

Neurological manifestations of COVID-19; A narrative review

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Abstract

Background: Many studies done during this pandemic revealed several neurological manifestations related to coronavirus disease 2019 or COVID 19 infection. The aim of this narrative review is to discuss the neurological manifestations and complications of COVID-19 disease. Methods: Data were retrieved from: PubMed, Scopus, Science direct in addition to manual search using Google scholar from December 2019–May 2020. Keywords were used in the search such as COVID-19; Neurological manifestations; Cranial nerves; Motor system. Results: Neurological manifestations and complications are common and increase with the severity of the respiratory involvement . It ranges from 34% to reach 80% in some studies. It involves the central and peripheral nervous system leading to cranial nerves palsies and limbs paralysis. Conclusion: Neurological complications of COVID-19 is an important determinant for the severity and mortality of patients .The virus can lead to Headache, Convulsion, Mental and Psychic changes , Delirium and Insomnia (the most affected cranial nerve is the olfactory nerve leading to anosmia), Stroke (mainly infarction), Encephalitis, Meningitis , Guillain-Barre Syndrome ,Relapse of Multiple Sclerosis and Transverse Myelitis.

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