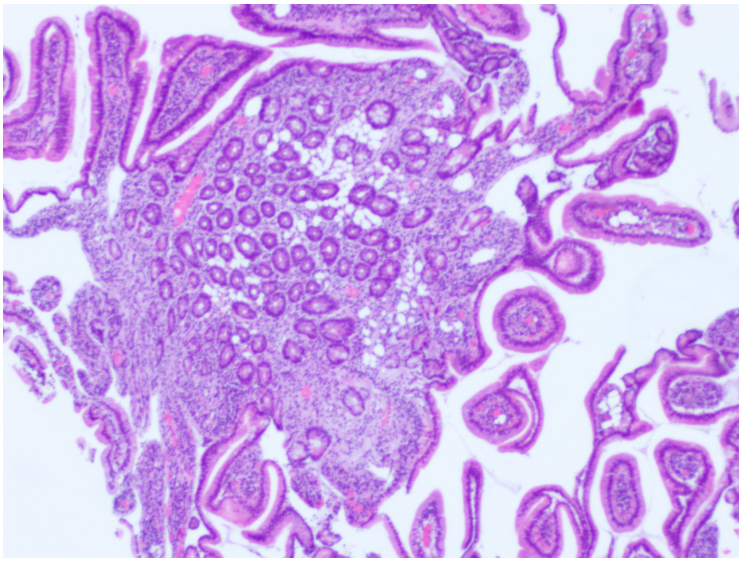

Figure 1: HE, 4x: Dilated and distortion of the structural pattern of the intestinal villi with expanded lamina propria infiltrated with macrophages.

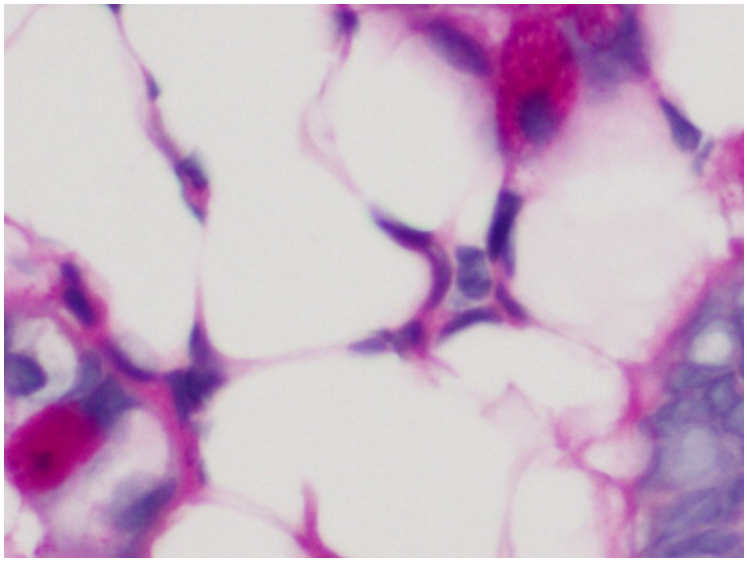

Figure 2: PAS, 40x: Macrophages in the lamina propria containing PAS positive granules.

He completed 14 days of intravenous ceftriaxone 2g daily, followed by oral sulfamethoxazole trimethoprim 800+160mg twice a day. He had a good clinical response, with resolution of diarrhea and correction of ferropenia. He recently completed 1 year of antibiotic therapy with sulfamethoxazole trimethoprim, having repeated UE with biopsies that revealed duodenal mucosa with architecture preservation and without microorganisms' identification.

Whipple's disease is a rare chronic systemic disease caused by the Gram-positive bacillus *Tropheryma whipplei* with an incidence of 0.5–1 cases per million [1]. *Tropheryma whipplei* infiltrates the tissues and causes macrophage activation [1-3]. The classic presentation of the disease begins with arthralgia followed by diarrhea, weight loss, fever, lymphadenopathies, and occasionally neurological, cardiac, or ocular manifestations [1-3]. The disease is confirmed by duodenal biopsies characterized by foamy macrophages in the lamina propria, whose cytoplasm contains large amounts of PAS-positive particles [1, 3]. Positive PCR screening for *Tropheryma Whipple* is pathognomonic of the disease [3]. If left untreated, it is progressive and fatal [1].

We pretend to illustrate a very rare disease that presented with symptoms similar to other significantly more common diseases and whose histology is essential to its diagnosis.

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