

In Response to: Corticosteroids in Non-severe COVID-19: Finding Window of Opportunity

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Keywords: Acute respiratory distress syndrome, Corticosteroids, Coronavirus disease-2019, Severe acute respiratory syndrome coronavirus 2.
Indian Journal of Critical Care Medicine (2022); 10.5005/jp-journals-10071-24139

Sir,

We appreciate the intuitive comments from our colleagues regarding our article on expert consensus statements on the use of corticosteroids in non-severe coronavirus disease-2019 (COVID-19).¹ The experts in this Delphi were against the non-selective use of corticosteroids for mild and moderate COVID-19 without evidence of disease progression. However, the dogma of severe vs non-severe COVID-19 in determining the use of corticosteroids should be appraised in light of the clinical findings and pathophysiology of COVID-19.

Inflammation is the cornerstone to the pathogenesis of COVID-19-related lung injury.² With their immunomodulatory properties, corticosteroids are a potent therapeutic in managing COVID-19. World Health Organization (WHO) living guidelines recommended no corticosteroid for managing non-severe COVID-19 with a conditional or weak recommendation.³ This recommendation was based on a subgroup analysis of an unblinded RECOVERY trial which found an increased risk of 28-day mortality [odds ratio 1.22 (95% CI 0.93–1.61)] with systemic corticosteroids in patients without oxygen.⁴ WHO also recommended considering corticosteroids if clinical condition worsens in non-severe COVID-19.³ Hence, in the ambiguity of the clinical evidence, consensus statements among a panel of experts were developed using a Delphi approach.⁵

Once the hypoxemia sets in, the delay in the initiation of corticosteroids may worsen the outcome. Predicting the disease progression needs an astute clinical assessment and combination of biochemical and imaging criteria.^{6,7} We do not recommend a single biochemical or radiological test over clinical assessment for prediction of clinical progression.

We appreciate the concern raised by the colleagues on the use of corticosteroids and the risk of COVID-19-associated mucormycosis (CAM). There are multiple reasons for invasive fungal infection with COVID-19. Diabetes mellitus (DM), irrational (prolonged or high dose) corticosteroids, and COVID-19 *per se* are proposed risk factors for CAM. Uncontrolled hyperglycemia vs controlled DM is a significant risk factor for CAM.⁸

We recommended low-dose corticosteroids for 5–10 days with periodical blood-glucose monitoring and management. In addition, there was a recommendation on continued assessment for potential warning signs.

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How to cite this article: Nasa P, Chaudhry D. In Response to: Corticosteroids in Non-severe COVID-19: Finding Window of Opportunity. *Indian J Crit Care* 2022;26(3):405.

Source of support: Nil

Conflict of interest: None

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