



Editorial Notes on the Neurological Manifestations and Complications of COVID-19

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The coronavirus pandemic has overwhelmed the health scene in almost all world countries. Neurological events and complications are common in cases suffering from COVID-19. Several patients with neurological manifestations are reported in addition to the respiratory diseases. This covid 19 disease is mainly due to coronavirus which is known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

The clinical features seem to be due to multi-factor model which is a mixture of the influence of direct viral infections, complications of systemic disease, and/or inflammation of the nervous system and blood vessels. SARS-CoV-2 infection presented distinguishing neurological neurotropism in most cases. It is assessed that about 25 % of patients with Covid- 19 infection have one or more neurological features. The spectrum of these neurological characteristics involves both the central and peripheral nervous systems. Loss of taste and smell, headache, dizziness, Guillain-Barre syndrome, seizures, stroke, and encephalitis have been recorded as neurological characteristics as a result of SARS-CoV-2 infection. The high incidence of neurological sequelae together with the wide spectrum of symptoms was of great concern. Some previous studies suggest that this may be related to an impaired brain-lung- brain axis, that enables the induction of brain injury by concurrent lung injury. The central nervous system may also be affected by the irresistible cytokine storm known to be the hallmark of Covid-19 pathogenicity. Dysregulation of blood pressure, hypoxia, and thrombotic complications may be involved also as contributing factors.

The new emerged COVID-19, has presented firstly by Acute respiratory disorder, resulted in acute respiratory failure, may require ICU care, Mechanical ventilation support, sometimes com-

plicated by severe ARDS, or even sudden death, but later on with consequent wide international spread of COVID-19, a lot of others different manifestations and complications of COVID-19 were reported consequently throughout the world, including, hematologic, gastro-intestinal, cardiac, renal, dermatologic, neurological, and psychiatric disorders.

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