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Authors' response

We appreciate Gupta *et al*[1] for their keen interest, valuable comments and critical reading of our article[1].

As the number of COVID-19 cases increases across the globe, further evidence for the use of specific medications for its management comes to light. Remdesivir has been shown to be superior to placebo in shortening the time to recovery in adults hospitalized with COVID-19 pneumonia with hypoxia[2]. We agree with Gupta and colleagues[1] regarding the benefit of steroid use in the management of COVID-19 with improved mortality established by the RECOVERY trial[3]. Hydroxychloroquine (HCQ) does not seem to provide any significant benefit in the management of COVID-19. The SOLIDARITY trial conducted by the WHO discontinued both HCQ and lopinavir/ritonavir arms in view of the little or no reduction in the mortality benefit seen with these agents in hospitalized COVID-19 patients[4]. The role of interleukin-6 (IL-6) blockers in severe COVID-19 appears to be controversial. A recent press report by the Roche's COVACTA trial investigators stated that IL-6 blockade by tocilizumab did not improve pulmonary status or mortality in patients with severe COVID-19[5]. Tocilizumab, an IL-6 inhibitor, is also associated with increased risk of infections. Another report showed a similar outcome with sarilumab, another IL-6 inhibitor[6]. These reports are yet to be published in peer-reviewed literature but should caution against the widespread use of tocilizumab.

We appreciate the authors' efforts to highlight the novel multisystem inflammatory syndrome (MIS) in children. This rare multisystem disorder manifests about 2-4 wk after exposure to COVID-19, suggesting a dysregulated immune response underlying it. However, there are some concerns. The

current case definitions, both by the WHO and the Centers for Disease Control and Prevention, require careful consideration of alternative aetiologies such as sepsis or toxic shock syndrome, which can closely mimic many of the manifestations mentioned in the definitions. Atypical presentations such as MIS seem to be rare events of a large-scale SARS-CoV-2 transmission in the community and are less described in areas with limited transmission. Furthermore, the exposure to SARS-CoV-2 will be difficult to determine in many centres as polymerase chain reaction may be negative at the time of presentation with MIS which occurs 2-4 wk after the exposure to the virus[7]. Although the antibodies to SARS-CoV-2 may be positive, it may be an unreliable marker during a pandemic. The current case definitions likely to underestimate the true burden of MIS, as less severe presentations will not satisfy the criteria for diagnosis. The therapeutic strategies for MIS are still evolving, and more data are needed to fully characterize, diagnose and treat this enigmatic syndrome.

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