

**LETTER TO THE EDITOR**

# Comment on "Chorea as a Presentation of SARS-CoV-2 Encephalitis: A Clinical Case Report"

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Dear Editor,

I was very interested to read the article by Hassan et al.<sup>1</sup> reporting chorea as a complication of COVID-19, as this movement disorder has not been previously correlated with this condition, to the best of my knowledge. However, I was disappointed to see that the video illustrated what appeared to be multifocal myoclonus. Myoclonus has been quite widely documented as one of the major movement disorder manifestations of cerebral involvement of SARS-CoV-2 infection.<sup>2</sup> This phenomenon may be related not only to hypoxia but also to generalized metabolic factors.

There can be some overlap in the appearance of these two hyperkinetic, irregular movement disorders, and electrophysiological testing is occasionally required to distinguish the two. However, I would argue that the rapid, jerky movements seen in the video strongly suggest myoclonus. I could not tell from the report, but it appeared that the movements were increased with volitional movement, which is characteristic of myoclonus, rather than chorea. The correct identification of the movement disorder is important, as it has implications for pharmacotherapeutic management; in the case of myoclonus, levetiracetam or benzodiazepines<sup>2</sup> are prescribed rather than the dopamine D2-receptor-blocking agents used in this case.

The underlying mechanism(s) for the generation of myoclonus in patients with SARS-CoV-2 infection are likely to be multifactorial and related to the underlying infectious process;<sup>3-5</sup> thus, res-

olution of the movement disorder is likely to parallel general medical recovery.

**Ethics Statement**

Not applicable.

**Conflicts of Interest**

The author has no financial conflicts of interest.

**Funding Statement**

None.

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