BIOPSYCHOSOCIAL FACTORS IN THE REHABILITATION OF ELDERLY PATIENTS WITH DISEASES OF THE NERVOUS SYSTEM.

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Introduction. A fall is regarded as a sudden change in the position of the body, which is accompanied by its contact with the ground with a high probability of developing injuries in old age and senility. Currently, it is believed that the fall is a preventable phenomenon with the rational organization of a complex of therapeutic and rehabilitation measures [1].

The peculiarity of the course of the disease in old age is a combination of somatic and mental changes. Emotional disorders in old age can also be associated with specific traumatic situations, such as retirement, death of peers, social lack of demand, with personality characteristics characteristic of

elderly people (viscosity, stagnation of emotional response with a tendency to fixate on negative emotions, loss of sensitivity to the nuances of interpersonal relationships) [2].

According to literature data, symptoms of anxiety and depression are observed in 25-30% of people over 65 years of age, and against the background of concomitant somatic diseases, this figure reaches 50%. In patients with neurological diseases, depression occurs in 53-86% of cases [3].

Anxiety and depressive disorders, in addition to reducing the patient's adherence to treatment, aggravate the severity of somatic symptoms, provoke complications, increase the duration of hospital stay, and affect the degree of efficiency [3].

Due to the variety of causes that form emotionally negative states of elderly people, it is necessary to develop and specify the directions of psychological impact that will be included

in the rehabilitation process and should be differentiated depending on the biopsychosocial characteristics of patients [2].

The purpose of this work was to describe and analyze the biopsychosocial characteristics of elderly patients that influence the effectiveness

of medical rehabilitation in diseases of the central nervous system.

Materials and methods. The study included patients aged 56 to 84 years (n=121) undergoing inpatient treatment in the neurological and rehabilitation departments of the ASMI clinic. The criteria for inclusion in the study were: age over 56 years, the presence of an informed

patient's consent to the study. Exclusion criteria: refusal of the patient from the study, severe somatic and neurological pathology that prevents the maintenance of an upright posture. Each patient was informed about the technique, principle and purpose of the study. The average age of patients was 72.3±3.1 years (SD=9.50).

The examination included the collection of complaints, anamnesis, neurological examination, conducting a questionnaire with the collection of data on the number of falls over the past year, indicated by the patient and his relatives, the presence of fear of falls, tests: a brief scale of assessment of mental status (MMSE), hospital scale of anxiety and depression (HADS), clinical

key equilibrium tests "Timed Up and Go", Berg scale.

As a screening test for the psychological diagnosis of coping strategies (coping mechanisms), the E.Heim stress control test was used, adapted in the laboratory of Clinical Psychology of the V. M. Bekhterev Psychoneurological Institute, under the guidance of Dr. med.

sciences of Professor L. I. Wasserman [4].

All patients underwent a stabilometric study on the device "Stabilo MBN" (Moscow) in the European installation of the feet ("heels together, socks apart") for 60 seconds. Statistical analysis was carried out in the program Statistica 6.0. Statistically significant differences were considered at a value of $p<0.05$

Results. In the clinical picture, the majority (64%) of the examined patients had vestibulo—atactic syndrome, 28% had pain syndrome, and 2% had akinetic-rigid syndrome.

Clinical examination showed correct gait only in 23% of the examined. Most of the patients had difficulty walking, 51% had gait assessed as atactic, 7% of patients used a cane.

Analyzing the number of falls over the past year, it was revealed that 14% of patients experienced more than 10 falls. The number of patients who did not experience falls was 63%, falling 1-5 times 17%. The majority (56%) of our patients experienced a slight fear of falling, in 8% the fear of falling was extremely pronounced and limited their movement and social activity.

According to the analysis of the values of the Berg scale, only 7% of patients had a high risk of falling, the average value was 43.7 (SD=5.6), which corresponds to a high risk of falls. A direct correlation was revealed between the severity of the fear of falls and the data of the Berg scale (r=0.56, p=0.001).

According to the Timed "Up and Go" test, a high risk of falling was noted in 10 (8.2%) patients, the average time was 11.05 seconds (SD=5.12), with a norm of less than 10 seconds. 43 (36%) patients met the normal indicators.

The average value of the MMSE test results was 25 points (SD=3.47), which corresponds to mild cognitive impairment.

Clinically pronounced anxiety and depression according to the hospital Anxiety and Depression Scale (HADS) was detected in 23% and 15% of patients, respectively. The "norm" (absence of reliably expressed symptoms of anxiety and depression) was detected in 34% of patients.

When analyzing E. Heim's cognitive and behavioral coping strategies, it was revealed that 49% and 34% of patients, respectively, used relatively productive variants of coping strategies that help in some situations, for example, not very significant or with little stress. In 58% of patients, maladaptive variants of emotional coping behavior were identified, which do not eliminate the stressful state,

but on the contrary, contribute to its strengthening.

After analyzing the stabilometric indicators, it was revealed that in 78% of patients, the support fell on the left leg by more than 59.26%. The average value of the Romberg coefficient was 174.49%, which corresponds to normal indicators.

With normal indicators of the area of the statokinesiogram of 37.98 sq.mm (m=3.76) with open eyes and 78.38 sq. mm (m=9.45) with closed, in our patients these values averaged 568.12 sq. mm (min=52.75, max=4102.320, SD=635.57, m=48.04), and with closed eyes - 885.74 sq. mm

(min=42.48, max=4789.23, SD=779.95, m=66.51). As can be seen from statistical calculations, all the data varied very widely. It was revealed that 31 (26%) patients have an area of atokinesiograms

we decreased when closing the eyes, which indicates an improvement in stability when visual control was turned off. The area of the statokinesiogram correlated with the number of falls (r=0.51, p=0.001) and the clinical test "Up and Go" (r=0.21, p=0.001).

Conclusion. Thus, the complex application of clinical, psychological and stabilometric studies makes it possible to identify imbalance and factors that hinder social activity and aggravate the psycho-emotional state of elderly patients. A comprehensive examination of patients can contribute to the earlier introduction of rehabilitation measures to prevent falls and improve the quality of life of this group of patients.

Literature:

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