

Antiviral treatment in patients with *cytomegalovirus* positive ulcerative colitis

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Abstract

Cytomegalovirus (CMV) is a common virus in patients with ulcerative colitis receiving immunosuppressive drugs. Many studies suggested that CMV infection is an exacerbating factor in patients with ulcerative colitis. The role of CMV in exacerbations of ulcerative colitis has been discussed. One of studies starting this discussion is an article entitled "CMV positive ulcerative colitis: A single center experience and literature review" by Kopylov *et al.* However, we think that there are some points that should be emphasized about the study. Especially, the small number of patients in the study has led to meaningless results. Large controlled prospective trials are needed to clarify the benefit of antiviral therapy for active ulcerative colitis patients.

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Key words: *Cytomegalovirus*; Ulcerative colitis; Antiviral treatment; Steroid resistant; Colonoscopy

Core tip: Many studies suggested that *cytomegalovirus* (CMV) infection is an exacerbating factor in patients with ulcerative colitis. The role of CMV in exacerbations of ulcerative colitis has been discussed. We believe that large controlled prospective trials are needed to clarify the bene-

fit of antiviral therapy for active ulcerative colitis patients.

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TO THE EDITOR

We read with great interest the recently published article entitled "Cytomegalovirus (CMV) positive ulcerative colitis: A single center experience and literature review" by Kopylov *et al*^[1] in the February 15, 2013 issue of *World Journal of Gastrointestinal Pathophysiology*. In this retrospective study, the authors compared the clinical outcomes of CMV-positive ulcerative colitis patients with and without antiviral therapy (gancyclovir). They concluded that patients with obvious histological evidence of CMV in the colonic mucosa may not universally require antiviral therapy and may respond to conventional anti-inflammatory therapy. This study reveals the indications for antiviral therapy in CMV-positive patients with ulcerative colitis. Moreover, it provides some new information that represents educational "take-home messages" for readers. We believe that further studies will be performed in light of these findings. However, we think that there are some points that should be emphasized about the study.

First, in the discussion section of the paper, the authors reported that patients in the antiviral-treated group "are in greater need of hospitalization" than patients without antiviral treatment. However, as shown in Table 1, no statistically significant difference could be seen between these two groups. As we know that the *P* value is revealed below a certain significance level, often 0.05, this elucidates a strong presumption against the null hypothesis^[2,3]. In light of this, we suggest that the conclusion of

Table 1 Clinical and demographic characteristics of the included patients (mean \pm SD)

Patient characteristic	Treated (n = 7)	Untreated (n = 6)	P value
Age (yr)	50.0 \pm 14.6	45.0 \pm 13.6	0.540
Gender (male/female)	4/3	3/3	0.400
Extent of disease			
Pancolitis	6	5	0.540
Left-sided	1	1	0.540
Age at diagnosis of UC, yr	35.7 \pm 13.3	41.5 \pm 13.3	0.530
Duration of disease, yr	14.2 \pm 9.3	3.5 \pm 1.8	0.008
Hospitalized patients	6	4	0.560
Prehospitalization treatment			
SC	4	2	0.560
Thiopurines	3	2	1.000
Infliximab	1 ¹	0	1.000
5-asa	5	4	1.000
SC + thiopurines	2	1	1.000
Treatment during hospitalization			
SC	6	3	0.400
Infliximab	1	0	1.000
Cyclosporine	3	0	0.200
Timing of colonoscopy (d)	3.8 \pm 2.4	2.7 \pm 3.4	0.600
Positive cytopathic changes on HE staining	2	0	0.460
Hospitalization outcome			
Death	1	0	1.000
Colectomy	1	0	1.000
Outcome by the end of the follow-up			
Colectomy	3	0	0.190
Death	1	0	1.000

¹Combined with systemic corticosteroids and thiopurine. Treated: Patients who received antiviral therapy; Untreated: Patients who did not receive antiviral therapy; Timing of colonoscopy: Number of days from hospital admission; SC: Systemic corticosteroids; HE: Hematoxylin and eosin; IHC: Immunohistochemistry; UC: Ulcerative colitis.

the present study should be reviewed.

Second, the authors mentioned in the discussion section that only three patients without antiviral therapy were hospitalized. However, four patients in the group without antiviral therapy were hospitalized, according to Table 1. Finally, there are conflicting data regarding the staining method of the histopathological examination. Consequently, we conclude that, before making certain interpretations, this work should be rearranged in light of the above-mentioned suggestions. This could provide the readers of the journal clearer information regarding the role of CMV infection in the pathogenesis and clinical

course of ulcerative colitis.

REFERENCES

- 1 Kopylov U, Sasson G, Geyshis B, Oikawa MT, Barshack I, Eliakim R, Ben-Horin S. Cytomegalovirus positive ulcerative colitis: A single center experience and literature review. *World J Gastrointest Pathophysiol* 2013; **4**: 18-23 [PMID: 23596551 DOI: 10.4291/wjgp.v4.i1.18]
- 2 Stigler S. Fisher and the 5% level. *Chance* 2008; **21**: 12 [DOI: 10.1007/s00144-008-0033-3]
- 3 Goodman SN. Toward evidence-based medical statistics. 2: The Bayes factor. *Ann Intern Med* 1999; **130**: 1005-1013 [PMID: 10383350 DOI: 10.7326/0003-4819-130-12-199906150-00019]

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