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CLINICAL IMAGE

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Lymphocytic gastritis in a patient with dyspepsia

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Abstract

Lymphocytic gastritis (LG) is uncommon and presents histologically with a non-specific inflammatory pattern. It is most often associated with celiac disease and *Helicobacter pylori* gastritis and is rarely associated with other conditions including lymphoma. LG is of clinical importance since its recognition should prompt further clinical evaluation for other disorders.

KEYWORDS

celiac disease, *Helicobacter pylori*, intraepithelial lymphocytosis, lymphocytic gastritis, lymphocytic gastroenterocolitis, MALT lymphoma

Lymphocytic gastritis (LG) is associated with celiac disease and *Helicobacter pylori* infection, and rarely with other conditions including lymphoma.[1]

A 50-year-old female presented with a 2-week history of epigastric pain, nausea, vomiting, and weight loss. An abdominal CT scan and endoscopy were unremarkable. A gastric biopsy was obtained.

The biopsy revealed a moderately dense lymphocytic infiltrate involving the lamina propria. In addition, the surface epithelial cells and gastric pit demonstrated markedly increased intraepithelial lymphocytes (IELs) with >25 IELs/100 epithelial cells. The IELs were predominantly small lymphocytes, including many with a halo appearance (Figure 1). The intraepithelial infiltrate raised concern for extranodal marginal zone lymphoma (MALT lymphoma).

By immunohistochemistry, the lymphoid infiltrate consisted of mostly CD3+/CD8+/TIA-1 + cytotoxic T lymphocytes, characteristic of LG. CD4+ T cells localized to the lamina propria without epithelial involvement (Figure 1). An immunostain for *H pylori* was negative. In contrast, MALT lymphoma is characterized by a monoclonal B-cell infiltrate. Follow-up serologic studies for celiac disease and *H pylori* were negative.

A diagnosis of LG should prompt further clinical evaluation for celiac disease (including serologic testing and possible additional small bowel biopsies). Antibiotic therapy for *H pylori* infection should also be considered even if *H pylori* is not detected histologically.[2]

Katrina Collins and William N. Rezuke contributed equally to this article.

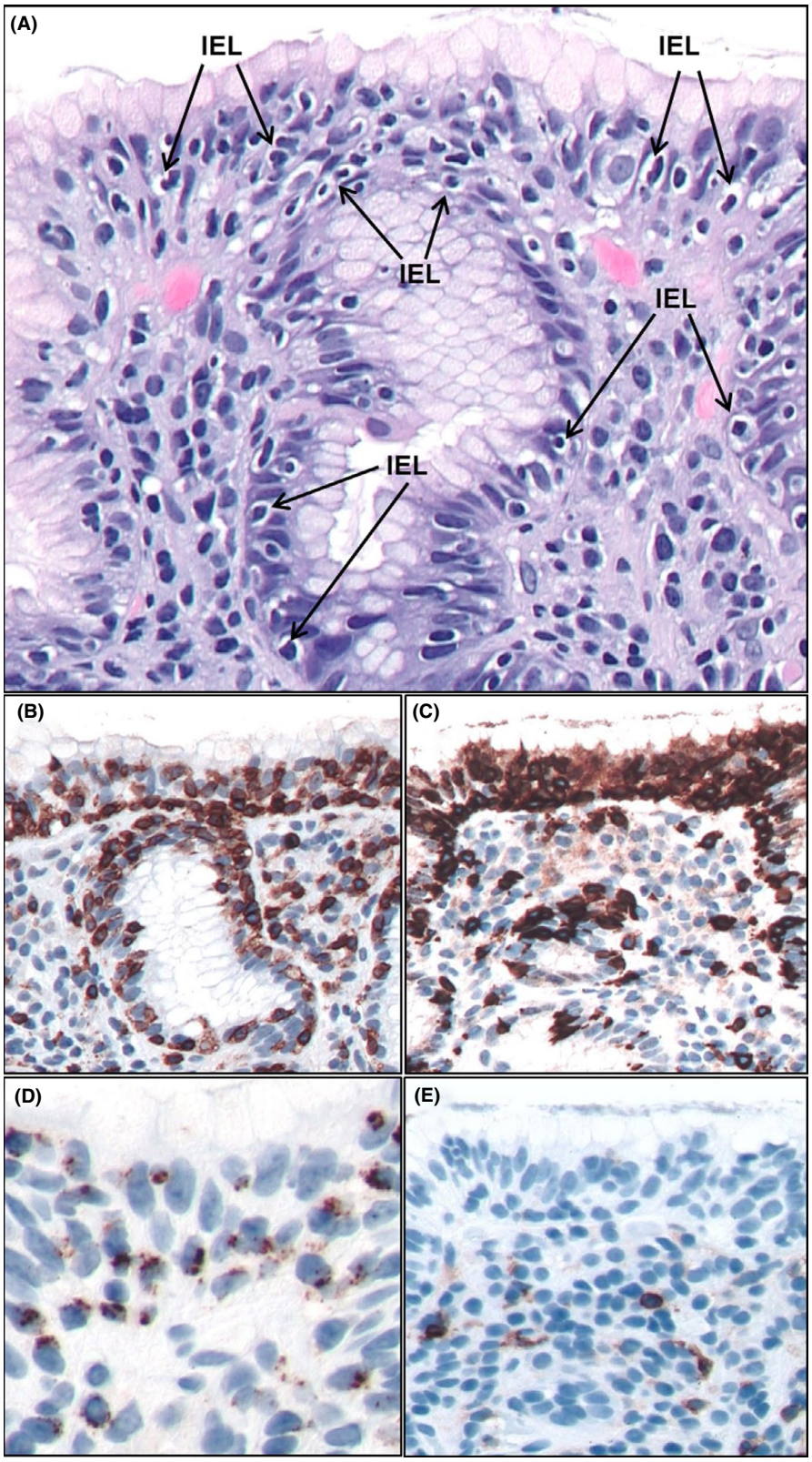

FIGURE 1 A hematoxylin-and-eosin–stained section of the gastric biopsy demonstrates surface epithelium and gastric pit, with numerous intraepithelial lymphocytes (arrows) including many lymphocytes with a halo appearance (A). By immunohistochemistry, the IELs were positive for CD3 (B), CD8 (C), and TIA-1 (D), characteristic of cytotoxic T cells and consistent with LG. CD4+ T cells (E) localized primarily to the lamina propria without significant epithelial involvement (×50 magnification). IEL, intraepithelial lymphocyte; LG, lymphocytic gastritis

AUTHOR CONTRIBUTIONS

KC: served as the primary author and is responsible for this literature review and construction of the manuscript. WNR: served as the hematopathologist on the case and was responsible for the histopathological work-up and final diagnosis as well as senior author managing the construction and edits of the manuscript and guiding the primary author through the submission process.

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