

ANSWERING REVIEWERS

September 8, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format.

Title: Characteristic Endoscopic Findings and Risk Factors for Cytomegalovirus-Associated Colitis in Patients with Active Ulcerative Colitis

Author: Yutaka Hirayama, Takafumi Ando, Yoshiaki Hirooka, Osamu Watanabe, Ryoji Miyahara, Masanao Nakamura, Takeshi Yamamura, Hidemi Goto

Name of Journal: *World Journal of Gastrointestinal Endoscopy*

ESPS Manuscript NO: 20768

Thank you for reviewing our submission to *World Journal of Gastrointestinal Endoscopy* entitled “Characteristic Endoscopic Findings and Risk Factors for Cytomegalovirus-Associated Colitis in Patients with Active Ulcerative Colitis” (ESPS Manuscript No: 20768). We appreciate the comments from the reviewers and have responded to each of the items raised in the review. These comments have certainly improved the manuscript and we appreciate the opportunity to return it to you for consideration of publication.

Revision has been made according to the suggestions of reviewers:

Reviewer 1

1. For Yi’s report (PMID: 23374225)

Yi’s study showed that corticosteroid use wasn’t the risk of CMV infection in UC patients.

- a. In their report, they recruited UC patients not only on active phase but on non-active phase. Therefore, we considered population of their study was different from ours.
- b. They analyzed only the corticosteroid use for UC patients. They didn’t analyze the amount of corticosteroid. We consider that the amount of used corticosteroid is more

important than corticosteroid use itself for CMV-associated colitis in active UC patients.

- c. They defined CMV infection as CMV-IgM+ (3/186), CMV-IgG+ (139/50), or CMV-DNA+ (161/28) respectively. In univariate analysis of risk factors for CMV infection, corticosteroid use was significant in CMV-IgM positive group (the number of positive patients is limited) and CMV-DNA positive group (it might include prior CMV infection). In multivariate analysis of risk factors, corticosteroid use wasn't significantly associated in both groups. Their definition of CMV infection was different from our definition. Therefore, it might cause the difference of results.

We considered that these factors as above made results different. However, we think the conclusion of our manuscript is also acceptable and appropriate.

2. For Iida's report (PMID: 23619714) ; Reference number 30 in our manuscript

Iida's study indicated that punched-out ulceration wasn't the specific endoscopic feature of CMV-associated colitis in active UC patients. In their study, they compared ulcer features among three groups (A: CMV-Ag+, steroid refractory, B: CMV-Ag-, steroid refractory, C: CMV-Ag-, steroid free). Between A and B, there was no significance ($p=0.055$). Between A and C, it was statistically significant ($p < 0.0001$). But they didn't compare ulcer features between CMV-Ag+ (A) and CMV-Ag- (B and C).

In our study, we compared ulcer features between CMV-positive groups (antigen, histology, or immunohistochemistry positive) and CMV-negative groups. Therefore, this might cause the difference of results. However, we think the conclusion of our paper is also acceptable and appropriate. It is very important for us to accumulate and consider further cases.

Reviewer 2

We modified part of the manuscript based on the comments, and checked all references again.

Reviewer 3

No suggestions were made.

Thank you again for publishing our manuscript in the *World Journal of Gastrointestinal Endoscopy*.

Sincerely yours,
Yutaka Hirayama
Takafumi Ando
Hidemi Goto