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REHABILITATION OF PATIENTS WITH PROGRESSIVE SUPRANUCLEAR PARALYSIS

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Introduction. Progressive supranuclear paralysis is a rare sporadic degenerative disease of the central nervous system from the group of tau pathologies [1], which is based on the selective death of individual groups of neurons and glial cells as a result of the accumulation of pathological phosphorylated tau protein in them, forming neurofibrillary glomeruli and neuropilic filaments [3]. The characteristic clinical picture of the disease is determined by the unique topical distribution of degenerative lesions in the brain, in which the basal ganglia and the brain stem are most often affected, in particular the black substance, the pale ball, the subthalamic nucleus, and the dorsal the midbrain, to a lesser extent the striatum, the nuclei of the bridge and the medulla oblongata that brain, the cerebellum, the frontal cortex. The result of a degenerative process is the disorganization of all cortico striato pallido talamo frontal

circles regulating various aspects of motor, cognitive and behavioral functions, according to which the clinical picture is dominated by akinesia, rigidity, postural instability, infidelity walking disorders, oculomotor, cognitive disorders, behavioral

disorders in the form of disinhibition and apathetic manifestations. Polymorphism, severity and rapid rate of progression of manifestations of pain determine a significant decrease in the quality of life of patients and the difficulties of the rehabilitation process [5]. Rehabilitation of patients with progressive supranuclear palsy is an important aspect for maintaining the quality of life of patients at an acceptable level, despite the fact that its effectiveness has no evidence base from the point of view of evidence-based medicine due to the small number of observations.

Materials and methods. The study was conducted on the basis of neurological who of the department of the AGMI clinic. The study involved 4 patients diagnosed with progressive supranuclear palsy, 3 of them male patients, 1 female patient. The average age of patients was 62.3 years, the average duration of the disease was 4.6 years.

The patients' condition was assessed according to the following scales:

- The progressive supranuclear palsy rating scale (PSP RS, Golbe et al., 1997) [4]
- Mini Mental State Examination (MMSE) — A short scale for assessing mental status (Folstein M.F. et al., 1975) [2]
- Watch Drawing Test (Lovenstone S., Gauthier S., 2001) [2]
- Geriatric Depression Scale (Lovenstone S. et al., 2001) [2]
- Beck's questionnaire (Beck A.T. et al., 1961) [2].

Patients received levodopa therapy and symptomatic drug therapy. In addition, all patients underwent 10 sessions of complex rehabilitation measures, such as: physical therapy, kinesiotherapy, training on a stable platform, psychoteraptic correction, speech therapy correction.

Results. The average score on the PSP RS scale was 48.3 (maximum — 64, minimum — 35 points), on the MMSE scale — 22.7 (maximum — 27, minimum — 19 points), on the drawing hours test —

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6.5 (maximum — 9, minimum — 4 points), on the Geriatric depression scale — 18.5 (maximum - 24, minimum 12 points), according to Beck's questionnaire — 32.3 (maximum - 42, minimum - 22 points).

According to the PSP RS scale, motor, postural, oculomotor, pseudobulbar, moderate and mild cognitive impairment, moderate and severe depression were detected in all patients. After carrying out a complex of rehabilitation measures, a re-assessment of the patients' condition was carried out, which did not reveal significant dynamics in the motor and cognitive spheres, but showed a significant decrease in indicators on the scales of depression assessment.

In particular, when re-conducting the survey on the Geriatric scale depression average score decreased from 18.5 to 13.5, and according to the Beck questionnaire —from 32.3 to 24.5 points, which meets the criteria of mild and moderate depression. In addition, there was an improvement in the function of swallowing, phonation, speech and sleep. Statistical processing of the obtained data was not carried out due to the small sample and, as a result, the low probability of obtaining reliable data.

Conclusion. Thus, despite the lack of evidence, a multidisciplinary approach and the inclusion of rehabilitation measures in the complex therapy of patients with progressive supranuclear palsy, aimed at improving motor functions, correction of swallowing, mental status, can reduce the manifestations of affective disorders, in particular depression, improve sleep, reduce the manifestations of dysphagia and dysarthria, which in turn contributes to to increase adherence to the therapy and the quality of life of patients.

This study needs to be continued with the inclusion of more patients and evaluation scales in order to be able to conduct a detailed statistical analysis.

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