LETTER TO THE EDITOR

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Reply: Careful Assessment Is Needed in Patients with Ulcerative Colitis with Evidence of Cytomegalovirus Reactivation

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Reply:

We thank Dr. Ozturk and colleagues for their letter[1] regarding our article, "Long-term outcomes of cytomegalovirus reactivation in patients with moderate to severe ulcerative colitis."[2] This study is a follow-up of our previous one showing that cytomegalovirus (CMV) reactivation is frequently observed (43%) in patients with moderate to severe ulcerative colitis (UC).[3] In our previous study, we prospectively created the "CMV cohort", which comprised 72 consecutive moderate to severe UC patients enrolled from 10 medical centers between July 2007 and December 2008. Among them, 31 patients were grouped to CMV-positive and 41 patients grouped to CMV-negative, according to their initial CMV evaluation. We detected the evidence of CMV reactivation with several tests, including CMV IgM antibody, histologic detection of inclusion bodies on hematoxylin and eosin (H&E)-stained sections, immunohistochemical (IHC) staining for CMV antigen, and CMV DNA polymerase chain reaction (PCR) test. All 72 patients underwent three tests for CMV IgM antibody, histologic detection on H&E staining, and IHC staining. CMV DNA PCR was performed on only 16 patients due to limitations in available facilities at several medical centers. As mentioned in Dr. Ozturk's letter,[1] the tests detecting CMV have variable sensitivity and specificity. However, the sensitivity and specificity of IHC staining is high, at 78%–93% and 92%–100%, respectively.[4] Therefore, IHC staining is regarded as the gold standard of CMV detection in patients with UC. Usually, positive IHC staining of CMV shows CMV intestinal disease, not merely reactivation of CMV. In our previous study, most of the CMV-positive group showed CMV intestinal disease on initial CMV evaluation.[3]

In the present study, although we did not provide strict study protocols for the long-term assessment of "CMV cohort" patients, we intended to evaluate the long-term clinical outcomes of these "CMV cohort" patients.[2] Even though 11 patients were not followed up in January 2013, the mean duration of follow-up of these "CMV cohort" patients was 43.16±19.78 months, approximately a 5-year period. In this long-term follow-up study, we obtained the valuable results that the patients who had UC with CMV reactivation at initial evaluation showed poor outcomes: namely that they have shown a significantly higher cumulative colectomy rate (log-rank, p=0.025) and significantly higher disease flare-up rates (log-rank, p=0.048) during the follow-up period. Therefore, we suggested that careful assessment is needed for active UC patients who exhibit evidence of CMV reactivation. These results are concordant with a recent study with a 10-year observation period.[5] This study also suggested that the presence of CMV in inflammatory bowel disease (IBD) patients may increase the risk of colectomy. We think that severe colonic inflammation itself is an important trigger for CMV reactivation. Therefore, UC patients with CMV reactivation tend to have severe colonic inflammation, and this inherent factor could cause the poor outcomes.[6,7]

Several studies reported the high prevalence of CMV IgG antibody in Asian countries: 92% in Korea[8] and 76.11% in China[9] compared to Western countries. This means that CMV reactivation is more frequent in Asian IBD patients than in Western patients. Accordingly, in this study, three patients in the CMV-negative group have shown reactivation of CMV in the follow-up period. Although they were successfully treated with ganciclovir, such patients should be carefully monitored.

In conclusion, considering that UC patients with CMV reactivation tend to have severe colonic inflammation and poor clinical outcomes, we suggested that clinicians in Asian countries should pay more attention to CMV reactivation in IBD patients.

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CONFLICTS OF INTEREST

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

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