Lymphocytic (Microscopic) Colitis
Clinicopathologic Study of 18 Patients and Comparison to Collagenous Colitis

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Lymphocytic colitis, formerly called microscopic colitis, is a clinicopathologic syndrome with chronic watery diarrhea and diffuse mucosal inflammatory changes with prominent intraepithelial lymphocytes. The 18 lymphocytic colitis patients studied presented with chronic watery diarrhea at a mean age of 53.8 ± 17 years (± 1 SD). Roentgenographic, endoscopic, and culture data were not diagnostic. In patients tested, there was a high prevalence of arthritis (82%) and autoantibodies (50%) but no increase in frequency of histocompatibility antigens associated with well-defined autoimmune disease (DR3, B8).

Lymphocytic colitis patients were compared to 21 patients with collagenous colitis. Similarities included age, symptomatology, and nondiagnostic radiographic and endoscopic studies. However, the sex distribution was statistically different, with an equal male-to-female ratio in lymphocytic colitis and female predominance (80%) in collagenous colitis. Other differences included dissimilar histocompatibility phenotypes and collagen band on biopsies of collagenous but not lymphocytic colitis. These findings suggest that lymphocytic and collagenous colitis may be related yet distinct disorders.

KEY WORDS: microscopic colitis; lymphocytic colitis; collagenous colitis; autoimmune.

The term microscopic colitis was introduced to describe patients with diarrhea of unknown origin, normal barium enema, and colonic endoscopy, but mucosal inflammatory changes on colonic biopsy (1). Since this initial report by Read et al in 1980, at least 23 other cases have been reported (2-5). Recent pathologic studies have emphasized the distinctive lymphocytic infiltration of the colonic epithelium, prompting the proposal that lymphocytic colitis be substituted for the ambiguous term microscopic colitis (6).

Lymphocytic colitis shares many clinical and histopathologic similarities with collagenous colitis, another newly recognized syndrome presenting with chronic watery diarrhea. Extrainestinal manifestations have been noted in both lymphocytic and collagenous colitis, and it has been suggested that these entities may have an autoimmune etiology (5-9).

The purposes of this study were: (1) to more fully characterize the clinical features of lymphocytic colitis, utilizing a large group of patients; (2) to...
investigate a possible autoimmune etiology for lymphocytic colitis; and (3) to compare specifically lymphocytic and collagenous colitis, elucidating differences and similarities.

**MATERIALS AND METHODS**

**Pathology.** The findings of a previous histopathologic study were used in defining lymphocytic and collagenous colitis (6). That reference can be consulted for further details. All 16 of the patients in the histopathologic study are included in this report, plus two additional patients. The histologic parameters evaluated and the definitions employed in their earlier study are listed in Table 1. In that prior study, coded analysis of both proximal and distal colon biopsies established that lymphocytic colitis could be readily distinguished from idiopathic inflammatory bowel disease (ulcerative colitis and Crohn's colitis), acute colitis (infectious and ischemic colitis), and histologically normal colon. Although collagenous colitis had many histologic similarities to lymphocytic colitis, it could be distinguished by the presence of subepithelial collagen thickening seen only in collagenous colitis.

Our previous histopathologic study established that the single most distinguishing feature of lymphocytic colitis was increased intraepithelial lymphocytes. Lymphocytic colitis had an estimated mean of 24.6 lymphocytes/100 surface epithelial cells. Other characteristic features of lymphocytic colitis included surface epithelial damage (mainly flattening), increase lamina propria mononuclear cells (compared to acute colitis and normals), prominent crypt lymphocytes, and minimal crypt distortion or cryptitis. While the combination of histologic features detailed above was characteristic of lymphocytic colitis, no single