

## ASSOCIATIONS OF MEDICAL AND BIOLOGICAL UNCONTROLLABLE RISK FACTORS WITH THE CHANCES OF DEVELOPING CEREBRAL STROKE AMONG THE ADULT POPULATION

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**Background.** Experts attribute the recent steady increase in the incidence of cerebral strokes (CS) to the «aging» of our planet's population and a significant increase in risk factors for the onset and development of these diseases (arterial hypertension, cardiovascular disease, diabetes mellitus, tobacco smoking, consumption of alcoholic beverages and alcohol-containing substances, etc.)

**The purpose of the study is** to determine the possible chances of developing CS among the adult population of medical and biological uncontrollable risk factors using multiple logistic regression analysis.

**Materials and methods.** The study was conducted at the Clinical Sanatorium Roshcha, a subsidiary of Ukrprofozdorovnytsia, a private joint-stock company, and the Clinical Sanatorium Berezivski Mineral Water Resort, a subsidiary of Ukrprofozdorovnytsia, a private joint-stock company. 500 people aged 19-91 were examined, among whom 300 respondents of the main group with an anamnesis of CS and 200 people of the control group (practically healthy individuals randomized by age and gender) were identified. The study and analysis of the research objects were conducted by copying the data from the medical records (control card of dispensary observation; medical record of an inpatient, etc.), questionnaires, and surveys.

**Results.** According to the results of multiple logistic regression analysis, both univariate and multivariate variants, the development of CS among the adult population is significantly influenced by female gender (respectively, odds ratio (OR) = 0.583 [95.0 % confidence intervals (CI) 0.401-0.848],  $p = 0.005$  and OR = 0.655 [95.0 % CI 0.445-0.966],  $p = 0.033$ ). Among this group of risk factors, both univariate and multivariate analyses showed a significant ( $p < 0.001$ ) effect on the development of CS by parents' bad habits (respectively, OR = 0, 447 [95.0 % CI 0.298-0.672] and OR = 0.467 [95.0 % CI 0.308-0.707]) and a burdened history of stroke pathology (respectively (OR = 0.377 [95.0 % CI 0.237-0.600] and (OR = 0.421 [95.0 % CI 0.262-0.676])).

**Conclusions.** Thus, the probable influence on the development of CS was determined by female gender, an anamnesis of parental harmful habits, and a burdened anamnesis of stroke pathology.