



CORRECTION OF THE PHYSIOTHERAPIST OF VEGETATIVE AND PSYCHOEMOTIONAL DYSFUNCTION OBSERVED IN POSTKVIT SYNDROME

Akhrorova Shakhlo Batirovna ,Nurullaev Nodirbek Namozovich
Abdurakhmon Iskandarovich Kurbanov ,Azizbek Sanat ugli Gayratov

nodirbek.nurullaev@mail.ru

Bukhara State Medical Institute., Uzbekistan

Annotation. Numerous studies have shown that cardiorespiratory, neurological, psychoemotional, musculoskeletal, gastrointestinal, endocrine, and other system disease symptoms can persist for extended periods of time in patients recovering from COVID-19. In the acute period of the disease, it was found that the treatment of patients with a number of drugs can provoke the development of other diseases of various organ systems. In such cases, it is advisable to restore the complications of the disease, that is, postcovid syndrome, not only with medication, but also using modern physiotherapeutic methods, to restore the general condition of patients, to support the psychoemotional state. In this regard, the development and implementation of rehabilitation programs for patients of this category is relevant.

Keywords: post-covid syndrome, treatment, psychoemotional, vegetative

The literature highlights the results of various scientific studies on whether deep brain structures can be affected using physical methods such as magnetic wave stimulation to improve cranial function and achieve good results.

In postcovid syndrome, it has been proven that the affected organ system suffers deeply not only from the respiratory system, but also from various areas of the nervous system. Today, the problems of developing measures for the elimination of patients not from an acute respiratory disease, but how to reduce its complications, the non-long duration of postcovid syndrome, are considered an urgent issue facing doctors.

Research objective. Correction and treatment effect analysis of psychoemotional and vegetative dysfunction in postcovid syndrome using magnetic wave stimulation (TMS).

Research materials and methods. The study examined 358 patients with covid infection who had postcovid syndrome between the ages of 16 and 60. The highest percentage in this was patients from 4 to 12 weeks of illness. The minimum was more than 6 months of illness patients were observed. PS began to regress reliably as time began to decrease. But even after 6 months, it was found that the symptoms of the disease were maintained. When we analyze all the observed symptoms schematically, the damage to psychoemotional status made up the largest share. Matinee damage was found in 22.1% of cases and peripheral nervous system damage in 13.4% of cases. 36.3% of patients (130) were male and 63.7% (228) were female. The median age was 38.9 ± 1.7 . Of these, 238 formed a core group and 20 formed a control group. Patients in the core group received magnetic wave stimulation treatment along with medications included in the standard treatment. Patients in the control group, on the other hand, were treated only with medication. Among those examined, all patients were on-site, and the main group of patients were assigned a 10-day treatment of pastintensive (0.3 TL), high frequency (30 Hz) TMS in conjunction with the standard treatment. The treatment was carried out in the left prefrontal area for 5-10 minutes. Initially, all patients underwent a general clinical and neurological examination. A number of tests and tests were carried out with the aim of in-depth examination of the vegetative nervous system and psychoemotional state of all patients. In the evaluation of vegetative tone (Vt), the Giyyom – Wayne table, a Danin – Ashner test, was used to assess vegetative reactivity (VR). The examination of the provision of vegetative activity

was carried out by monitoring the blood pressure and pulse indicators in a sitting and standing position (orthostatic sinama).

In an effort to investigate changes in the psychoemotional sphere, anxiety and depression levels were studied in the same group of patients who experienced coronavirus infection at different clinical severity levels. Anxiety disorders can be found in the Hamilton anxiety Rating Scale (po M. Hamilton, 1959; I.A.Bevz)), while depressive disorders are found in Hamilton's depression assessment scale (Hamilton Depression Rating Scale (po M. Hamilton, 1959; I.A.Bevz, 1999)).

Research results. Initially, we were able to determine the level of anxiety and depression symptoms among patients using Hamilton tests. Patients with a significant level of anxiety among patients were 106. Of these, 86 were treated with standard treatment and magnetic flux stimulation (TMS). 20 patients were followed as a control group. When the main group of patients were examined after TMS treatment, no signs of anxiety were observed at 89.5 ± 1.23 of them. In 10.4 ± 0.8 patients, however, signs of anxiety expressed at mild to urtic levels were reported. Recovered patients in the control group were 75 ± 0.71 . Anxiety symptoms were significantly preserved in 25 ± 1.5 patients. The retention of anxiety symptoms varied in a reliable ratio ($R0.01$) between the main group and the control group patients (Figure 1). The depressive episode was observed in 125 out of 231 patients. We also studied patients with depressive symptoms in 2 groups. In this, the main group of patients was 105 and the control patients were 20. Among patients receiving TMS treatment, the regression of depressive episodes showed bori, while 16.2 ± 0.48 patients showed mild symptoms of depression. At 30 ± 1.3 of the patients in the control group, we still witnessed the observation of depressive states. This indicates a significant reliability difference among patients who have not recovered from the core group and control group ($R0.05$).

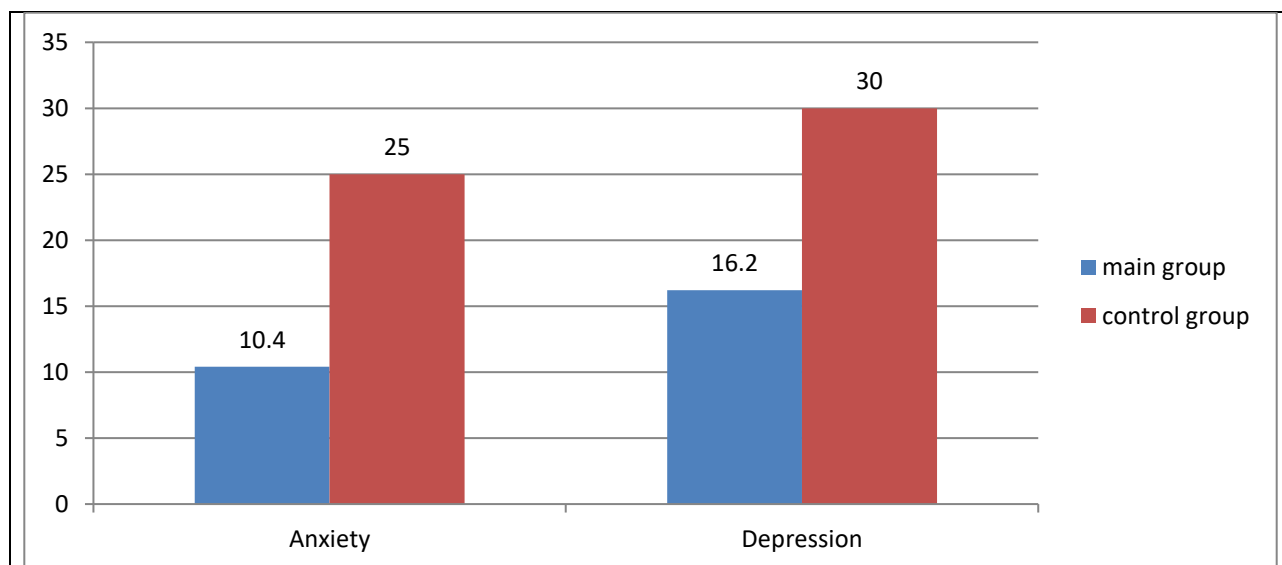


Figure 1. In patients suffering from anxiety and depressive disorders, TMS is a more effective treatment.

Taking into account the importance of the activity of the Segmental and Supra-segment apparatus of the brain in the origin of psychoemotional dysfunction in all patients, we examined the degree of vegetative tone, vegetative reaction and vegetative supply of the autonomic nervous system. In our scientific work, the PS had been found to have a higher sympathetic tone when the vegetative tone was examined. An in-depth examination of the vegetative activity of patients showed that the more vividly expressed the symptoms of PS, the more sympathetic tone prevails. Such symptoms often manifested themselves in the form of sympathoadrenal crises.

Dysfunction of the provision of vegetative activity was manifested by the presence of changes in the heart rate of patients when performing orthoclinostatic synapses. The vegetative reaction showed the superiority of ham sympathicus.

Thus, when 231 patients were tested for vegetative activity, 160 were diagnosed with sympathetic and 71 with parasympathetic malfunctions. These patients also underwent TMS treatment along with the recommendation of vegetostabilizers. Of the 160 patients with sympathetic dominance observed, 140 were isolated as the primary group and the control group was made up of 20 patients with sympathetic nervous system dominance. They are only nootropic, with antidepressants and neuroleptics they were treated. Sympathicotonia was observed in 11.4 ± 1.8 patients in the main group when treatment was complete. Control group 20 ± 0.8 patients showed signs of sympathetic nervous system dominance. The results of the examination show that the effectiveness of the treatment is superior in patients of the main group compared to patients in the control group (Figure 2)

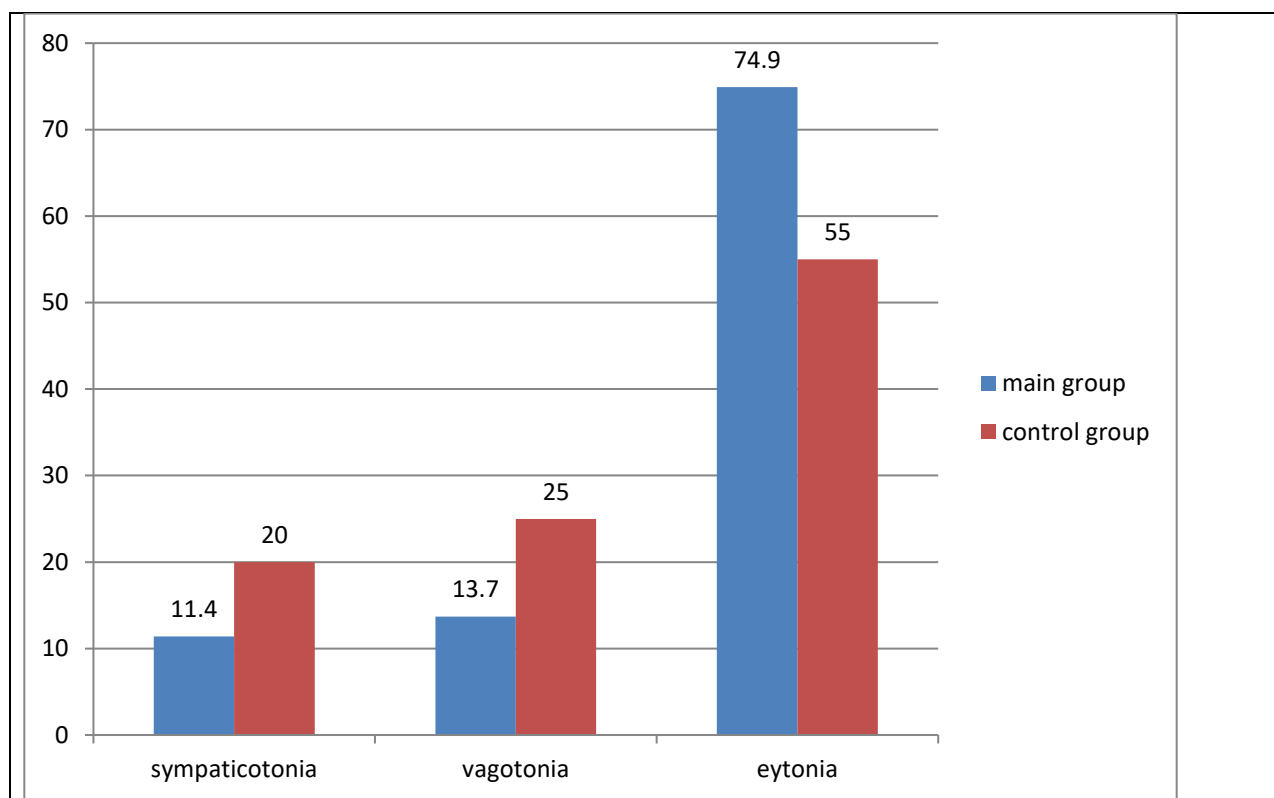


Figure 2. Indications for the effect of treatment of vegetative dysfunction with the help of TMS

Conclusion. Thus, TMS treatment is an effective method of treatment in terms of the psychoemotional state of a person, normalization of the activity of structures of the vegetative nervous system and alternation of the system of Centers for controlling the order of transfer of impulses, showing their influence on different parts of the brain. In the treatment of patients with psychoemotional and vegetative disorders in which PS is observed, the use of magnetic wave treatment in combination with a base treatment has been found to give positive results. The treatment measures offered are recommended in the treatment of PS. Magnetic wave physiotherapeutic treatment measures are effective in the correction of psychoemotional and vegetative disorders and have led to a sharp regression of symptoms in the short term. TMS and basis treatment lead to an improvement in Vegetative and psychoemotional dysfunction with the possibility of greater reliability compared to the control guru when taken together in patients with PS. Carrying out such a complex treatment reduces the neurlogic deficit by three times the recovery period.

References:

1. Badalyan L.O. Neuropathology: Uchebnyk dlya vuzov. 4-e izd. M.: Akade-miya, 2007. - 392 P.
2. Bogolepov N.N., Fokin V.F. Funktsionalnaya mejpolusharnaya asymmetry. Chrestomatiya. M.: Nauchny Mir, 2004.
3. Biller H. Prakticheskaya neurology. Diagnostics. M.: Meditsinskaya li-teratura, 2008.-512 P.
4. Vegetativnie rasstroystva: pod Red. A.M.Veyna. M.: MIO. 2003. - 361s
5. Wayne, A. M. Bolevie syndrome V neurologicheskoy praktike. M.: MED press, 1999. S. 171-216.
6. Wayne A.M., Dyukova G.M., Vorobeva A.V., Danilov A.B. Panicheskie Ataki. M.: Eydos Media, 2004.
7. 3. Gordeev S.A. Primenenie metoda endogennix svyazannix s sotiyami potentialov mozga R300 dlya issledovaniya kognitivnix funktsion V norme I klinicheskoy praktike. Physiology cheloveka 2007; 33: 121-133.
8. 4. Gordeev S.A. Psychophysiologicalnoye issledovanie vnimaniya pri asteno-neuroticheskix rasstroystvax. Mejd. neurol. zhurn. 2007; 1: 78-82.
9. 5. Gorev A.S. Dynamika ritmicheskix sostavlyayutshix EEG v usloviyax relaksatsii u shkolnikov 9-10 let s razlichnoy uspezhnostyu obucheniya. Physiology cheloveka 1998; 24: 42-47
10. Golubev V.L., Wayne A.M. Neurologicheskie sindromy: rukovodstvo dlya vrachey. OOO "eydos Media" 2002. 264-282 PP.
11. Ilyuchenok I.R. Razlichia zastnykh kharakteristik EEG pri vospriyatii polojitelno-emosionalnykh, otrisatelno-emosionalnykh I neutralnykh slov. Zhurn. vissh. nerv. deyat. 1996; 46: 457-468.
12. Karlov V.A. Neurology: rukovodstvo dlya vrachey. M.: Meditsinskoye informatsionnoye agentstvo. 2002. 525-526 s
13. Nikiforov A.C., E.I. Gusev. Chastnaya neurology. M.: Geotar-Media, 2008. 768 P.
14. Nikiforov A.S., Gusev E.I. Klinicheskaya neurology: rukovodstvo dlya vrachey. M.: Media, 2009.
15. A. M. Veyna: Vegetativnie rasstroystva: klinika, diagnostika, lechenie. Meditsinskoye informatsionnoye agentstvo. 1998.
16. Tanashyan M.M., Kuznesova P.I., Raskurajev A.A. Neurologicheskie aspekty COVID-19. Zhurn. klinicheskoy I eksperimentalnoy neurologii 2020; 14 (2): 62-69.
17. Khomskaya E.D. Mozg I aktivatsiya. M.: Izd-vo MGU, 2008.
18. Carfi a, Bernabei R, Landi F, Gemelli Against COVID-19 Post-Acute Care Study Group. Persistent symptoms in patients after acute covid 19. JAMA 2020; 9. doi: 10.1001 / jama.2020.
19. Garner P. For 7 weeks I have been through a roller coaster of ill health, extreme emotions, and utter exhaustion. BMJ Apinian. 5 May 2020.

20. Greenhalgh T, Knight M, A'court C, Buxton M, Husain L. Management of post-acute covid-19 in primary care. *BMJ*2020;
21. Dr. Andrew White. A Tale of two Syndromes – POTS and MCAS (angl.).
22. Hanaoka A., Kikuchi M., Komuro R. et al. EEG coherence analysis in never-medicated patients with panic disorder. *Clin. EEG Neurosci.* 2005; 36: 42-48.
23. Hanatani T., Sumi N., Taguchi S. et al. Event-related potentials in panic disorder and generalized anxiety disorder. *Psychiatry Clin. Neurosci.* 2005; 59: 83-88
24. Sudre CH, Murray B, Varsavsky T, Graham MS, Penfold RS, Bowyer RC, Pujol JC, Klaser K, Antonelli M, Canas LS, Molteni E. Attributes and predictors of long-COVID: analysis of COVID cases and their symptoms collected by the Covid Symptoms Study App (angl.) // preprints from medRxiv: statya. — 2020. - 21 October.
25. Puntmann VO, Carerj ML, Wieters I, et al. Outcomes of cardiovascular magnetic resonance imaging in patients recently recovered from coronavirus disease 2019 (covid-19). *JAMA Cardial*2020.
26. The Effects of COVID-19 on Hypothalamus: Is it Another Face of SARS-CoV-2 That May Potentially Control the Level of COVID-19 Severity?.
27. YipingLu, MD 1 XuanxuanLi, MD 1 DaoyingGeng, MD 1 NanMei, MD 1 Pu-YehWu, PhDChu-ChungHuang, PhDTianyeJia, PhDYajingZhao, MD DongdongWang, MD AnlingXiao, MD BoYin, PhD. Cerebral Micro-Structural Changes in COVID – 19 Patients-an MRI-based 3-month Follow-up Study // *The Lancet.* — 2020.