Background

First described by Jules Haot in 1988, lymphocytic gastritis (LG) was initially believed to correspond to an entity mentioned in 1945 by the Belgian gastroenterologist François Moutier, who reported a nodular form of gastritis characterized by centrally eroded or ulcerated depressions. Amidst the flurry of gastric pathology that immediately followed the discovery of H. pylori (“octopus-sucker gastritis”), the entity was initially believed to correspond to an entity mentioned in 1945 by the Belgian gastroenterologist François Moutier, who reported a nodular form of gastritis characterized by centrally eroded or ulcerated depressions. The entity was initially characterized as a gastric epithelial lymphocytosis. However, this characterization was later found to be insufficient, as increased lymphocytic infiltrates in the gastric epithelium were also reported in patients with an endoscopically normal gastric mucosa.

Thus, for years lymphocytic gastritis has remained relegated to a histopathologic manifestation of other conditions.

Purpose

The purpose of this study was to determine whether LG is a distinct nosologic entity irrespective of its associations, or represents the histopathologic expression of at least three different conditions: gastric intraepithelial lymphocytosis, lymphocytic colitis, and no H. pylori infection.

Study Setting

Miraca Research Institute, part of Miraca Life Sciences, is a specialized gastrointestinal laboratory that receives specimens from gastroenterologists operating in private outpatient endoscopy and surgery centers across the U.S. All demographic, histopathologic, endoscopic, and clinical information is stored in a searchable SQL database.

Patients and Controls

Using the Miraca database, we extracted all patients who had a histopathologic diagnosis of lymphocytic gastritis and duodenal and colonic biopsies between 1/2008 and 12/2011. Patients with upper gastrointestinal cancer or surgery were excluded.

Patients with lymphocytic gastritis were then divided in three groups: LG with H. pylori infection (LG-Hp), LG without concurrent intestinal lymphocytosis and no H. pylori infection, and LG with duodenal lymphocytosis, celiac sprue, or microscopic colitis and no H. pylori infection.

Lymphocytic gastritis. Both surface and foveolar epithelium is heavily infiltrated by CD3+ lymphocytes.

Results

During the study period gastric biopsy specimens were collected from 523,093 patients. Patients who had a history or a diagnosis of upper gastrointestinal cancer or surgery were excluded from the analysis, when a patient had multiple encounters, only the first one was included in this analysis. Thus, the study included 104,011 unique patients (median age 57 years, range 3 months to 101 years; 61.8% female). Of these, 883 patients had LG, and 254 of them had concurrent duodenal and colonic biopsies. The demographic characteristics of these 254 patients (the study group) are summarized in Table 1 below.

<table>
<thead>
<tr>
<th>Lymphocytic Gastritis</th>
<th>Median Age (years)</th>
<th>Male (%)</th>
<th>Presenting with anemia (%)</th>
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</thead>
<tbody>
<tr>
<td>H. pylori-infection</td>
<td>54</td>
<td>22 (30%)</td>
<td>12 (23%)</td>
</tr>
<tr>
<td>GI lymphocytosis</td>
<td>66</td>
<td>34 (28%)</td>
<td>3 (2.4%)</td>
</tr>
<tr>
<td>No concurrent GI lymphocytosis</td>
<td>55</td>
<td>25 (41%)</td>
<td>17 (31%)</td>
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</tbody>
</table>

Table 1: Both age (p<.05) and the M:F ratio (OR 3.32 95%CI 1.73-6.36) were significantly different between patients with and without concurrent GI lymphocytosis.

Anemia was the stated indication for endoscopy in 16% of patients with LG-Hp, in 31% of those with LG and no other lymphocytosis, and in 24% of those with associated lymphocytosis (p<.0001 for all groups). In contrast, diarrhea was reported in 12% of LG-Hp patients; in 38% of those with LG only; and in 68% of patients with LG and concomitant lymphocytosis (p<.0001 for all groups). Both gastric and duodenal ulcers were uncommon (~4%) and not significantly different among the three groups.