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AMALIY KONFERENSIYASI**

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FANI: INSON UCHUN
INNOVATSION G'OYA
VA YECHIMLAR**

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Annotatsiya

Mazkur to'plamda "Yangi davr ilm-fani: inson uchun innovatsion g'oya va yechimlar" mavzusidagi XIX Respublika ilmiy-amaliy konferensiyasi materiallari jamlangan. Nashrda respublikaning turli oliy ta'lim muassasalari, ilmiy markazlari va amaliyotchi mutaxassislari tomonidan tayyorlangan maqolalar o'rin olgan bo'lib, ular ijtimoiy-gumanitar, tabiiy, texnik va yuridik fanlarning dolzarb muammolari va ularning innovatsion yechimlariga bag'ishlangan.

Ushbu nashr ilmiy izlanuvchilar, oliy ta'lim o'qituvchilari, doktorantlar va soha mutaxassislari uchun foydali qo'llanma bo'lib xizmat qiladi.

Kalit so'zlar: ilmiy-amaliy konferensiya, innovatsion yondashuv, zamonaviy fan, fanlararo integratsiya, ilmiy-tadqiqot, nazariya va amaliyot, ilmiy hamkorlik.

Barcha huquqlar himoyalangan.

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TIBBIYOT FANLARI

CORRELATION SIGNS OF CLINICAL COURSE AND DIAGNOSTIC FEATURES OF CRANIAL POLYNEUROPATHIES AFTER COVID-19 INFECTION

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Annotation. This study focuses on the clinical course and diagnostic features of cranial polyneuropathy in patients following COVID-19 infection. A total of 30 patients aged 18–60 years were examined. Clinical, neurological, and laboratory investigations were performed. Changes in leukocyte, lymphocyte, platelet, thrombocrit, and D-dimer levels were observed in the studied patients. These changes were associated with a prolonged course of the disease, delayed recovery, and persistent focal neurological symptoms. The results emphasize the importance of clinical and laboratory assessment in patients with post-COVID cranial polyneuropathy.

Keywords: COVID-19, cranial polyneuropathy, cranial nerves, neurological complications, post-COVID syndrome, peripheral nervous system, neurological symptoms, D-dimer, lymphocytes, thrombocytes.

COVID-19 INFEKSIYASIDAN KEYIN RIVOJLANGAN KRANIAL POLINEVROPATIYALARNING KLINIK KECHISHI VA DIAGNOSTIK XUSUSIYATLARI O'RTASIDAGI KORRELYATSION BELGILAR

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O'zbekiston Respublikasi Ichki ishlar vazirligi
Markaziy gospitali katta nevrolog, katta serjant

Annotatsiya. Ushbu tadqiqot COVID-19 infeksiyasini boshdan kechirgan bemorlarda kranial polinevropatiyaning klinik kechishi va diagnostik xususiyatlarini o'rganishga bag'ishlangan. Tadqiqotda 18–60 yoshdagi jami 30 nafar bemor tekshirildi. Klinik, nevrologik va laborator tekshiruvlar o'tkazildi. Tekshirilgan bemorlarda leykotsitlar, limfotsitlar, trombotsitlar, trombokrit va D-dimer ko'rsatkichlarida o'zgarishlar kuzatildi. Mazkur o'zgarishlar kasallikning uzoq davom etishi, tiklanish jarayonining kechikishi va o'choqli nevrologik simptomlarning saqlanib qolishi bilan bog'liq bo'lgan. Olingan natijalar post-COVID kranial polinevropatiyasi bo'lgan bemorlarni klinik va laborator jihatdan baholash muhimligini ko'rsatadi.

Kalit so'zlar: COVID-19, kranial polinevropatiya, bosh miya nervlari, nevrologik asoratlar, post-COVID sindromi, periferik nerv tizimi, nevrologik simptomlar, D-dimer, limfotsitlar, trombotsitlar.

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Introduction. Currently, a significant proportion of patients with COVID-19 experience various neurological disorders during the acute stage of infection and in the post-COVID period. Neurological complications associated with COVID-19 may include headache, dizziness, cognitive and sleep disturbances, olfactory and gustatory dysfunctions, encephalopathy, encephalomyelitis, ischemic brain injury, polyneuropathy, and other disorders of the central and peripheral nervous systems. among these complications, cranial nerve involvement and cranial polyneuropathy are of particular clinical interest because they may result in persistent

sensory, motor, autonomic, visual, auditory, olfactory, and gustatory dysfunctions. Several foreign studies have reported that damage to different cranial nerves may occur in patients with COVID-19 at various time intervals during and after the infection. The development of cranial polyneuropathy may be associated with immune-mediated mechanisms, systemic inflammation, microvascular dysfunction, hypoxia, alterations in coagulation, and other pathophysiological processes associated with SARS-CoV-2 infection. However, available clinical and laboratory data are still insufficient for a comprehensive assessment of the clinical course, diagnostic features, and laboratory changes in patients with post-COVID cranial polyneuropathy. In this regard, further study of the problem is relevant for improving early diagnosis, monitoring disease progression, assessing recovery dynamics, and developing appropriate rehabilitation approaches. The purpose of this study was to investigate the clinical course and diagnostic features of cranial nerve damage in patients following COVID-19 infection and to determine the relationship between clinical neurological manifestations and selected laboratory parameters[1].

The study was conducted at the Department of Neurorehabilitation and the ENT Department of the Center for the Development of Professional Qualifications of Tashkent Medical Workers. a total of 30 patients aged 18–60 years with cranial polyneuropathy after COVID-19 infection were included in the study. among them, 22 were women (73.3%) and 8 were men (26.7%). all patients underwent a comprehensive clinical and neurological examination. The history of COVID-19 infection, the duration and severity of the previous infection, the onset and duration of neurological symptoms, and the persistence of focal neurological manifestations were analyzed. General blood analysis, selected immunological parameters, and coagulation-related indicators were also assessed.

Particular attention was paid to leukocyte, lymphocyte, platelet, thrombocrit, and D-dimer levels. The analysis of laboratory parameters revealed a number of changes in the studied patients. Leukocytosis was detected in 15 patients (50%), while leukocytopenia was observed in 2 patients (6.67%). These findings indicated alterations in the leukocyte response in a significant proportion of patients. Lymphocyte analysis revealed lymphocytosis in 27 patients (90%), which represented the most frequently observed abnormality among the studied immunological parameters. Platelet analysis showed thrombocytosis in 18 patients (60%). Thrombocrit analysis demonstrated an increased value in 20 patients (66.67%). The observed changes in platelet count and thrombocrit may indicate alterations in hemostatic and microcirculatory processes, which are potentially relevant to the pathophysiology of post-COVID neurological complications. D-dimer analysis revealed that in 8 patients (26.7%) the level was 250 ng/ml or below, while in 20 patients (66.7%) it was between 250 ng/ml and below 500 ng/ml. In 2 patients (6.67%), the D-dimer level was above the specified reference value. These findings may reflect persistent alterations in coagulation and fibrinolytic activity after COVID-19 infection[2].

During the clinical assessment, it was observed that patients with more pronounced changes in the investigated laboratory parameters tended to have a more prolonged clinical course, slower recovery, and persistent focal neurological symptoms. The neurological manifestations varied depending on the cranial nerves involved and may include sensory, motor, visual, auditory, olfactory, and other dysfunctions. In a number of patients, neurological symptoms persisted even after the resolution of the acute phase of COVID-19, which may

indicate a prolonged recovery process in the peripheral nervous system. The identification of associations between clinical symptoms and laboratory abnormalities emphasizes the importance of a comprehensive approach to the diagnosis and monitoring of patients with post-COVID cranial polyneuropathy[3].

The combined assessment of leukocyte, lymphocyte, platelet, thrombocrit, and D-dimer levels may provide additional information about the systemic state of the patient and the potential mechanisms contributing to persistent neurological symptoms. The results of the study demonstrated that alterations in leukocyte, lymphocyte, platelet, thrombocrit, and D-dimer parameters were frequently observed in patients with cranial polyneuropathy following COVID-19 infection. These laboratory changes were associated with a prolonged clinical course, delayed recovery, and persistence of focal neurological symptoms[4].

Conclusion.

The findings suggest that clinical neurological examination combined with laboratory evaluation may be useful in the comprehensive assessment of patients with post-COVID cranial polyneuropathy. Further studies involving larger groups of patients and longer periods of follow-up are needed to determine the long-term clinical significance of these laboratory changes, to assess the mechanisms of cranial nerve involvement, and to develop more precise diagnostic and prognostic approaches for patients with post-COVID neurological complications.

Adabiyotlar/Literatura/References:

1. Herman C., Mayer K., Sarwal A. COVID-19 associated cranial nerve neuropathy: A systematic review // *Journal of Neurology*. – 2022. – Vol. 269. – P. 377–391.
2. Soltani S., Tabibzadeh A., Zakeri A. [et al.]. COVID-19 associated central nervous system manifestations, mental and neurological symptoms: a systematic review and meta-analysis // *Reviews in the Neurosciences*. – 2021. – Vol. 32, № 3. – P. 351–361.
3. Misra S., Kolappa K., Prasad M. [et al.]. Frequency of neurologic manifestations in COVID-19: a systematic review and meta-analysis // *Neurology*. – 2021. – Vol. 97, № 23. – P. e2269–e2281.
4. Yassin A., Nawaiseh M., Shaban A. [et al.]. Neurological manifestations and complications of coronavirus disease 2019 (COVID-19): a systematic review and meta-analysis // *BMC Neurology*. – 2021. – Vol. 21, № 1. – Art. 138.
5. Collantes M. E. V., Espiritu A. I., Sy M. C. C. [et al.]. Neurological manifestations in COVID-19 infection: a systematic review and meta-analysis // *Canadian Journal of Neurological Sciences*. – 2021. – Vol. 48, № 1. – P. 66–76.
6. Lewis A., Frontera J., Placantonakis D. G. Cerebrospinal fluid from COVID-19 patients with olfactory/gustatory dysfunction: A review // *Clinical Neurology and Neurosurgery*. – 2021. – Vol. 207. – Art. 106760.

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