

Atrophic Glossitis Leading to the Diagnosis of Celiac Disease

TO THE EDITOR: Diagnosing celiac disease is relatively easy in typical cases, characterized by the classic features of chronic diarrhea, abdominal pain and distention, and weight loss. However, most patients have atypical celiac disease, with few or no gastrointestinal symptoms and a predominance of extraintestinal features (e.g., iron-deficiency anemia). Patients with celiac disease are prone to the development of long-term complications (e.g., autoimmune diseases or cancers) that are responsible for a mortality rate higher than that in the general population.¹ Gluten withdrawal seems to be protective against long-term complications, and it is the cornerstone of treatment for celiac disease. Case finding in subjects with clinical conditions known to be associated with celiac disease is currently the best epidemiologic approach to detecting atypical cases²; highly sensitive and specific serologic tests (for endomysial antibodies and tissue transglutaminase antibodies) are now available to screen at-risk patients. Although the natural history of celiac disease detected on screening remains unclear, at present, a gluten-free diet is deemed mandatory even for patients with atypical celiac disease; consequently, discovering the submerged part of the “celiac iceberg” is of the utmost importance.

A 33-year-old man presented at our clinic with a 4-month history of an erythematous, atrophic area on the dorsum of the tongue, accompanied by a painful burning sensation (Fig. 1). He was otherwise well and was taking no medications. His medical history was notable only for occasional episodes of diarrhea, for which the patient had never sought medical advice. Results of laboratory tests, including a complete blood count and measurements of serum iron, ferritin, vitamin B₁₂, and folic acid levels, were within the normal limits. A test for endomysial antibodies was positive. Biopsy of the small intestine showed intraepithelial lymphocytosis, crypt hypertrophy, and reduction in villous height, which confirmed the diagnosis of celiac disease. The glossitis resolved within 1 month after the initiation of a gluten-free diet.

The tongue was the most frequently affected site in a series of 128 patients with celiac disease



Figure 1. Erythematous, Atrophic Area on the Dorsum of the Tongue.

who were examined for oral mucosal lesions and symptoms, with 29.6% of the patients describing soreness or a burning sensation and 8.6% having erythema or atrophy.³ Robust evidence in support of routine screening for celiac disease in patients with atrophic lesions of the tongue is lacking. Nevertheless, the National Institutes of Health consensus statement on celiac disease states that “the single most important step in diagnosing celiac disease is to first consider the disorder by recognizing its myriad clinical features.”⁴ Our report should alert physicians and dental practitioners to consider celiac disease in managing cases of idiopathic atrophic glossitis.

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