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METHODOLOGICAL ASSESSMENT OF PSYCHOEMOTIONAL DISORDERS IN VASCULAR DEMENTIA



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ABSTRACT

Background. This article presents the identification of cognitive and psychoemotional disorders in patients with currently widespread vascular dementia. Vascular dementia is manifested not only by a decrease in cognitive functions, but also by psychoemotional disorders of varying degrees in patients. In particular, such patients often experience depression, anxiety, emotional lability, apathy, and aggressiveness. This has a serious negative impact on the patient's quality of life, social adaptation, and treatment effectiveness. However, in practice, the assessment of psychoemotional disorders is often based on subjective approaches, and standardized and comprehensive methods are not sufficiently used. This leads to errors in diagnosis, difficulties in making a differential diagnosis, and limitations in drawing up an individual treatment plan. Psychoemotional disorders play an important role in pathogenesis and directly affect the course, progression, and rehabilitation process of the disease. Therefore, their assessment based on a scientifically sound, systematic and comprehensive approach is one of the priority tasks in clinical practice.

The purpose of this study is to improve the mechanisms of methodological assessment of psychoemotional disorders in vascular dementia, develop clear diagnostic criteria and introduce them into clinical practice.

Materials and methods. The study included 62 patients with vascular dementia aged 55-63 years were examined. Their average age was 58.2. In order to determine the effectiveness of psychodiagnostics in patients, they were conditionally divided into two groups: In the first group, MMSE was used to identify changes in cognitive functions, and HADS was used to identify changes in the emotional sphere, and in the second group, the Integrated Screening Scale for Vascular Dementia was used to identify changes in the cognitive and psychoemotional spheres.

Conclusion. The obtained results indicate that it is more effective to quickly and easily identify cognitive and psychoemotional disorders in patients with vascular dementia using a single scale using the integrated screening scale for vascular dementia, rather than separately examining them using the MMSE scale and the HADS scale.

Keywords: vascular dementia, cognitive sphere, psychoemotional sphere, HADS, MMSE, Integral screening scale-IISH

VASKULYAR DEMENSIYADA PSIXOEMOTSIONAL BUZILISHLARNI USLUBIY BAHOLASH

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ANNOTATSIYA

Dolzarbli. Mazkur maqolada hozirgi kunda keng tarqalgan vaskulyar demensiya bilan og‘rigan bemorlarda uchraydigan kognitiv va psixoemotsional buzilishlarni aniqlash tahlil qilinadi. Vaskulyar demensiya nafaqat kognitiv funksiyalarning pasayishi, balki bemorlarda turli darajadagi psixoemotsional buzilishlar bilan ham namoyon bo‘ladi. Xususan, bunday bemorlarda depressiya,



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xavotirlanish, emotsional labillik, apatiya, agressivlik kabi holatlar tez-tez uchraydi. Bu esa bemorning hayot sifatiga, ijtimoiy moslashuviga va davolash samaradorligiga jiddiy salbiy ta'sir ko'rsatadi. Biroq amaliyotda psixoemotsional buzilishlarni baholash ko'p hollarda sub'ektiv yondashuvlarga asoslanadi, standartlashgan va kompleks usullar yetarlicha qo'llanilmaydi. Bu esa diagnostikada xatoliklarga, differensial tashxis qo'yishda qiyinchiliklarga va individual davolash rejasini tuzishda cheklanishlarga olib keladi. Psixoemotsional buzilishlar patogenezda muhim o'rin tutib, kasallikning kechishi, progressiyasi va rehabilitatsiya jarayoniga bevosita ta'sir ko'rsatadi. Shu sababli ularni ilmiy asoslangan, tizimli va kompleks yondashuv asosida baholash klinik amaliyotda ustuvor vazifalardan biri hisoblanadi.

Ushbu tadqiqotning maqsadi-vaskulyar demensiyada psixoemotsional buzilishlarni uslubiy baholash mexanizmlarini takomillashtirish, aniq diagnostik mezonlar ishlab chiqish va klinik amaliyotga joriy etish hisoblanadi.

Material va usullar.

Vaskulyar demensiya bilan og'rikan 55-63 yosh oralig'idagi 62 ta bemor tekshiruvdan o'tkazildi. Ularning o'rtacha yoshi 58,2 ni tashkil etdi. Bemorlarda psixodiagnostika effektivligini aniqlash maqsadida ikki guruxga shartli ravishda ajratildi: Birinchi guruxda kognitiv funksiyalarni o'zgarishlarini aniqlash uchun MMSE, emotsional sfera o'zgarishlarini aniqlash uchun HADS qo'llanildi, 2-guruxda esa kognitiv va psixoemotsional sfera o'zgarishlarini aniqlash uchun vaskular demensiyada integral skrening shkalasi qo'llanildi.

Xulosa: Olingan natijalar vaskulyar demensiya bilan kasallangan bemorlarda uchraydigan kognitiv va psixoemotsional sfera buzilishlarini MMSE shkalasi va HADS shkalasi bo'yicha alohida tekshirishdan ko'ra vaskular demensiyada integral skrening shkalasi yordamida bitta shkala orqali qisqa vaqtda tez va oson aniqlash samarali ekanligi aniqlandi.

Kalit so'zlar: vaskulyar demensiya, kognitiv sfera, psixoemotsional sfera, HADS, MMSE, Integral skrening shkala-IISH

МЕТОДОЛОГИЧЕСКАЯ ОЦЕНКА ПСИХОЭМОЦИОНАЛЬНЫХ РАССТРОЙСТВ ПРИ СОСУДИСТОЙ ДЕМЕНЦИИ

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АННОТАЦИЯ

Актуальность. В данной статье представлены методы выявления когнитивных и психоэмоциональных расстройств у пациентов с распространенной в настоящее время сосудистой деменцией. Сосудистая деменция проявляется не только снижением когнитивных функций, но и психоэмоциональными расстройствами различной степени тяжести у пациентов. В частности, такие пациенты часто испытывают депрессию, тревожность, эмоциональную лабильность, апатию и агрессивность. Это серьезно негативно сказывается на качестве жизни пациента, социальной адаптации и эффективности лечения. Однако на практике оценка психоэмоциональных расстройств часто основывается на субъективных подходах, а стандартизированные и комплексные методы используются недостаточно. Это приводит к ошибкам в диагностике, трудностям в проведении дифференциальной диагностики и ограничениям в составлении индивидуального плана лечения. Психоэмоциональные расстройства играют важную роль в патогенезе и напрямую влияют на течение, прогрессирование и реабилитационный процесс заболевания. Поэтому их оценка на основе научно обоснованного, систематического и комплексного подхода является одной из приоритетных задач клинической практики.



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Цель данного исследования – усовершенствовать механизмы методологической оценки психоэмоциональных расстройств при сосудистой деменции, разработать четкие диагностические критерии и внедрить их в клиническую практику.

Материалы и методы. В исследование были включены 62 пациента с сосудистой деменцией в возрасте 55-63 лет. Средний возраст составил 58,2 года. Для определения эффективности психодиагностики у пациентов они были условно разделены на две группы: в первой группе для выявления изменений когнитивных функций использовалась шкала MMSE, а для выявления изменений в эмоциональной сфере — шкала HADS, а во второй группе для выявления изменений в когнитивной и психоэмоциональной сферах использовалась интегрированная скрининговая шкала сосудистой деменции.

Вывод. Полученные результаты показывают, что более эффективно быстро и легко выявлять когнитивные и психоэмоциональные расстройства у пациентов с сосудистой деменцией с помощью единой шкалы — интегрированной скрининговой шкалы сосудистой деменции, чем проводить их раздельное обследование с использованием шкал MMSE и HADS.

Ключевые слова: сосудистая деменция, когнитивная сфера, психоэмоциональная сфера, HADS, MMSE, Интегральная скрининговая шкала – IISH

Vascular dementia is a complex disease characterized by not only cognitive but also psychoemotional disorders. The use of new psychodiagnostic methods and biomarkers is important in determining diagnosis and prognosis.

Vascular dementia is a progressive impairment of cognitive function caused by vascular factors, which develops as a result of stroke, small vessel pathology, lacunar infarcts, and microangiopathy. According to the World Health Organization, vascular dementia accounts for approximately 15–20% of dementia cases [1,3].

Currently, a significant increase in acute and chronic cerebrovascular pathology is observed all over the world, which allows us to consider vascular diseases of the brain as an urgent socio-medical problem, even called the "epidemic of the 20th century" [2,4,5]. In the Russian Federation, more than 450,000 cases of stroke are registered annually, the number of patients with chronic cerebral ischemia is more than 700 per 100,000 inhabitants [4,6,7]. Delayed diagnosis, inadequate prevention and treatment of dyscirculatory encephalopathy lead to an increase in the morbidity of patients and disruption of brain functions, which negatively affects work performance and social adaptation [8,10]. Among the various neurological symptoms that develop as a result of organic lesions, cognitive dysfunction is a significant problem, which significantly affects the quality of life of patients [9,10]. The issues of nosological differentiation of various variants of cognitive disorders, including those associated with cerebrovascular pathology, have been developed for many years, but the exact definition of vascular cognitive disorders is still not fully defined, there are no generally accepted classification and diagnostic criteria. The data on the significance of cerebrovascular pathology in cognitive impairment are contradictory. According to epidemiological data, in many countries of the world, vascular dementia is second only to Alzheimer's disease in prevalence and accounts for 20–25% of all cases [9,11]. The incidence of vascular dementia ranges from 1.5 to 3.3 per 1000 elderly people [12,13]. In the field of applied medicine, there is no consensus on the role of various brain lesions in the development of vascular cognitive disorders. With the advent of functional neuroimaging methods, such as OFECT and PET, it has become possible not only to detect early brain function disorders, but also to study the process of formation of various cognitive disorders [14]. At the same time, the place and role of these modern methods in everyday clinical practice have not been clearly defined. To date, no significant studies have been conducted in Uzbekistan to study the possibilities of using functional neuroimaging methods in the differential diagnosis of vascular cognitive disorders. Pathomorphological studies in vascular dementia are mainly limited to describing the structural damage to brain structures and the vascular supply. However, it has not et been



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determined which changes in the brain are vascular and their contribution to the development of cognitive disorders [14]. There are no studies that compare in detail the pathomorphological changes in the combined vascular-degenerative process using simpler light and electron microscopy techniques. In recent years, certain successes have been achieved in the field of prevention and treatment of cognitive disorders, which is associated with the emergence of modern drugs capable of influencing the formational pathogenesis of cognitive deficits [15]. However, today there are no generally accepted schemes for the treatment of vascular cognitive disorders, therefore, it is very urgent to develop recommendations that differentiate the risks of drugs in different clinical and pathogenetic variants. Thus, a detailed study of the etiopathogenetic and clinical patterns of various cognitive disorders in vascular pathology is an important and urgent scientific problem of modern neurology.

Epidemiological studies show that vascular dementia most often develops after the age of 65, and there are certain differences in prevalence between women and men. As shown by a number of large-scale meta-analyses, arterial hypertension, diabetes mellitus, and atherosclerosis increase the risk of vascular dementia by 2–3 times.

The main clinical feature of vascular dementia is a decline in cognitive functions (memory, attention, thinking, speech) and, along with them, the manifestation of psychoemotional and interpersonal disorders. This condition seriously affects the patient's social adaptation, daily life activities, and relationships with family members.

This research paper highlights new modern methods for identifying cognitive and psychoemotional disorders in patients diagnosed with vascular dementia and their advantages.

Research objective: Evaluation of the effectiveness of psychodiagnostic methods in vascular dementia

Research materials and methods.

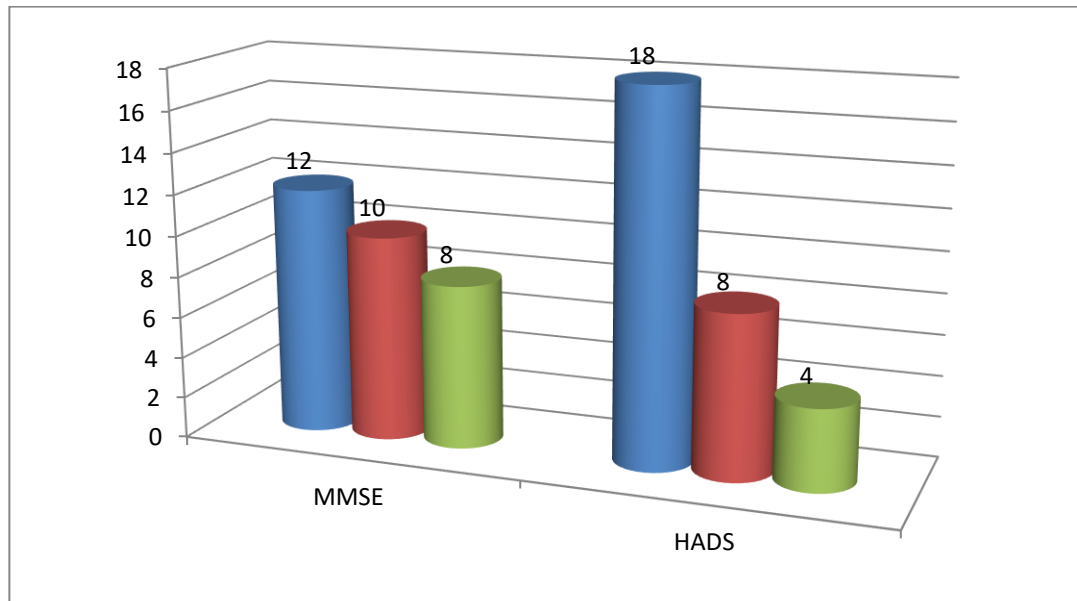
Vascular dementia 62 patients aged 55-63 years with schizophrenia were examined. Their average age was 58.2. In order to determine the effectiveness of psychodiagnostics in patients, they were conditionally divided into two groups:

Group 1: n=30 MMSE was used to determine changes in cognitive functions in vascular dementia, and HADS was used to determine changes in the emotional sphere.

Group 2: n=30 To determine changes in the cognitive and psychoemotional spheres in vascular dementia Vascular dementia integrated screening scale was applied.

In group 1, cognitive impairment was assessed using the MMSE scale, and three levels of dementia were found in the patients. In particular, mild dementia was detected in 12 patients (40.1%), moderate dementia in 10 patients (33.3%), and severe dementia in 8 patients (26.6%). In this group, psychoemotional disorders were assessed using the HADS scale, and three levels of anxiety and depressive disorders were detected: mild anxiety in 18 patients (60.1%), moderate anxiety in 8 patients (26.6%), and severe anxiety in 4 patients (13.3%), mild depression in 16 patients (60.1%), moderate depression in 10 patients (26.6%), and severe depression in 4 patients (13.3%) (Figure 1).

Results of examination of the cognitive and psychoemotional sphere (group 1)

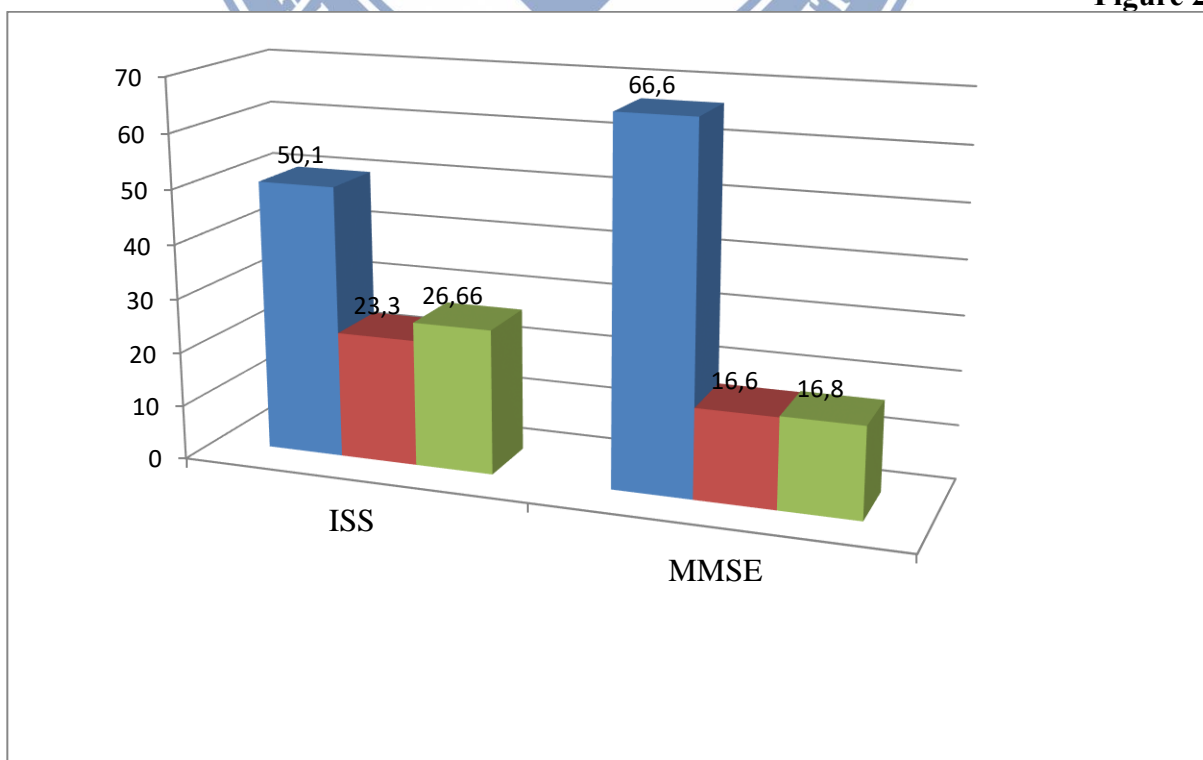


($p < 0.05$)

The examinations for the state of cognitive and emotional block in vascular dementia in group 2 patients, as determined by the integrated screening scale, are as follows: Mild in 15 patients (50.1%) disorders, 7 patients (23.3%) had moderate to severe disorders, 8 patients (26.6%) had severe disorders was found. When changes in the cognitive and psychoemotional spheres were examined and analyzed separately in this group, According to the MMSE scale We also present the results: 16 patients (66.6%) had mild cognitive impairment, 7 patients (16.6%) had moderate to severe cognitive impairment, 7 patients (16.8%) had severe cognitive impairment was determined (Figure 2).

Results of the examination of the cognitive and psychoemotional sphere (group 2)

Figure 2



($p < 0.05$)



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Thus, the results of our study indicate that it is more effective to assess cognitive and psychoemotional disorders in patients with vascular dementia using the MMSE scale and the HADS scale separately. Vascular dementia integrated screening scale It was found to be effective for quick and easy determination in a short time using a single scale.

References:

1. Albert MS, Dekosky ST, Dickson D, Dubois B, Feldman HH, Fox NC, Hamst A, Holtzman DM, Jagust WJ, Petersen RC (2011). The diagnosis of mild cognitive impairment due to alzheimer's disease. *Alzheimer's & Dementia*, 7(3): 270–279.
2. Gauthier s., rockwood k., camicioli r., black se, bocti c., darvesh s., hogan db, kertes z a., poirier j., legault v., massoud f. (2006). Recommendations for the diagnosis and management of vascular cognitive impairment. *Canadian medical association journal*, 176(9): 1131–1138.
3. Karakhonova S.A The Significance of the Application of Psycho-Correction Methods in the Treatment of Psycho-Emotional Disorder, *European Journal of Modern Medicine and Practice*, 2022
4. Karakhonova S.A, & Ernayeva G.H. (2025). Evaluation of the effectiveness of psychodiagnostic methods in vascular dementia. *INTEGRATION OF EDUCATION AND SCIENCE: GLOBAL CHALLENGES AND SOLUTIONS*, 1(2), 1090–1094.
5. Ibodullayev Z.R., Karakhonova S.A., Ernayeva G.X. The effectiveness of psychodiagnostic methods in vascular dementia // *Ethiopian International Journal of Multidisciplinary Research*, Vol. 1 No. 2 (2026): Shokh Articles Library, 26-30
6. Karakhonova S.A., Murodov G.H., Ernayeva G.H. The significance of the application of psycho-correction methods - in the treatment of anxiety-phobic syndrome Material of The International Conference of Young Scientist “Actual problems of modern medicine” Collection of the conference materials // 127
7. Sarvinoz Karakhonova. Psychological structure of patients with anxietyphobic syndromes and the importance of the use of psychocorrective methods in the treatment//E3S Web of Conferences **381**, International Scientific and Practical Conference “Development and Modern Problems of Aquaculture” 01099 (2023), 1-19
8. Sarvinoz Karakhonova Psychocorrection and optimal pharmacotherapy in anxiety-phobic syndrome // *Psychosomatic medicine and general practice* 2019 4, № 1 118-120
9. Qaraxonova S.A., Murodov G‘.X., Ernaeva G.X. The importance of pharmacoterapy in the treatment of psyho-emotional disorder // *Klinik laborator diagnostikada innovatsion texnologiyalardan foydalanish, muammolar va echimlar*. 2023: 375
10. Qaraxonova S.A., Murodov G‘.X., Ernaeva G.X. Xavotirli-fobik sindromda psixokorreksiya // *Klinik laborator diagnostikada innovatsion texnologiyalardan foydalanish, muammolar va echimlar*. 2023: 342
11. Динмухаммадиева Д.Р., Юсупова Г.А., Каримова Б.Н., Исроилова Н.А., Эрнаева Г.Х., Карахонова С.А. Нарушение кровообращения суставов при ювенильном Идиопатическом артрите и психоэмоциональные осложнения: обзор Современной литературы//*Journal of «Circulatory Diseases»*, 2025(3): 42-47
12. З.Р. Ибодуллаев, С.А. Карахонова Effective psychocorrection in neurotic disorder // *Вестник* 2022 №9 76-80
13. Ибодуллаев З.Р., Карахонова С.А. Значение использования методов психокоррекции при лечении тревожно-фобического синдрома // *Журнал неврологии и нейрохирургических исследований* №4 2021 38-40.
14. Ibodullayev Z.R, Karakhonova S.A, & Ernayeva G.X. (2026). Vaskulyar demensiyada kognitiv va psixoemotsional baholash metodlarining samaradorligi: komparativ tadqiqot. *Universal journal of medical and natural sciences*, 4(33), 70-73.



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15. Ibodullayev Z.R. Karakhonova S.A, & Ernayeva G.X. (2026). Vaskulyar demensiya bemorlarida psixodiagnostik metodlarning klinik ishonchliligi va prognoz qiymati. *Innovations in technology and science education*, 5(41), 34-37.
16. Ibodullayev Z.R, Karakhonova S.A, & Ernayeva G.X. (2026). Integrativ psixodiagnostika yondashuvi: vaskulyar demensiyada kognitiv va psixoemotsional buzilishlarni aniqlashda samaradorlik tahlili. *Universal journal of academic and multidisciplinary research*, 4(33), 98-102.

