**Name of journal: *World Journal of Gastrointestinal Pathophysiology***

**ESPS Manuscript NO: 11126**

**Columns: Letter to the Editor**

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

Ozturk K. Antiviral treatment in ulcerative colitis

Kadir Ozturk

**Kadir Ozturk,** Department of Gastroenterology, Gulhane School of Medicine, GATA Gastroenteroloji BD, Etlik, Ankara 06010, Turkey

**Author contributions:** Ozturk K contributed to the paper.

**Correspondence to: Kadir Ozturk, MD, PhD,** Department of Gastroenterology, Gulhane School of Medicine, GATA Gastroenteroloji BD, General Tevfik Saglam Street, Etlik, Ankara 06010, Turkey. kadirozturk3041@gmail.com

**Telephone:** +90-312-3044047 **Fax:** +90-312-3044045

**Received:** May 6, 2014 **Revised:** June 29, 2014

**Accepted:** September 16, 2014

**Published online:**

**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.

© 2014 Baishideng Publishing Group Inc. All rights reserved.

**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.

Ozturk K, Antiviral treatment in patients with *cytomegalovirus* positive ulcerative colitis. *World J Gastrointest Pathophysiol* 2014; In press

**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.

**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]

**P-Reviewer:** Ahluwalia NK, El-Tawil AM, Kawasaki H, Nevels M

**S-Editor:** Ji FF **L-Editor: E-Editor:**

|  |
| --- |
| **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 0.540Gender (male/female) 4/3 3/3 0.400Extent of disease Pancolitis 6 5 0.540 Left- sided 1 1 0.540Age on diagnosis of UC, yr 35.7 ± 13.3 41.5 ± 13.3 0.530Duration of disease, yr 14.2 ± 9.3 3.5 ± 1.8 0.008Hospitalized patients 6 4 0.560Prehospitalization 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 1.000Treatment during hospitalization SC 6 3 0.400 Infliximab 1 0 1.000 Cyclosporine 3 0 0.200Timing of colonoscopy (d) 3.8 ± 2.4 2.7 ± 3.4 0.600Positive cytopathic changes on HE 2 0 0.460Hospitalization outcome Death 1 0 1.000 Colectomy 1 0 1.000Outcome 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. |