13. HEADACHE – THE CONSEQUENCE OF COVID-19

Author: Ursu Anastasia

Scientific adviser: Ion Moldovanu, PhD, Professor, Department of Neurology No. 1, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Headache is one of the most common neurological symptoms seen in patients with COVID-19, which drastically decreases the quality of life. It can be installed de novo, with a worsening of the pre-existing primary or secondary headache.

Aim of study. Description of clinical features of headache in patients with COVID-19, reveal of the typical clinical pattern.

Methods and materials. For this review, various sources (5 cross-sectional, 1 retrospective, 1 case-control, 1 descriptive survey study, and 2 meta-analysis), published in the last two years, were selected from PubMed, Google Scholar, Elsevier scientific databases. Data were analysed according to the following criteria: gender; pain location, character, severity, progression; associated symptoms and history of pre-existing headache.

Results. A review of several studies found that women are more likely to develop COVID-19 headaches, although men are more likely to be infected. The most typical headache location has been shown to be holocranial or bilateral frontal. The main character of the headaches was the oppressive one. Most of the patients had mild to moderate pain severity, with VAS data ranging from 6 to 7.5 points. It is noteworthy that men present more severe pain attacks than women. This may be due to the higher number of comorbidities among male patients. According to the studies, headache mainly resolved in the first month after COVID-19, and in 8-15% - in the first 6 months after infection, indicating a tendency towards chronicity. Typical associated symptoms accompanying headache in COVID-19 are nausea, vomiting, photo- and phonophobia, the most common being nausea and photophobia. Patients with a history of tension-type headache or migraine showed a greater tendency to develop headache in COVID-19. These patients also often experience a change in the clinical pattern of headache, with headache becoming more severe, with longer, more frequent attacks and a tendency towards chronicity. However, the absence of headache in the history does not exclude the possibility of developing chronic headache post-COVID-19.

Conclusion. 1. Headache intensity in most of the described cases ranged from mild to moderate, frontal or holocranial with pressure sensation, without nausea, vomiting, phono- or photophobia. These features might suggest a phenotypic classification of tension-type headache according to ICHD-3. 2. Two studies with mostly female participants showed that the typical clinical headache pattern following COVID-19 was the migraine with pulsatile pain character and association of photo- and phonophobia. These data can be explained by the fact that migraine is a predominant type of primary headache among female patients. Further investigation of the gender-dependent influence of COVID-19 is needed for clarification.