



## Features of the Course of Cognitive Dysfunction in Patients with Type II Diabetes Mellitus

**Davronova Hilola Zavkiddinovna**

Bukhara State Medical Institute, Bukhara, Uzbekistan

**Abstract:** Cerebrovascular diseases are one of the most urgent medical and socio-economic problems. In the structure of total mortality, acute cerebrovascular accidents account for 21.4%, and disability after a stroke reaches 3.2 per 10 thousand of the population, ranking first among all causes of primary disability. The most important risk factors for stroke include diabetes mellitus (DM) [Virani, S., 2020]. Currently, DM is a global medical and social threat, the growth rate of which has acquired the scale of a global epidemic. In the context of the global epidemic of DM, the problem of chronic CVD in such patients is gaining more and more medical and social significance. The presence of diabetes increases the risk of dyscirculatory encephalopathy, stroke, in all age categories, but to the greatest extent in the able-bodied population under 65 years of age. The relative risk of stroke in this case increases to 1.8-3.8 times.

**Research objective:** the influence of DM2 on the manifestation of the manifestation of chronic CVD and factors influencing neuropsychological disorders.

**Keywords:** Diabetes mellitus, cognitive dysfunction, cerebrovascular accident.

**Introduction.** High rates of mortality due to CCI, including in patients with DM, raise the question of the need to find active measures for the diagnosis, treatment and prevention of strokes in this category of patients. Features of the state of carbohydrate metabolism in patients with DM2 and CVD, their relationship with pathogenetic subtypes, severity and prognosis of stroke, the hemostasis system and the state of the vascular wall of the brachiocephalic arteries in patients with ischemic CVD remain insufficiently elucidated today.

**Objective:** the influence of DM2 on the manifestation of the manifestation of chronic CVD and factors influencing neuropsychological disorders.

**Materials and Methods:** A study was conducted on 120 patients (98 women, 22 men) with a history of stroke and suffering from diabetes mellitus. As a result of a comprehensive examination, three groups of patients were identified: a group of patients with initial manifestations of stroke, suffering from diabetes mellitus - 65 people, a control group of patients with initial manifestations of patients with a history of stroke and without diabetes mellitus - 27 people; a group of patients with a history of stroke against the background of diabetes mellitus - 28 people groups revealed primary diabetes mellitus, which was caused by chronic autoimmune thyroiditis, postoperative condition and diffuse nodular goiter. In addition to the primary manifest, primary subclinical (latent) diabetes mellitus was diagnosed.

In the differential diagnosis of patients with diabetes mellitus, in addition to the clinical picture, the results of a neuropsychological study, an assessment of the emotional state, and the results of

neuroimaging are of great importance. Many patients with a history of stroke are not diagnosed because they do not undergo a neuropsychological study that can detect existing cognitive disorders.

To identify cognitive disorders, the patients underwent a neuropsychological examination. The following tests and scales were used: a brief mental status assessment scale, a speech activity test (semantic and phonetic mediated associations); visual memory test with an assessment of free and delayed reproduction and recognition (memorization test of 5 words - B. Dubois, 2002).

Age		I group	II group	III group	Overall
The elderly (60-74 age)	n	65	27	28	77
	%	24.6 %	46.8 %	28.6%	27.5 %
middle aged people (45-59 age)	n	57	29	22	108
	%	52.8 %	26.9 %	20.3 %	38.6 %
Youngs (18-44)	n	61	24	10	95
	%	64.2 %	25.3 %	10.5 %	33.9%
Overall	n	137	89	54	280
	%	48.9 %	31.8 %	19.3 %	100.0%

**Research results:** The group of patients with initial manifestations of stroke and against the background of diabetes mellitus included 65 people (57 women, 8 men). The mean age of the patients was  $45.3 \pm 1.29$  years. The group of patients with stroke was 27 people (22 women, 5 men) with an average age of  $31.4 \pm 1.27$  years. The group of patients with stroke on the background of diabetes mellitus consisted of 28 people (26 women, 2 men). The mean age of patients in this group was  $59.7 \pm 1.38$  years. The duration of hypothyroidism in the studied groups of patients prevailed in the range from 1 to 5 years.

**Distribution of patients by age**

Groups	Sex		Older (60-74 ages)	Middle ages (45-59 ages)	Youngs (18-44 ages)	Overall
I group n=65	man	n	14	36	14	64
		%	13.6%	44.4%	42.0%	59.1%
	Women	n	8	21	27	56
		%	14.3%	37. %	48.2%	40.9%
II group n=27	Men	n	9	11	7	27
		%	40.4%	33.3%	26.3%	64.0%
	Women	n	13	10	9	32
		%	40.6%	31.3%	28.1%	36.0%
III group n=28	Man	n	11	15	5	28
		%	35.5%	48.4%	16.1%	57.4%
	Women	n	11	7	5	23
		%	47.8%	30.4%	21.7%	42.6%

According to the results of the study, cardiovascular system diseases were most common in the groups, in particular: arterial hypertension, atherosclerosis, diabetes type 2, metabolic syndromes, chronic obstructive pulmonary diseases, bronchial asthma, etc. The frequency of diseases is shown together in Table 2.3. Medications were administered according to treatment standards and clinically diagnosed, taking into account possible contraindications and adverse reactions.

**Output**

Thus, the gender index of the examined patients with diabetes was 1.37:1.0 in favor of men, the severe course of the disease was 19.3%, the average course was 31.8%, and the mild course was 48.9%. did

Young people (especially women) in group I (64.2%), middle-aged in group II (54.8%), women in group III are elderly, and among middle-aged men - 47.8% and 48.4%, respectively. According to this study, pre-diabetes comorbid background and diabetes complications were predominant as a percentage in men. no significant differences were found in the prevalence of complications due to the severity of diabetes.

### List of literature

1. Khodzhiyeva D.T. Characteristics of lesions of the pathways in moderate cognitive disorders against the background of chronic cerebral ischemia. Eurasian Union of Scientists (EUU). – 2015. - №7(16). – P. 97-98.
2. Khodzhiyeva D.T. Evoked brain potentials in patients with moderate cognitive vascular disorders of dyscirculatory encephalopathy during treatment with cytoflavin. Journal of Neurology and Psychiatry named after S.S. Korsakov. – S.Petersburg, 2013. - No. 8. – vol.113. – pp. 42-45.
3. Rakhmatova D.I. New possibilities for assessing clinical and neurological indicators of the formation of facial nerve contractures in patients with comorbid conditions // Neurology. Tashkent, 2019. -№1 (77). – P. 26
4. Akhrorova Sh.B. Experience in the treatment of patients with facial nerve neuropathies using the drug Nucleo CMF forte // Neurology of Siberia. – Novosibirsk. - 2015. - No.2. - pp. 24-27.
5. Kazakov B.Sh . Khodjiyeva D.T. Clinical and Neurological Factors in the Formation of Individual Predisposition to Covid-Associated Ischemic Stroke
6. Shamrey, V. K. Modern methods of neuroimaging in the diagnosis of depressive disorders / G. E. Trufanov, V. A. Fokin, A. Yu. Efimtsev et al. // Bulletin of the Russian Military Medical Academy. – SPb. – 2010. – №1(29). – Pp. 37-45.
7. Tulaev Mirzohid Zhalolovich. Cognitive disorders in dyscirculatory encephalopathy and their features. Journal of neurology and neurosurgery Research Volume 4, issue 1.2020.C.54-56
8. Efimtsev, A. Yu. Tractography as a new method of studying the pathogenesis and differential diagnosis of dementia / A. Yu. Efimtsev et al. // Bulletin of the Russian Military Medical Academy.- SPb. – 2009. – №4(28). – Pp. 56-57
9. Pashkova A. A., Trufanov G. E., Fokin V. A. Optimization of the MRI technique in disorders of cerebrospinal fluid dynamics // Tez. dokl. Nevsky Radiological Forum. – SPb. – 2011. – p. 174.
10. Basser P.J., Pajevic S., Pierpaoli C. et al. In vivo fiber tractography using DT-MRI data / Magn. Reson. Med, 2000; 44: 625-632.
11. Ходжиева Д.Т., Гаффарова В.Ф. Оценка факторов риска развития фебрильных судорог у детей.// Multidiscipliner Proceedings of Digital fashion conference. Korea 2021.-P.59.
12. Гаффарова В.Ф. Способ прогнозирования психоречевых нарушений при фебрильных судорогах у детей. Методическая рекомендация. 2021.-С.18.
13. Гаффарова В.Ф. Алгоритм ведения детей с фебрильными судорогами с учетом ранней профилактики психо-речевых нарушений.Методическая рекомендация. 2021.-С.18.
14. Гаффарова В.Ф. Болаларда тутқанокдан кейин психо-лингвистик нутқ бузилишларини аниқлаш. ЭХМ учун дастур.DGU 20212367.
15. Gaffarova V.F. Method for prediction of psycho-speech disorders during febril conversions in children.// (Scopus) 2022 C. 951-955
16. Sadullayev D.I., Gaffarova V.F. Cognitive disorders in patients with acute cerebrovascular accident and arterial hypertension.// Amaliy va tibbiyot fanlar jurnali 2022.-P. 293-295.