Letter to the editor: Neuroleptic malignant syndrome in COVID-19 patients by Soh et al

We read with great interest the recent article by Soh et al. detailing two cases of Neuroleptic Malignant Syndrome (NMS) in COVID-19 patients being treated with favipiravir in Tokyo [1]. We recently published the first case report of NMS in a COVID-19 patient in Los Angeles [2]. Although our patient did not receive favipiravir, he had a history of haloperidol decanoate administration three weeks prior to his presentation. Neurologic symptoms including skeletal muscle injury have been observed in a notable percentage of COVID-19 patients [3]. It has been proposed that some of these symptoms are caused by the SARS-CoV-2 virus using ACE2 receptors found in the nervous system [3]. Additionally, autopsy reports of COVID-19 patients have shown hyperemic and edematous brain tissue with evidence of neuronal degeneration [3]. As a result, COVID-19 infection could make patients, especially those with other risk factors, more susceptible to the development of NMS. One possible mechanism for this phenomenon may be the destabilization of peripheral muscle cell membranes.

References