In a retrospective study of 50 patients with COVID-19, who were admitted at a hospital in the USA from 17 March 2020 to 18 May 2020, two men were described, of whom, a 41-year-old man developed myoclonus while receiving sedation with propofol, fentanyl, midazolam, morphine, hydromorphone, ketamine and dexmedetomidine, and a 78-year-old man developed serotonin syndrome while receiving fentanyl [dosages, routes and duration of treatments to reactions onsets not stated; not all outcomes stated].

A 41-year-old man was admitted with respiratory disorder, gastrointestinal disorder, anosmia and headache. COVID-19 was diagnosed based on RT-PCR test result. He received sedation with propofol, fentanyl, midazolam, morphine, hydromorphone, ketamine and dexmedetomidine. He was also needed ventilation. During the treatment, he developed abnormal movements. Brain MRI revealed subtle cortical FLAIR signal without acute stroke. He was diagnosed with sedation related myoclonus. Therefore, the sedation and ventilation were weaned. Subsequently, he was discharged.

A 78-year-old man, who was admitted with respiratory disorder, was tested positive for COVID-19. He also had a history of cancer. He started receiving sedation with propofol, midazolam, dexmedetomidine and high-doses fentanyl. He also received mechanical ventilation. The fentanyl was administered for ventilator synchrony. During the treatment, he developed abnormal high-amplitude non-rhythmic movements of the lower extremities. The movements were exacerbated by stimulation with accompanying ocular clonus, fever and hypertension. He was diagnosed with fentanyl related serotonin syndrome. Therefore, the fentanyl treatment was discontinued. Consequently, the movements were resolved. Subsequently he was discharged to an acute inpatient rehabilitation.

Clark JR, et al. Abnormal movements in hospitalized COVID-19 patients: A case series. Journal of the Neurological Sciences 423: 15 Apr 2021. Available from: URL: http://doi.org/10.1016/j.jns.2021.117377