

Headache in Covid-19 Era

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Abstract:

Since December 2019, the time when the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was spotted, numerous reports have been published on COVID-19 and its neuroinvasion, reviewing various aspects of the virus. A growing number of reports have reported headache as a common neurological manifestation of COVID-19.

However, although there are a number of hypotheses regarding the association between headache and the coronavirus, there is no solid evidence confirming the mechanism and features of headache in COVID-19. Headache could be due to meningeal inflammation as the result of cytokine release or might be due to the less common complication of cerebrovascular events due to endothelial damage and hypercoagulability state.

Apart from the headache in association of Covid-19 infection, there are increased number of headache sufferers in Covid-19 eras due to the changing of life style and prolonged use of electronic devices.

In this review, the headaches reported in previous studies are classified and their possible pathogenic mechanisms are outlined. To accomplish this objective, various types of headache are classified and their patterns according to ICHD-3 diagnostic criteria are outlined, including: headache attributed to systemic viral infection, viral meningitis or encephalitis, non-infectious inflammatory intracranial disease, hypoxia and/or hypercapnia, cranial or cervical vascular disorder, increased cerebrospinal fluid (CSF) pressure, refractive error, external-compression headache, and cough headache.

Furthermore, persistent headache after the recovery of the disease are discussed.

This review may suggest a practical approach to classification, diagnosis, and management of COVID-19-attributed headache.