



ANALYSIS OF COGNITIVE DYSFUNCTIONS IN THE ACUTE PERIOD OF ISCHEMIC STROKE

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Summary

80 patients with acute ischemic stroke were examined. Of the 80 patients studied, 69 (86.25%) patients had PICN according to the MoCA scale. The average number of points according to the MoCA scale was 21.71 ± 3.26 . In accordance with the results obtained, all examined patients were divided into three groups: normal, moderate cognitive disorder (MCD), severe cognitive disorder (SCD).

Key words: ischemic stroke, cognitive impairment, encephalopathy

Relevance. Over the past decade, in the USA, Canada, Western Europe, Japan, Australia and New Zealand, on average, the incidence of stroke has decreased by 7% per year. Whereas in developing countries this indicator continues to increase by 13% annually [16]. The increase in incidence is likely due to the trend of increasing the number of elderly people, the increasing prevalence of vascular risk factors and the “rejuvenation” of the brain vascular diseases [17]. Thus, in developing countries, the incidence of stroke increased from 1990 to 2013 among the working population - people aged 20-64 [20]. It is worth noting that at present There is a favorable trend towards a decrease in such epidemiological indicators as mortality and disability. Disability of patients after a stroke remains one of the main factors determining the further full and independent life of the patient. In patients who have suffered a stroke, it reaches 3.2 cases per 10,000 population [20]. Of course, disability has a significant negative impact on the patient’s recovery after a stroke, his work, household and social activities. The majority of post-stroke patients with disabilities (60%) are able to care for themselves, however, 19-35% of patients need constant specialized care and become completely and dependent on caregivers [16]. Particularly dramatic is the fact that a third of patients who have suffered a stroke are people of working age, but only everyone has the opportunity to perform work again about the fourth patient. At the same time, only 8% of patients remain professionally suitable. Many patients have to switch to lighter work, which leads to financial instability, loss of life goals, and a decrease in the social role of the post-stroke patient in the family and society [90]. The frequency of development of CI is not the same in different periods of development of ischemic stroke (IS), they occur in 60% patients in the early period of cerebral infarction and in 70-85% of patients who suffered a stroke (G.N. Belskaya, S.E. Chuprina, A.A. Vorobiev et al., 2017).

Research methods. Of the 80 examined patients with stroke, 69 (86.25%) patients had cognitive impairment (CI) according to the MoCA scale.

Results. Of the 80 patients studied, 69 (86.25%) patients had PICN according to the MoCA scale. The average number of points according to the MoCA scale was 21.71 ± 3.26 . In accordance with the results obtained, all examined patients were divided into three groups:

normal, moderate cognitive disorder (MCD), severe cognitive disorder (SCD). According to the results of the study, the first group turned out to be the smallest - 11 people (13.75%). The second group included the largest number of examined patients - 55 (68.8%). The third group was represented by 14 patients (17.5%). The severity of PICN depending on age is shown in Table 1.

Table 1.

Severity of PICN in patients of different age groups

Age groups	Normal (n=11)		MCD (n=55)		SCD (n=14)	
	abs.	%	abs.	%	abs.	%
40-49 age (n=8)	5	62,5	3	37,5	0	0
50 -59 age (n=21)	4	19	15	71,4	2	9,5
60 -69 age (n=43)	2	4,65	35	81,4	6	13,9
70-79 age (n=8)	0	0	2	25	6	75

As can be seen from Table 1, in the group of patients with normal cognitive functioning, the majority of patients were aged 40-49 and 50-59 years. The largest percentage of patients with MCI was identified in the age range from 60 to 69 years (81.4%). The majority of patients with VKP belonged to the age group – 70-79 years (75%). According to the data obtained in the study, the number of patients with severe cognitive disorders increases after 70 years. A significant relationship was obtained between the severity of PICN and the age of the patient ($p < 0.05$).

Among 41 (51.3%) examined patients with an average level of education, UCR was observed in 10 (24.3%) people, UCR was determined in 24 (58.5%) patients, the remaining 7 (17.1%) - no e had changes in the cognitive sphere. The majority of people with higher education (39 (48.75%)) had MCI, their number was 31 (79.5%) people, MCI was detected in 4 (10.5%) of the patients examined, and in 4 (10.5%) patients' cognitive functions were normal. In the group of patients with intermediate education, the number of patients suffering from dementia disorders was significantly higher ($p < 0.05$). The patient's professional occupation throughout his life was one of the factors influencing the development of cognitive decline in the patient after a stroke.

According to Doppler ultrasound data of the main arteries of the head, in patients with stenotic lesions of the brachycephalic arteries, VKP according to the MoCA scale was detected significantly more often - 24.4% , in contrast to patients without stenosis - 12.1%. In the group of people with MCI, the percentage of patients with stenotic atherosclerosis of the braxeocephalic arteries (BCA) was slightly less than 66.7%, compared to patients without stenosis - 70.7%. In the group of patients with non-stenotic atherosclerosis, the proportion of patients with normal cognitive functions was higher than in the group of patients with stenosis - 10 (17.2%) and 4 (8.9%) people, respectively.

Conclusion. Thus, in the acute period of ischemic stroke, cognitive impairment according to the MoCA scale was determined in 69 (86.25%) patients. The decline in cognitive functions significantly depended on age and correlated with the presence of CHF. All patients with VKP had vascular risk factors such as hypertension, atherosclerosis of BCA and CHF. Naming



phonetically mediated associations was significantly better in patients with mental disabilities and higher education.

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