



GENDER- AND AGE-RELATED ASPECTS OF THE CLINICAL AND PSYCHOLOGICAL COURSE OF POST- STROKE DEPRESSION

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ABSTRACT

This thesis examines the gender- and age-related characteristics of the clinical and psychological course of post-stroke depression. The study highlights the influence of sex, age, stroke etiology, neurological deficit, anxiety, cognitive impairment, and emotional response patterns on the severity and manifestation of post-stroke depression. The findings support the need for early psychoneurological assessment and individualized rehabilitation strategies aimed at improving recovery outcomes and quality of life in post-stroke patients.

Relevance. Post-stroke depression (PSD) is one of the most frequent psychoneurological complications developing in patients after stroke and has a pronounced impact on the dynamics of recovery of impaired functions, cognitive processes, and the overall psychosocial adaptation of the individual [1, 2, 7, 9]. PSD reduces the effectiveness of rehabilitation interventions, prolongs the recovery period, and worsens patients' quality of life [3, 4]. Contemporary studies indicate that the prevalence of depression after stroke ranges from 25% to 65%; however, its clinical manifestations, structure, and severity largely depend on sex, age, etiological factors of stroke, and the localization of brain injury [5, 6, 8]. Investigation of gender- and age-specific patterns of PSD creates a basis for developing more individualized approaches to its diagnosis, prevention, and treatment.

Aim of the study. To identify gender- and age-related features of the clinical and psychological course of post-stroke depression and to determine the leading causes of stroke in men and women of different age groups.

Materials and methods. The study included 60 patients (30 men and 30 women) with confirmed post-stroke depression, aged 40-75 years, who were in the subacute and early recovery periods after stroke. The participants were divided into three age categories: Group I, 40-49 years; Group II, 50-59 years; and Group III, 60-75 years. The clinical-anamnestic method, the Hamilton Depression Rating Scale (HDRS), Beck Anxiety Inventory (BAI), Montreal Cognitive Assessment (MoCA), and National Institutes of Health Stroke Scale (NIHSS) were used. Stroke risk factors were also analyzed, including hypertension, diabetes mellitus, atherosclerosis, arrhythmias, smoking, stress, and physical inactivity.

Results and discussion. The analysis demonstrated that gender and age differences substantially influence both the causes of stroke and the clinical manifestations of PSD.

Among men aged 40-49 years, hypertensive and atherothrombotic strokes predominated. The leading risk factors were arterial hypertension (47%), smoking (40%), stress overload (26%), and alcohol abuse (18%). Depression was manifested mainly by asthenoneurotic and somatized symptoms, including rapid fatigability, insomnia, a feeling of internal tension, and decreased motivation. The mean HDRS score was 14.2 +/- 2.1 points, corresponding to moderate depression.

In the 50-59-year age group, men more frequently had atherosclerotic strokes and dyslipidemia (33%), as well as ischemic heart disease (18%). Apathy-irritability forms of depression, reduced social activity, and mild cognitive impairment were observed in 68% of cases.

In the group older than 60 years, the leading causes of stroke were atrial fibrillation (42%) and post-infarction cardiosclerosis (28%). The psychoemotional sphere was characterized by marked apathy, psychomotor and cognitive slowing, and reduced volitional activity. The mean HDRS score was 18.5 +/- 1.9 points, indicating severe depression. Correlation analysis revealed a direct relationship between the severity of neurological deficit (NIHSS) and the severity of depression ($r = 0.68$; $p < 0.05$).

Different patterns were observed among women. At the age of 40-49 years, strokes were more often associated with hypertension (41%), chronic stress (33%), and hormonal influences, including contraceptive use (15%). Women demonstrated increased anxiety, emotional lability, tearfulness, and fear of recurrent stroke. The Beck Anxiety Inventory score reached 20.4 +/- 3.3 points, corresponding to a high level of anxiety.

At the age of 50-59 years, the leading causes of stroke in women were metabolic syndrome (28%), obesity (37%), and hypertension (48%). Psychoemotional manifestations combined anxiety, insomnia, and apathy. Moderate cognitive disorders, especially in attention and short-term memory, were found in 62% of patients.

In the older age group (60-75 years), strokes more often developed against the background of atherosclerosis (46%), type 2 diabetes mellitus (35%), and cardiac arrhythmias (22%). Depression was characterized by an apathy-dysthymic course, loss of interest in communication and social activity, while cognitive decline was observed in 78% of female patients, substantially limiting the effectiveness of rehabilitation.

A common pattern was that women more frequently presented with emotional-affective complaints, such as anxiety, feelings of helplessness, and tearfulness, whereas men more often reported somatovegetative symptoms, including fatigue, pain, and insomnia.

Conclusions. 1. Sex and age exert a significant influence on the nature and severity of post-stroke depression. In men, somatized and asthenoneurotic forms predominate, whereas in women anxiety-apathy variants with a predominance of emotional reactions are more typical. 2. Age differences determine both the causes of stroke and the type of depression: in patients aged 40-49 years, stress-related and behavioral factors dominate; at 50-59 years, atherosclerotic and metabolic mechanisms are more important; and at 60-75 years, cardiocerebral and endocrine mechanisms prevail. 3. The severity of depression directly correlates with the severity of neurological deficit and cognitive impairment, confirming the need for comprehensive assessment of patients' condition. 4. Individualized consideration of gender-, age-, and etiology-related factors when designing rehabilitation programs increases

treatment effectiveness, shortens the recovery period, and improves quality of life. 5. The obtained data confirm the need to introduce early psychoneurological diagnostics and monitoring of emotional status at all stages of rehabilitation in order to prevent chronic forms of depression.

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