

Is Microscopic Colitis Really Microscopic?

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See “Does Lymphocytic Colitis Always Present with Normal Endoscopic Findings?” by Hye Sun Park, et al. on page 197, Vol. 9, No. 2, 2015

Microscopic colitis (MC) is characterized by chronic watery diarrhea. MC comprises two entities: collagenous colitis (CC) and lymphocytic colitis (LC), which are separated by typical histopathological characteristics. The colonic mucosa appears endoscopically normal in general so it can be diagnosed only by colonic mucosal biopsies.

But, macroscopic subtle nonspecific abnormalities in the colon such as erythema, edema, or abnormal vessel pattern were seen in 60 patients of the 199 patients with LC (30%) and in 42 patients of the 105 patients with CC (29%).^{1,2} But these findings have been accepted not so meaningful features in the diagnosis of MC. Exceptionally colonic mucosal tears (“cat-scratch colon”) are occasionally seen during colonoscopy in CC, and might indicate an increased risk of colonic perforation during the procedure.³

In this issue of *Gut and Liver*, Park *et al.*⁴ report their retrospective analysis comparing the endoscopic, clinical, and histopathologic features of LC with and without mucosal lesions (MLs). The authors showed MLs were observed in seven of the 14 LC cases. Six of the MLs exhibited hypervascularity, three exhibited exudative bleeding and one exhibited edema. The patients with MLs had more severe diarrhea and were taking aspirin or proton pump inhibitors (PPIs). More intraepithelial lymphocytes were observed during histologic examination in the patients with MLs compared to the patients without MLs, although this difference was not significant. The numbers of mononuclear cells and neutrophils in the lamina propria were independent of the presence or absence of MLs.

Authors focused on hypervascularity and exudative bleeding in this report. Depending on colonoscopic examples provided, these findings are not only nonspecific, but also can be observed in patients without MC. On this report, patients with

MLs showed 10 years older than patients without MLs, and they had been taking aspirin and PPI at the time of diagnosis. These medications also affect bleeding tendency. Because gross ulcerations can be seen rarely in patients with MC who are taking nonsteroidal anti-inflammatory drugs (NSAIDs).⁵ So, we could not make any conclusion from these mucosal findings yet.

By histological review, this study show more intraepithelial lymphocytes were observed in the patients with MLs compared to the patients without MLs, although this difference was not significant. As we know, MC is not evenly involved in the whole colon. It can help diagnostic sensitivity of MC in patients with chronic diarrhea, if we could choose adequate biopsy site. In the future, laser endomicroscopy, which enables “real-time” microscopic imaging of the mucosa during endoscopy, may possibly allow *in vivo* diagnosis of MC.⁶⁻⁸

In previous prospective multicenter study in Korea, the prevalence of LC was 18% similar with this study.⁹ That study showed many of LC (18/100) was younger than 50 years old, all of CC (4/100) was older than 50 years old. The cause of MC is not known, but is probably multifactorial. Currently, CC and LC are considered to represent specific mucosal responses to different thus-far-unidentified luminal agents in predisposed individuals, resulting in an uncontrolled mucosal immune response.¹⁰ As CC and LC have similar clinical presentations and share histopathological features, except for the subepithelial collagen band in CC, it has been discussed whether CC and LC are actually the same disease seen in different phases of development. Conversion of CC to LC or the reverse has been reported, but is rare.¹¹

In this point of view, it is so interesting whether LC with MLs show different prognosis comparing with LC without MLs in the follow-up.

In Korean situation, old age patients having medications such

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as aspirin, PPI and NSAIDs will be continuously increasing. Early diagnosis and adequate management of MC are important. We need to have more concern about MC and colonic mucosal biopsy must be performed for patients with chronic diarrhea with no or subtle mucosal alteration. Also it is suggested that we need large scaled prospective study of LC concerning about minor mucosal alteration and change of mucosal abnormality after treatment.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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