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THE VALUE OF HEALTH-RELATED QUALITY OF LIFE IN OBJECTIVIZING THE LONG-TERM PROGNOSIS OF PATIENTS WITH POST-TRAUMATIC BRAIN INJURY

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ОБЪЕКТИВИЗАЦИЯ ОТДАЛЕННОГО ПРОГНОЗА ПАЦИЕНТОВ С ПЕРЕНЕСЕННОЙ ЧЕРЕПНО-МОЗГОВОЙ ТРАВМОЙ

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The study included 414 working-age patients with a history of PTBI, of which 93.6 % were men. Respondents underwent an examination of their neurological status and an assessment of the quality of life (QOL) using the WHOQOL-100 questionnaire annually during 2020–2022. In 64.7 % of patients with PTBI, clinical deterioration was noted, accompanied by a decrease in QOL. In 6.3 % of respondents, the clinical picture remained stable, and QOL indicators remained unchanged during repeated studies. In 24.9 % of cases, there was a clinical improvement accompanied by an increase in the dynamics of QOL. In 4.1 % of patients, an inverse relationship was noted in the form of a decrease in the overall quality of life and an improvement in the clinical picture (a reduction in the severity of cerebral symptoms, asthenic syndrome).

Thus, in the absence of specific laboratory markers in clinical practice and insufficient information content of neuroimaging research methods in patients after PTBI, QOL should be considered an additional personalized criterion for predicting patients with this pathology.

Keywords: traumatic brain injury, long-term prognosis, quality of life

В исследование включены 414 пациентов трудоспособного возраста с черепно-мозговой травмой (ЧМТ) в анамнезе, из которых 93,6 % составляли мужчины. Респондентам проводилась экспертиза неврологического статуса и оценка качества жизни (КЖ) с использованием опросника WHOQOL-100 ежегодно в течение 2020–2022 гг. У 64,7 % пациентов отмечалось клиническое ухудшение состояния, которое сопровождалось снижением показателей КЖ. У 6,3 % респондентов клиническая картина сохранилась стабильной, показатели КЖ при повторных исследованиях остались без изменений. В 24,9 % случаев отмечалось клиническое улучшение, которое сопровождалось повышением в динамике КЖ. У 4,1 % пациентов отмечалась обратная зависимость в виде снижения общего показателя качества жизни и улучшения клинической картины (уменьшение выраженности общемозговой симптоматики, астенического синдрома).

Таким образом, при отсутствии в клинической практике специфических лабораторных маркеров и не всегда достаточной информативности нейровизуальных методов исследования у пациентов после ЧМТ КЖ следует рассматривать как дополнительный персонализированный критерий прогноза пациентов с данной патологией.

Ключевые слова: черепно-мозговая травма, отдаленный прогноз, качество жизни

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PTBI – post-traumatic brain injury
QOL – quality of life

Post-traumatic brain injury (PTBI) is one of the leading causes of death and disability in the world today [1], often with physical, social, cognitive, and psychological consequences [2]. In addition to the establishment of functional disorders in patients after the PTBI, it is essential to consider the subjective experience of functioning and general well-being of patients [3], which is realized in the category of QOL – a convergent category of subjective and multidimensional concept, including physical and professional functions, psychological state, social interaction, and somatic status» [4].

The study aims to study the prospects of objectification of the remote prognosis of patients with a transferred PTBI.

Material and Methods. The random sample included 414 working-age respondents, of whom 93.6 % were men. The majority (81.9 %) of respondents have a PTBI diagnosed before the age of 50. 54.0 % of respondents had a PTBI rescheduled within one year – 5 years. Patients were examined annually for neurological status and QOL during 2020–2022.

Inclusion criteria: The study includes working-age respondents who have not been transferred earlier than one year by a PTBI and have signed informed consent. Exclusion criteria: Patients of working age who have been transferred from a PTBI and who have not confirmed the adequacy of their self-esteem during the Dembo – Rubinstein test.

Cohort longitudinal sociological research of QOL using the WHOQOL-100 questionnaire was implemented by questionnaire survey. The protocol of the study was approved by the Ethical Committee of the Saratov State Medical University named after V. I. Razumovsky (Protocol #9, June 06 2017).

Neurosurgical departments of medical organizations located on the region's territory have been identified as research bases.

Analysis of the results of the study was carried out using statistical, analytical, and mathematical methods. Statistical processing of the results was carried out using standard algorithms of SPSS Statistics 21.0 (IBM, USA).

Results and Discussion. The study of neurological status dynamics was carried out with the analysis of QOL patients. It should be noted that in clinical practice, there are no objective laboratory diagnostic markers of the dynamics of the condition of patients with PTBI. In addition, changes in the status of this group of patients do not always correlate with changes in neuroimaging techniques (CT and/or MRI).

In the annual study, 64.7 % of the respondents showed a clinical deterioration, which in 96 % of cases was reflected in increased severity of the brain symptoms (headaches, dizziness, nausea), cognitive impairment (reduced memory and attention) and asthenic syndrome (rapid fatigue, irritability, reduced work activity, sleep disturbance, weakness). New symptoms (post-traumatic epilepsy) were reported in 4 % of cases. The study of the dynamics of the somatic and neurological status of respondents was carried out in the hospital, where they were hospitalized with deterioration. In the QOL study of respondents, the clinical worsening of the condition was accompanied by a decrease in the QOL of the questionnaire WHOQOL-100 in dynamics ($p<0.05$).

In contrast to our results (64.7 % of respondents had a clinical deterioration), in the studies, poor functional outcomes among patients with PTBI were observed in only 0.6–24.3 % of cases [5].

In 6.3 % of patients maintained a stable clinical picture. In these patients, pyramid symptoms (mono- and hemiparesis) remained dormant for several years and combined with occasional headaches and mild dizziness.

Twenty-nine percent of respondents showed clinical improvement (partial or complete regression of aphasia in 4.1 % of patients, partial or full regression of mono- and hemiparesis in 4.7 % of patients, reduction of the frequency of convulsive or episeizure up to several years or total absence of this in 4.1 % of patients, regression of asthenic syndrome in 12.0 % of patients, reduction in the severity of general cerebral symptoms, an asthenic syndrome in 4.1 % of patients). The clinical improvement was accompanied by an increase in the respondents' QOL, as well as the overall QOL of the WHOQOL-100 questionnaire in dynamics ($p<0.05$).

In 4.1 % of patients, inverse dependence was observed as a decrease in the overall rate of female genital mutilation and an improvement in the clinical picture (reduction in the severity of brain symptoms, asthenic syndrome).

Conclusion. In the course of the study, the correspondence of the dynamics of the clinical condition and the average values of the indicators of the QOL of patients with PTBI in the history has been established. In the absence of specific laboratory markers in clinical practice and insufficient informative neurovisual research methods, verifying the effects of the PTBI on the QOL can be considered an additional objective personalized criterion for the prognosis of patients with a transferred PTBI.

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PROFESSIONAL BURNOUT OF DENTAL SPECIALISTS IN CLINICAL PRACTICE

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ПРОФЕССИОНАЛЬНОЕ ВЫГОРАНИЕ СПЕЦИАЛИСТОВ СТОМАТОЛОГИЧЕСКОГО ПРОФИЛЯ В КЛИНИЧЕСКОЙ ПРАКТИКЕ

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Professional burnout syndrome (PBS) in the professional activity of a dentist is due to several causal factors, including occupational hazards. At the same time, its impact on the psycho-emotional state and general bodily health of dentists is significant. The study analyzes the causes of psychological stress in the context of interpersonal communication of the dentist – patient – administration of a medical organization.

Keywords: occupational stress, occupational hazard, dental practice, burnout syndrome, anxiety, depression

Синдром профессионального выгорания (СПВ), сопутствующий профессиональной деятельности врача-стоматолога, обусловлен целым рядом причинных факторов, включая профессиональную вредность. Влияние СПВ на психоэмоциональное состояние и общесоматическое здоровье врачей-стоматологов весьма существенно. В исследовании проведен анализ причин психологического стресса и развития СПВ, возникающего в контексте межличностного общения: врач-стоматолог – пациент – администрация медицинской организации.

Ключевые слова: профессиональный стресс, производственная вредность, стоматологическая практика, синдром профессионального выгорания, тревожность, депрессия

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