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**Antiviral treatment in patients with *cytomegalovirus* positive ulcerative colitis**

Ozturk K. Antiviral treatment in ulcerative colitis

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**Abstract**

*Cytomegalovirus* (CMV) is a common virus in patients with ulcerative colitis due to 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 started this discussion is 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 are lead 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 benefit 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.

Firstly, 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 the present study should be reviewed.

Secondly, 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 the ulcerative colitis.

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| **Table 1 Clinical and demographic characteristics of the included patients (mean ± SD)** | | |
| | **Patient characteristics** | | --- | | | **Treated (*n* = 7)** | **Untreated (*n* = 6)** | ***P* vaule** | | --- | --- | --- | |  | |  |
| Age (yr) 50.0 ± 14.6 45.0 ± 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 on diagnosis of UC, yr 35.7 ± 13.3 41.5 ± 13.3 0.530  Duration of disease, yr 14.2 ± 9.3 3.5 ± 1.8 0.008  Hospitalized patients 6 4 0.560  Prehospitalization treatment  SC 4 2 0.560  Thiopurines 3 2 1.000  Infliximab 11 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 ± 2.4 2.7 ± 3.4 0.600  Positive cytopathic changes on HE 2 0 0.460  Hospitalization outcome  Death 1 0 1.000  Colectomy 1 0 1.000  Outcome by the of the follow-up  Colectomy 3 0 0.190  Death 1 0 1.000 | | |
| 1Combined with systemic corticosteroids and hiopurine. 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 eosin; IHC: Immunohistochemistry;UC: Ulcerative colitis. | | | | |