



EMOTIONAL AND DYSMORPHIC DISORDERS IN PATIENTS WITH HEADACHE DUE TO CHRONIC CEREBRAL ISCHEMIA

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Abstract

Chronic cerebral ischemia (CCI) is one of the most common forms of cerebrovascular disease and is often accompanied by headache, as well as emotional and insomnia disorders. The aim of this study was to investigate the characteristics of emotional and sleep disturbances in patients with headache associated with CCI. The study included 110 patients. It was found that most patients experienced anxiety-depressive disorders and various forms of insomnia, which exacerbate headache severity and impair quality of life. The findings highlight the need for a comprehensive approach to diagnosis and treatment in this patient population.

Keywords

chronic cerebral ischemia, headache, anxiety, depression, insomnia, insomnia disorders, quality of life

Introduction:

Chronic cerebral ischemia (CCI) is a progressive vascular disease caused by prolonged insufficient blood supply to the brain. This condition is a leading cause of neurological decline and is a significant cause of cognitive decline and quality of life in patients.

One of the most common symptoms of CCI is headache, which is chronic and often associated with emotional and sleep disturbances. Anxiety, depression, and insomnia not only accompany the disease but also exacerbate its progression, creating a "vicious cycle" of symptoms.

Despite the large number of studies devoted to CCI, the relationship between headache, emotional disturbances, and insomnia remains poorly understood, making this study particularly relevant.

Study Objective:

To study the characteristics of emotional and insomnia disorders in patients with headache associated with chronic cerebral ischemia.

Materials and Methods of the research:

The study included 110 patients diagnosed with chronic cerebral ischemia, who were receiving outpatient and inpatient treatment.



Inclusion Criteria:

- A confirmed diagnosis of chronic cerebral ischemia;
- Chronic headache;
- Age from 40 to 75 years.

Exclusion criteria:

- Acute cerebrovascular accidents;
- Severe mental illness;
- Severe somatic diseases in the decompensation stage.

Of the examined patients, 62 (56.4%) were women and 48 (43.6%) were men. The average age of the patients was 58.3 ± 8.7 years. Disease duration ranged from 3 to 15 years.

Methods:

The following methods were used to assess the patients' condition:

- clinical and neurological examination;
- headache intensity assessment using the visual analogue scale (VAS);
- anxiety assessment using the Spielberger-Hanin Inventory;
- depression assessment using the Beck Depression Inventory;
- sleep quality assessment using the Pittsburgh Sleep Quality Index (PSQI);
- statistical data processing using variation statistics methods.

Results of the study

The study analyzed the clinical and psychoemotional parameters of 110 patients with chronic cerebral ischemia (CCI) accompanied by headache. All patients experienced chronic cephalgic syndrome of varying severity, confirming its significant role in the clinical structure of this disease.

Analysis of headache intensity using the visual analog scale (VAS) revealed a mean score of 5.8 ± 1.6 points. Twenty-five patients (22.7%) had mild pain intensity (up to 4 points), 46 patients (41.8%) had moderate pain intensity (5–6 points), and 39 patients (35.5%) had severe pain intensity (7 points or higher). It should be noted that patients with higher pain intensity more often complained of emotional and sleep disturbances.

Emotional state assessment revealed a high prevalence of anxiety and depressive disorders. Elevated anxiety levels were detected in 72 patients (65.5%). Of these, moderate anxiety was diagnosed in 44 patients (40.0%), and high anxiety was diagnosed in 28 patients (25.5%). Patients with high anxiety reported constant internal tension, restlessness, irritability, and decreased stress tolerance.

Depressive disorders of varying severity were detected in 63 patients (57.3%). Mild depression was observed in 31 patients (28.2%), moderate depression in 22 patients (20.0%), and severe depression in 10 patients (9.1%). These patients experienced depressed mood, apathy, loss of interest in daily activities, and decreased motivation and performance.



Insomnia was detected in 81 patients (73.6%), indicating a high frequency of sleep disturbances in CCI. The most common complaints included difficulty falling asleep (49 patients, 44.5%), frequent nocturnal awakenings (53 patients, 48.2%), shallow and interrupted sleep (46 patients, 41.8%), and early morning awakenings (38 patients, 34.5%). The average PSQI sleep quality index score was 9.2 ± 2.3 points, significantly exceeding normal values and indicating significant sleep disturbances. Patients with severe insomnia experienced a reduction in total sleep duration to 4–5 hours, accompanied by feelings of sleep deprivation and fatigue during the day.

An analysis of the relationships between clinical parameters revealed statistically significant correlations. A direct correlation was found between headache intensity and anxiety levels ($r=0.59$), as well as between pain intensity and depression severity ($r=0.62$). This suggests that increased pain is accompanied by a worsening of patients' emotional state.

Furthermore, a strong correlation was established between sleep disturbances and depressive symptoms ($r=0.58$), as well as between sleep quality and anxiety levels ($r=0.55$). Patients with severe dyssomnia disorders more often reported worsening headaches in the morning, decreased concentration, and increased fatigue.

Additionally, it was found that in patients with a disease duration of more than 10 years ($n=37$), emotional and dyssomnia disorders were significantly more common (81.1%) compared to patients with a disease duration of less than 5 years (64.2%).

Thus, the study results demonstrate a high prevalence of anxiety-depressive and dyssomnia disorders in patients with chronic cerebral ischemia. The established correlations confirm a close pathogenetic relationship between headache, emotional disorders, and sleep disturbances, which requires a comprehensive approach to the diagnosis and treatment of this category of patients.

Discussion:

These results confirm the high prevalence of emotional and insomnia disorders in patients with chronic cerebral ischemia and chronic headache.

The identified relationship between headache, anxiety-depressive states, and sleep disturbances suggests a common underlying pathogenic mechanism. Chronic cerebral ischemia leads to disruption of the limbic system and neurotransmitter processes, which contributes to the development of emotional disorders.

Sleep disturbances, in turn, aggravate the disease, increasing headache severity and reducing the body's adaptive capacity. This creates a vicious cycle that requires a comprehensive therapeutic approach.

These findings are consistent with the results of other studies emphasizing the importance of early detection and treatment of psychoemotional and sleep disorders in patients with cerebrovascular pathology.

Conclusion:



A study involving 110 patients with chronic cerebral ischemia accompanied by headaches provided a comprehensive assessment of the prevalence and severity of emotional and insomnia disorders, as well as their clinical and pathogenetic significance. The results indicate that these disorders are an integral part of the clinical picture of the disease and have a significant impact on its course and prognosis.

It was found that the majority of patients experience anxiety and depressive disorders, as well as various forms of sleep disturbances. The high prevalence of these conditions (over 65% for anxiety, over 57% for depression, and approximately 74% for insomnia disorders) indicates their significance in the structure of chronic cerebrovascular pathology. Moreover, emotional and insomnia disorders are not only concomitant but also pathogenetically significant.

The study results showed that headache severity is closely linked to the level of anxiety and depressive disorders and sleep quality. Patients with more intense pain syndromes were significantly more likely to report higher rates of anxiety, depression, and severe insomnia. This confirms the close relationship between pain, emotional, and sleep-related components, which form a single pathological complex.

An important aspect is the identified correlation between sleep disturbances and the emotional state of patients. Insomnia contributes to increased headaches, cognitive decline, and a deterioration in overall well-being. Anxiety and depression, in turn, exacerbate sleep disturbances, creating a vicious cycle that perpetuates the chronicity of the disease.

The findings also demonstrate the influence of disease duration on the severity of disturbances. Patients with longer-term chronic cerebral ischemia exhibit a higher frequency and severity of emotional and insomnia disturbances, indicating the progressive nature of the pathological changes and the need for early intervention.

From a pathogenetic perspective, the identified disturbances may be due to chronic cerebral hypoperfusion, leading to dysfunction of the structures responsible for emotional and sleep regulation, including the limbic system and hypothalamus. Disruption of the neurotransmitter balance, in particular the serotonergic and dopaminergic systems, also plays an important role in the development of anxiety-depressive states and insomnia.

The practical significance of these results lies in the need to revise approaches to managing patients with chronic cerebral ischemia. Treatment should be comprehensive and include not only correction of vascular disorders but also the mandatory identification and treatment of emotional and insomnia disorders. The inclusion of psychotherapeutic methods, sleep normalization, and, if necessary, pharmacological treatment of anxiety and depression can significantly enhance treatment effectiveness and improve patients' quality of life.

Thus, emotional and insomnia disorders are an important component of the clinical picture of chronic cerebral ischemia and are closely related to headache severity. Their timely diagnosis and treatment are key to preventing disease progression, reducing symptom severity, and improving patients' functional status.



Prospects for further research include a more in-depth study of the neurobiological mechanisms underlying these disorders, the development of personalized treatment approaches, and the evaluation of the effectiveness of comprehensive rehabilitation programs.

References:

1. Olesen J. et al. Headache classification and diagnosis. *The Lancet Neurology*. 2018.
2. World Health Organization. Neurological disorders: public health challenges. 2020.
3. Beck A.T. Depression: Clinical, experimental, and theoretical aspects. 2019.
4. Buysse D.J. et al. The Pittsburgh Sleep Quality Index. *Psychiatry Research*. 2022.
5. Spielberger C.D. Anxiety and behavior. 2017.
6. Gorelick P.B. et al. Vascular contributions to cognitive impairment. *Stroke*. 2024.