

Post-COVID 19 neurological disorder: Implications for sequelae's treatment

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Introduction:

A non-systematic review of the literature was carried out in PubMed and Science Direct databases, using the keywords "Post-acute COVID-19 syndrome"; "Neurological complications"; "Neurologic Manifestations" "COVID-19" and "Rehabilitation", as well as synonyms, which were combined with the operators "AND" and "OR".

Objectives: Describe the implications of post-COVID syndrome due to neurological sequelae including treatment and the differences that may exist between this group of patients and those who present these events not associated with COVID-19..

Results: The COVID-19 viral causative agent, SARS-CoV-2, has a high affinity for human angiotensin-converting enzyme 2 receptor on type II pneumocytes. This receptor is also expressed in neurons and glial cells. Based on the foregoing and other not so clear mechanisms, it is stated that SARS-CoV-2 has tropism for the nervous system, being evident through the neurological manifestations observed in patients with mild, moderate and severe phenotype of the disease such as anosmia, ageusia, headache, cerebrovascular accidents, Guillain-Barré syndrome, seizures, and encephalopathy. This can generate severe sequelae and even fatal outcomes in those affected.

Conclusions: Neurological complications caused by COVID-19 are frequent and represent a risk that compromises the functional capacity and the life of patients. The suspicion of these conditions, the strict control of metabolic alterations and cardiovascular risk factors, the effective and safe treatment of these entities, are a current challenge throughout the pandemic. The rehabilitation process in these patients is a challenge. This is due to the limitations generated by multi-organ damage, as well as risk of brain death.