COMPLICATIONS OF COVID-19 FROM THE CENTRAL AND PERIPHERAL NERVOUS SYSTEM

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Annotation. Covid-19 disease remains the most important problem in recent years. Therefore, it is necessary to study all possible clinical manifestations of this disease from all systems of the human body. Complications from the nervous system pose a great threat to the life and health of the patient.

Keywords. Complications of Covid-19, acute hemorrhagic encephalopathy, acute meningoencephalitis, cranial mononeuropathies, avegesia.

To determine possible complications from the nervous system, an analysis of clinical cases of patients with Covid-19, published in scientific publications, was performed. Acute meningoencephalitis. The first case was described in a 24-year-old patient in Wuhan [1], there was a fever that could not be stopped by antipyretics. A headache developed, which after 9 days was replaced by an encephalitic reaction in the form of transient bilateral tonic-clonic seizures and coma. Neurological examination revealed a stiff neck. CSF analysis revealed increased cerebrospinal fluid pressure (320 mmH2O), cytosis 12 in μl (10 - mononuclear cells), positive test for Covid-19.

Acute hemorrhagic encephalopathy. A 48-year-old patient with a positive test for covid-19 was hospitalized with fever and respiratory failure. After 7 days, he suffered shock, with changes in blood pressure ranging from 70/30 to 180/90. A change in mental status was also observed. CT showed cytotoxic bilateral edema in the posterior parieto-occipital regions with subcortical localization, hemorrhage on

the right side. MRI of the brain confirmed the diagnosis of acute hemorrhagic posterior reversible encephalopathy A.M. Franceschi, 2020 [2],

Cranial mononeuropathies. The main symptom of Covid-19 is loss of smell. The exact cause of anosmia has not yet been clarified, but studies have noted a difference between anosmia in Covid-19 and other acute infectious diseases. In ARVI, the cause of loss of smell is swelling of the mucous membrane, while in Covid-19 this is associated with damage to the auxiliary cells that surround the olfactory receptor cells, which leads to disruption of the functioning of the olfactory nerves. The neurogenic route of penetration of the virus is also described, during which the migration of the virus towards the olfactory bulb and pear-shaped cortex is observed. [3]

Avegesia is also a common symptom of coronavirus infection. In the case of ARVI, loss of taste occurs due to loss of smell. In the case of Covid-19, the loss of taste is associated with damage to the nerve endings of the facial and glossopharyngeal nerves. Because of this, a distortion of taste reception is possible, which does not occur with a common cold.

Based on the analysis of the above cases, it can be seen that coronavirus infection has severe complications from the nervous system and it is necessary to pay due attention to the identification and treatment of these complications.

LIST OF LITERATURE

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