

Gastrointestinal and Liver Pathology at Rush

1750 W. Harrison St., Suite 570, Chicago, IL 60612 ♦ (312) 942-5227 phone ♦ (312) 942-4228 fax

Case of the Month Answer – December 2009

Contributed by Drs. Marlene Gallegos and Shriram Jakate

Diagnosis: Lymphocytic Colitis

The term *microscopic colitis* was first coined by Read and colleagues in 1980 to describe a group of patients with chronic diarrhea, normal colonoscopy, and a normal barium enema, who had evidence of mucosal inflammation in their colonic biopsies. From this subset of colitides, at least two well-defined clinico-pathologic conditions have been described: collagenous colitis and lymphocytic colitis. These two microscopic colitides have indistinguishable clinical presentations but are separated by their histopathological characteristics.^{1, 2}

Lymphocytic colitis is a chronic nondistorting colitis typified by increased intraepithelial lymphocytes and surface damage. Patients with lymphocytic colitis are typically middle-aged to older adults, with a mean onset of 51 years.³ Reported gender predilection varies from equal to female predominance.⁴ The disease has been associated with the use of medications such as ranitidine and Cyclo 3 Fort. An even stronger association has been found between lymphocytic colitis and celiac disease. In addition, an increased incidence of HLA-A1, DQ2, DQ1 and DQ3 haplotypes and other autoimmune processes (eg. thyroid disorders, diabetes mellitus, rheumatoid arthritis) has been noted in lymphocytic colitis patients.^{1, 2, 3}

Histologically, surface epithelial damage, increased intraepithelial lymphocytes, and superficial plasmacytosis without crypt distortion are seen (Figure A). Increased lamina propria plasma cells, eosinophils, and lymphocytes are also seen (Figure B). A few foci of cryptitis or a rare crypt abscess may be seen in lymphocytic colitis (Figures C), but more neutrophilic inflammation than this may suggest another diagnosis.³

The differential diagnosis includes collagenous colitis. Lymphocytic colitis appears identical to collagenous colitis except for the absence of the subepithelial collagen table.¹ The resolving phase of infectious colitis is also considered in the differential since there can be surface damage and a modest increase in intraepithelial lymphocytes.³ Wand and colleagues reported lymphocytic-like histology with constipation, as well as in patients with endoscopic abnormalities. In addition, cases of Crohn's with patchy areas of disease may show a lymphocytic colitis-like pattern.¹

Therapy for lymphocytic colitis is variable and is identical to that used for collagenous colitis. Some patients' symptoms resolve spontaneously, while others may require over-the-counter antidiarrheals, bismuth subsalicylate, 5-aminosalicylate acid compounds, or immunosuppressants. Overall, the prognosis is good because eventually most patients respond to some form of therapy. However, there is a small subset of patients who have lymphocytic colitis and sprue-like changes in their small bowel biopsies that seems refractory to all therapy. These patients have been classified as having lymphocytic enterocolitis, although some investigators have raised the possibility that these patients have a lymphoproliferative disorder.³

Gastrointestinal and Liver Pathology at Rush

1750 W. Harrison St., Suite 570, Chicago, IL 60612 ♦ (312) 942-5227 phone ♦ (312) 942-4228 fax

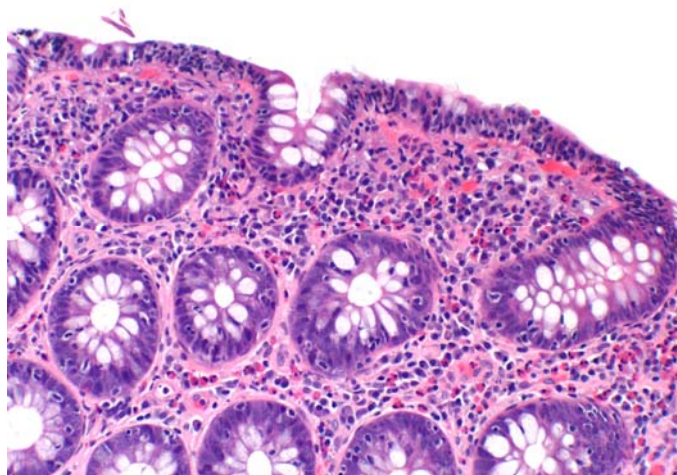


Figure A. Microphotograph of surface damage with increased intraepithelial lymphocytes.

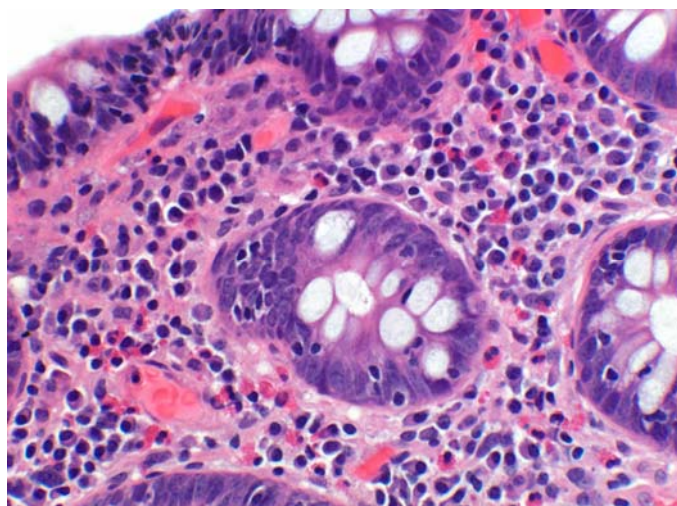


Figure B. Microphotograph of increased lamina propria plasma cells, eosinophils, and lymphocytes.

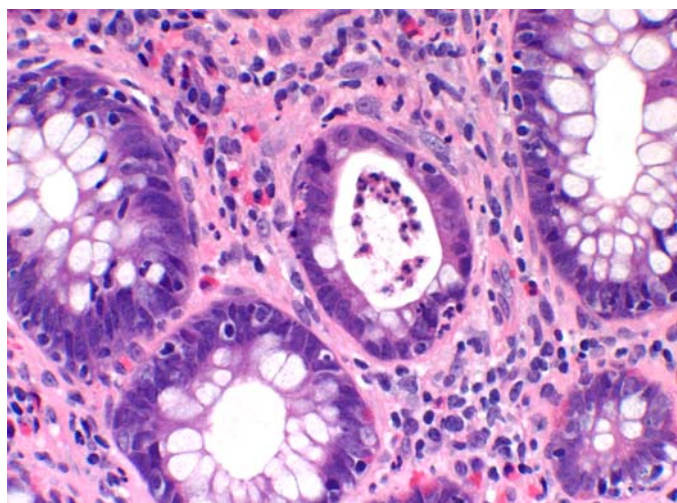


Figure C. Microphotograph of crypt abscess.

Gastrointestinal and Liver Pathology at Rush

1750 W. Harrison St., Suite 570, Chicago, IL 60612 ♦ (312) 942-5227 phone ♦ (312) 942-4228 fax

REFERENCES

1. Greenson JK, Odze RD. Inflammatory Diseases of the Large Intestine. In: Odze RD, Goldblum JR, Crawford JM. Surgical Pathology of the GI Tract, Liver, Biliary Tract, and Pancreas. Philadelphia: Elsevier, 2004:236-238.
2. Tysk C, Bohr J, Nyhlin N, et al. Diagnosis and management of microscopic colitis. World J Gastroenterol 2008 December 28;14(48):7280-7288.
3. Emory TS, Sobin LH. Idiopathic Inflammatory Bowel Disease. In: Iacobuzio-Donaghue CA, Montgomery EA. Gastrointestinal and Liver Pathology. Philadelphia: Elsevier, 2005:327-331.
4. <http://www.pathologyoutlines.com/colon.html#lymphocytic>