

## STUDY OF COGNITIVE IMPAIRMENTS IN PATIENTS WITH MULTIPLE SCLEROSIS

*Abdullaeva Muslima Akhatovna*

*Head of the Department of Pathological Physiology,*

*Bukhara State Medical Institute*

*Uroкова Vazira Khamidovna*

*student at Bukhara State Medical Institute*

**ABSTRACT:** As a result of demyelination of nerve fibers in multiple sclerosis, significant disturbances can occur not only in motor functions but also in cognitive functions. This article examines the higher mental functions in patients through a series of tests compared with healthy individuals.

**Keywords:** multiple sclerosis, cognitive functions, work capacity, quality of life

**Introduction:** The primary goal and task of medicine is to care for the health of patients, early diagnosis, and treatment of diseases. Each disease has its own unique course, affecting various functions to different extents or completely disrupting them. Currently, multiple sclerosis (MS) has become an increasingly significant issue in modern medicine. MS is a chronic autoimmune neurodegenerative disease of the central nervous system, leading to reduced quality of life and work capacity, especially in the working-age population. Considering that multiple sclerosis is prevalent in countries across Asia, including Uzbekistan, it becomes evident that studying the characteristics of the disease's progression in our country is becoming a pressing issue. The demyelination of axons in MS also impacts higher mental functions. Therefore, in recent years, there has been increasing interest worldwide in studying cognitive impairments in patients with multiple sclerosis.

**Objective:**

To examine cognitive functions in patients with multiple sclerosis.

The cognitive domains more often affected in patients with MS are memory, attention, information processing, abstract/conceptual reasoning, and visuospatial skills. In reviewing cognitive studies in MS, it is important to consider potential confounding factors. In particular, depression has often been reported in patients with MS and is a common feature of chronic illness independently associated with cognitive dysfunction. In some studies, the effect of depression, or the impact of physical disability (especially sensorimotor impairment), may not have been fully considered when studies were designed or data analyzed. Neuropsychological instruments have recently been developed to better control for these factors.

Information Processing Studies of attention in patients with MS have observed reduced speed of information processing, although accuracy is usually similar to that of subjects in the control group. A decline in information processing is particularly pronounced with visual and auditory tasks but is unrelated to motor impairment or lower global cognitive function. Verbal memory impairment has been correlated with the rate of information processing, suggesting that such impairment is due to inadequate initial learning secondary to slowed speed of processing rather than to impaired information retrieval.

### Литература

1. Abdullayeva Muslima Ahatovna, & Eshonkulova Elnora Makhmudovna. (2024). Causes of Hypoxia and Other Types of Diseases in Newborn Babies Associate. *American Journal of Pediatric Medicine and Health Sciences* (2993-2149), 2(2), 356–359. Retrieved from <https://grnjournal.us/index.php/AJPMHS/article/view/3202>
2. Абдуллаева, М. А. ., & Урокова, К. Х. . (2024). ВЛИЯНИЕ ГИДРОКОРТИЗОНА И ТИРОКСИНА НА АКТИВНОСТЬ СУХАРАЗЫ В РАЗНЫХ ОТДЕЛАХ КИШЕЧНИКА. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(2), 95–98. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/9593>
3. Абдуллаева, М. А., & Урокова, К. Х. (2024). МОРФОФУНКЦИОНАЛЬНЫЕ ИЗМЕНЕНИЯ ДУОДЕНАЛЬНЫХ ЖЕЛЕЗ ПРИ ТЕРМИЧЕСКОЙ ТРАВМЕ. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(2), 99–102. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/9594>
4. Abdullaeva, M. A., L. V. Kadirova, and U. R. Turaev. "Changes of Indicators of Immune Status in Patients with Nonspecific AortoArteritis on the Base of Combined Therapy." *The Pharmaceutical and Chemical Journal* 7.1 (2020): 35-38.
5. Abdullaeva, M. A., and D. S. Kosimova. "Evaluation of the quality of life of patients with cirrhosis after surgical prevention of bleeding from varicoseveins of the esophagus." *International journal for innovative engineering and management research* 9.11 (2020): 185-189.
6. Abdullaeva, M. A. "Damage to the endothelial layer of the vascular wall in nonspecific aortoarteritis." *Tibbiyotdayangikun. Tashkent* 3-4 (2016): 13-15.
7. Абдуллаева, М. А., et al. "ФАКТОРЫ РИСКА ОСТРОГО ИНФАРКТА МИОКАРДА У БОЛЬНЫХ МОЛОДОГО И СРЕДНЕГО ВОЗРАСТОВ." *БИОЛОГИЯ ВА ТИББИЁТ МУАММОЛАРИ* 4.3 (2013).
8. Abdullaeva, M. A., and O. I. Zhabborova. "Dynamics of indicators of the immune status and endothelial function in patients with nonspecific aorto-arteritis during combination therapy." *Tibbiyotda yangi kun Bukhoro* 2.30/1 (2020).

9. Abdullaeva, M. A., E. G. Muyidinova, and M. Tairov Sh. "Influence of Equator and Tessiron therapy on clinical symptoms and functional state of vascular endothelium in patients with nonspecific aorto-arteritis." *Science of young scientific and practical journal Ryazan* 3 (2015): 40-44.
10. Abdullaeva, M. A. "Comparative evaluation of the clinical effectiveness of the use of the equator and antiplatelet clopidogrel (tessiron) in patients with nonspecific aortoarteritis." *Actual problems of medicine Collection of scientific articles of the Republican scientific-practical conference and the 23rd final scientific session of the Gomel State Medical University. Gomel.* 2014.
11. Abdullaeva, M. A. "Abdulkhakimov Sh. A. Functional state of the vascular endothelium in patients with nonspecific aortoarteritis." *Scientific Medical Bulletin of Ugra, Khanty-Mansiysk* 1-2 (2014): 15-18.
12. Ахатовна, А. М. (2022). Турли Ёшдаги Куёнларда Сурункали Нурланиш Таъсирида Липид Профили Кўрсаткичларини Ўзгариши Ва Уларни Коррекциялаш. *AMALIY VA TIBBIYOT FANLARI ILMIIY JURNALI*, 60–67. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/3898>
13. Худойкулова, Н. И., and М. А. Абдуллаева. "Взаимосвязь клеточного иммунитета и функционального состояния эндотелия сосудистой стенки у больных неспецифическим аортоартериитом." *Новый день в медицине, (1)* 17 (2020)
14. Абдуллаева, М. А. "Цитокиновый профиль у больных неспецифическим аортоартериитом на фоне терапии." *Проблемы биологии и медицины* 113 (2020): 7-10.
15. Абдуллаева, М. А., and С. Ф. Сулейманов. "Клеточные факторы развития эндотелиальной дисфункции при неспецифическом аортоартериите." *Проблемы биологии и медицины* 4 (2019): 11-13.
16. Abdullayeva MA, Abdurakhmonov MM. "Congenital risk factors in uzbek population with nonspecific aortoarteriitis." *European science review. Austria* 11-12 (2018): 51-53.
17. Abdullaeva, M. A. "Cytokine profile in patients with nonspecific aortoarteritis during therapy." *Problems of Biology and Medicine* 113: 7-10.
18. Abdullaeva, M. A. "Effector link of immunity in patients with nonspecific aortoarteritis." *Problems of science* 6 (2018): 30.
19. Abdullaeva, M. A., and S. F. Suleymanov. "Cellular factors in the development of endothelial dysfunction in nonspecific aortoarteritis." *Problems of biology and medicine*: 11-13.
20. М. А. Abdullayeva, & B. N. Avezmurodov. (2024). O'SMA HUJAYRASIDAGI GENETIK OZGARISHLARGA FERMENTLAR TA'SIRINI O'RGANISH VA KUZATILADIGAN JARAYONLAR. *AMALIY VA TIBBIYOT FANLARI ILMIIY*

- JURNALI*, 3(1), 182–186. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/9409>
21. Abdullaeva, M. "ISHAKHON IBRAT'S FOLLOWING ACTIVITIES TO THE UZBEK DISTRIBUTION AND ACTIVITY." *Central Asian Problems of Modern Science and Education* 3.4 (2019): 269-273.
22. М.А.Абдуллаева, & К.Х.Уракова. (2023). ИНСУЛЬТДАН КЕЙИНГИ КОГНИТИВ БУЗИЛИШЛАР. *Лучшие интеллектуальные исследования*, 8(2), 87–93. Retrieved from <http://web-journal.ru/index.php/journal/article/view/1051>
23. Абдуллаева, М. А., & Урокова, К. Х. (2024). МОРФОФУНКЦИОНАЛЬНЫЕ ИЗМЕНЕНИЯ ДУОДЕНАЛЬНЫХ ЖЕЛЕЗ ПРИ ТЕРМИЧЕСКОЙ ТРАВМЕ. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(2), 99–102. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/9594>
24. Абдуллаева, М. А. ., & Урокова, К. Х. . (2024). ВЛИЯНИЕ ГИДРОКОРТИЗОНА И ТИРОКСИНА НА АКТИВНОСТЬ СУХАРАЗЫ В РАЗНЫХ ОТДЕЛАХ КИШЕЧНИКА. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 3(2), 95–98. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/95>