

New onset / changes in characteristics and patterns of headache during Covid19 pandemic

Dr. Fatemeh Namakian,

Department of Neurology, Sina Hospital, Tehran University of Medical Science, Tehran, Iran



Background: Headache is a frequent symptom of COVID-19, and understanding its management is important for health-care professionals involved in treating the disease.

Therefore, we explain the most remarkable findings concerning headache secondary to COVID-19, specifically focusing on epidemiology, characteristics, pathophysiology, and treatments.

Recent Findings: The real prevalence of headache as a symptom of COVID-19 is ranging from 10 to 70%. The headache usually begins early in the symptomatic phase, is bilateral, moderate to severe, and has a similar pattern to tension-type headache.

All studies found the migraine pattern and the tension-type headache pattern to be frequent patterns. This finding suggests that a likely pathophysiological mechanism is the activation of the trigeminovascular system. SARS-CoV-2 neurotropism can occur by trans-synaptic invasion through the olfactory route from the nasal cavity, leading to anosmia which has been associated with headache. However, other mechanisms such as brain vessels inflammation due to SARS-CoV-2 damage to the endothelium or systemic inflammation in the context of cytokine storm cannot be ruled out. Interestingly, headache has been associated with lower COVID-19 mortality.

Common analgesics and nonsteroidal anti-inflammatory drugs are the most commonly used drugs for headache in the acute phase of COVID-19.

Summary: Studies show that investigating COVID-19 headache represents an opportunity not only to better understand COVID-19 in general but also to advance in the knowledge of both secondary and primary headaches.