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### Letters to the editor

# The possibility of hepatitis C reactivation in COVID-19 patients treated with corticosteroids



### Dear Editor

The severe acute respiratory syndrome coronavirus- 2 (SARS-CoV-2) has led to a political, social and economic crisis of global proportions with fatal consequences. It has been hypothesized that acute respiratory distress syndrome (ARDS) caused by the cytokine storm can induce death in patients with COVID-19. Immunosuppressive drugs are often used to treat ARDS, with corticosteroids having recently emerged as one of the most common therapies for COVID-19 infection. However, the use of corticosteroids is not without a number of risks, one of which concerns the reactivation of viral infections including hepatitis C virus (HCV). Immunosuppression is one of the main factors responsible for severe HCV reactivation, and studies have shown that this can occur in patients treated with corticosteroids [1–3]. Two mechanisms are involved in the reactivation of HCV through the use of steroids: firstly, they directly enhance replication of the virus; secondly, they indirectly cause reactivation by suppressing the immune response against HCV, which, in turn, allows the virus to replicate [4].

Corticosteroid therapy can worsen the outcome of patients with chronic HCV infection by exacerbating the disease. Evidence indicates that HCV viremia increases when corticosteroids are used and returns to its previous levels when they are stopped [5,6]. Thus, corticosteroids should be avoided, if possible, in patients with HCV infection.

In conclusion, HCV screening should be implemented among all patients with COVID-19 before prescribing corticosteroids, one of the treatments of choice for COVID-19 infection.

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Somayeh Shokri Shahab Mahmoudvand\* Department of Virology, School of Medicine, Hamadan University of Medical Science, Hamadan, Iran

> \*Corresponding author. E-mail address: mahmoudvandsh100@yahoo.com (S. Mahmoudvand).