

ISCHEMIC STROKE AND PSYCHOEMOTIONAL DISORDERS IN PATIENTS

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Abstract

This article focuses on studying the prevalence and clinical significance of psychoemotional disorders in patients who have suffered an ischemic stroke. Ischemic stroke is a condition resulting from impaired blood supply to the nervous system and can lead to various psychoemotional problems affecting mental health among patients. The research examines depression, anxiety, stress, and other psychological conditions.

Keywords

Ischemic stroke, symptoms, psychoemotional disorders, anxiety, mental health, neuropsychological rehabilitation, stress management strategies, support system, quality of life

Introduction: Ischemic stroke occurs due to interruption of blood flow to the brain and is the most common type of stroke related to blood clot formation, leading to deprivation of oxygen and glucose to brain tissue; it can be caused by atherosclerosis (fatty deposits) or emboli (clots), its consequences include facial drooping on one side, speech impairment, limb weakness, and the process of rapid treatment (thrombolytic) saves lives.

Ischemic stroke is a neurological emergency that not only damages motor, sensory, and speech functions of the brain but also leads to profound psychological consequences. In the 21st century, ischemic stroke remains one of the leading causes of disability and death worldwide. Every year, millions of people worldwide suffer a stroke, many of whom are forced to bear varying degrees of physical and psychological burdens for life.

Causes of Ischemic Stroke

- Atherosclerosis: Direct narrowing and blockage of blood vessels due to fatty deposits.
- Blood clots (thrombi/emboli): Clots formed in the heart or blood vessels traveling to and blocking brain arteries.

Symptoms (FAST Acronym)

- F (Face drooping): Drooping of one side of the face.
- A (Arm weakness): Weakness in one arm or leg (on one side).
- S (Speech difficulty): Slurred speech, strange speaking.
- T (Time to call emergency): Time to call emergency medical services (103/110) if symptoms appear suddenly.
- Other symptoms: Sudden severe headache, vision problems, dizziness, loss of balance.

While restoring physical functions is a priority in modern neurology and rehabilitation sciences, the importance of psychoemotional disorders has not received sufficient attention for a long time. However, research conducted in recent decades has shown that post-stroke psychopathological conditions significantly affect not only the patient's subjective state but also the dynamics of physical recovery. Early identification and comprehensive treatment of psychoemotional problems are crucial for improving patients' quality of life and overall prognosis.

Psychoemotional disorders are a set of conditions or illnesses affecting a person's psychological and emotional state. They can arise for various reasons, including stress, trauma, genetic factors, chemical imbalances, and the social environment.

Prevalence and Classification of Psychoemotional Disorders
Psychoemotional disorders occur in 30-65% of patients who have suffered an ischemic stroke, making this a serious health issue for humanity. These disorders can manifest in the following forms:

1. **Post-Stroke Depression (PSD):** The most common psychopathological condition. Patients experience persistent low mood, lack of desire, apathy, feelings of hopelessness, involuntary crying, feelings of worthlessness, and even suicidal thoughts. PSD is not only a source of psychological suffering but also reduces brain plasticity and slows down motor rehabilitation.
2. **Anxiety Disorders:** Patients experience fear of recurrence of the illness, general nervousness, anxiety, and vegetative symptoms (palpitations, sweating, difficulty breathing). Often occurs alongside depression.
3. **Emotional Lability:** An organic condition resulting from brain damage, characterized by excessively strong emotional expressions to minor triggers (e.g., crying or laughing without reason).
4. **Apathy:** Loss of interest and motivation in any activity, low emotional level, passivity. Sometimes confused with depression but is a separate condition.
5. **Cognitive Impairments:** Decline in memory, difficulty concentrating, reduced problem-solving ability, and impairment of other cognitive functions.

Development

Mechanisms

The occurrence of psychoemotional disorders results from several factors:

- **Neurobiological factors:** Stroke damages specific areas of the brain (e.g., frontal and temporal lobes, basal ganglia). These areas regulate the balance of neurotransmitters (serotonin, norepinephrine, dopamine) that control mood, emotions, and cognitive processes.
- **Psychological reaction:** The illness itself is a strong psychological trauma. A person who becomes disabled is forced to drastically change their life direction, lose independence, and reconsider their family and social roles. This leads to depression and anxiety.
- **Socioeconomic factors:** Poor financial situation, social isolation, inability to continue professional activity, and family problems contribute to the development of psychopathological conditions.

Diagnosis

Early identification of psychoemotional disorders is key to successful rehabilitation. The following methods are used:

Clinical interview and observation: Establishing a trusting relationship with the patient and assessing changes in their mood, behavior, sleep, and appetite.

- **Standardized psychodiagnostic tests:**
 - **HADS (Hospital Anxiety and Depression Scale):** A convenient tool for assessing anxiety and depression.
 - **Beck Depression Inventory:** Allows for a deeper study of depressive symptoms.
 - **MMSE (Mini-Mental State Examination):** For screening cognitive impairments.
 - **FIM (Functional Independence Measure):** Helps in overall assessment of rehabilitation outcomes.
- **Neuroimaging (CT, MRI):** Determining the volume and location of brain damage, which is important for prognosis.

Comprehensive Treatment and Rehabilitation

Effective assistance requires a multidisciplinary approach:

1. **Pharmacotherapy:**
 - **Antidepressants:** Primarily SSRIs (Selective Serotonin Reuptake Inhibitors) such as citalopram, escitalopram, sertraline are recommended first-line due to fewer side effects and safety for the cardiovascular system.
 - **Anxiolytics (Tranquilizers):** Used short-term to reduce anxiety.
 - **Nootropic and neuroprotector drugs:** Aimed at improving brain metabolism and supporting cognitive functions.

2. Psychotherapy:
 - Cognitive Behavioral Therapy (CBT): Focused on changing negative thoughts and behaviors.
 - Supportive Psychotherapy: Understanding the patient's problems and providing emotional support.
 - Family Counseling: The patient's family also needs psychological support alongside the patient.
3. Rehabilitation Measures:
 - Physical exercise activities: Improve not only physical but also psychological state (due to endorphin release).
 - Vocational rehabilitation: Facilitates social integration.
 - Social assistance: Help in resolving the patient's financial and legal issues.

Conclusion

Assessment and treatment of psychoemotional state in a patient who has suffered an ischemic stroke should be an integral part of any rehabilitation program. A patient can achieve full social integration only when they have recovered not only in terms of motor functions but also in mental health.

To achieve successful results, the work of a multidisciplinary team consisting of a neurologist, psychiatrist, clinical psychologist, speech therapist, rehabilitation specialist, and social worker is necessary. Actively involving the patient and their family in the treatment process, providing them with information, and jointly developing a targeted rehabilitation plan are primary tasks.

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