

МІНІСТЕРСТВО ОСВІТИ ТА НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
МЕДИЧНИЙ ІНСТИТУТ



АКТУАЛЬНІ ПИТАННЯ
ТЕОРЕТИЧНОЇ ТА КЛІНІЧНОЇ МЕДИЦИНИ
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ЗБІРНИК ТЕЗ ДОПОВІДЕЙ
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Conclusion. In both groups, the main and control not found an association between genotype and patients' smoking habits.

ASSOCIATION *ApaI* POLYMORPHISM OF *VDR* GENE WITH THE DEVELOPMENT OF ISCHEMIC STROKE IN INDIVIDUALS OF DIFFERENT SEX

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In the overwhelming majority of cases, cerebral stroke is a multifactor disease, in the development of which, along with other factors, an undoubted role is played by changes in the system of hemostasis. In the last decade considerable attention has been paid to the study of the influence of genetic predisposition on the hemostatic system. In general, the risk of stroke in men is 30% higher than that of women. However, this is typical only for the age group of the population from 45 to 64 years. At the age of more than 65 years, the risk of stroke in men and women is practically the same.

Aim of our study was to analyze the association of *ApaI* polymorphism of *VDR* gene the development of atherothrombotic ischemic stroke (AIS) in individuals of different sex.

Methods. Venous blood of 170 patients with atherothrombotic ischemic stroke and 124 healthy individuals (control group) was used for genotyping. Pathogenetic variants of stroke was determined according to the criteria TOAST, based on anamnesis and clinical features of the disease, dopplerography ultrasound data of main arteries of the head, and ECG. Polymorphism *ApaI* of gene *VDR* was examined with PCR-RFLP methodology.

Result. The distribution of genotypes for the SNP studied in women with IAS, the polymorphic variants a/a, a/A and A/A accounted for 25.0%, 50.0% and 25.0%, while in the control group – 33, 3%, 46.7% and 20.0% respectively. The differences between the two groups to be insignificant ($\chi^2=1.045$; $P=0.593$). Men patients with IAS mentioned above parameters amounted to 27.6%, 50.0% and 22.4%, and in control – 30.4%, 40.5% and 29.1% ($\chi^2=1.747$, $P=0.417$). Analysis of the frequency of females and males in the comparison group depending on genotype-*ApaI* polymorphism showed that among homozygotes for the a-allele proportion of women and men in the control was respectively 38.5% and 61.5%, and in patients with IAS - 40.0% and 60.0%. In heterozygotes these parameters amounted to 39.6% and 60.4% in controls and 42.4% and 57.6% of patients in the main group.

Conclusion. In our work executed for the first time analyzed the association of *VDR* gene *ApaI* polymorphism with atherothrombotic stroke representatives of both sexes were not found due investigated the genetic factors of atherothrombotic ischemic stroke in persons of female and male.