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АКТУАЛЬНІ ПИТАННЯ ТЕОРЕТИЧНОЇ ТА ПРАКТИЧНОЇ МЕДИЦИНИ

Topical Issues of Clinical and Theoretical
Medicine

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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 *TaqI* of gene *VDR* was examined with PCR-RFLP methodology.

The distribution of genotypes for *TaqI* polymorphic variant of *VDR* gene in smokers and non-smokers was as follows. In the control group were found people, who do not smoke, with genotype T/T – 43.0%, with genotype T/t – 48.4%, with genotype t/t – 8.6%, and those who smoke, respectively 45.1%, 35.5% and 19.4%. The comparison of the data indicates a lack of statistically significant differences in the distribution of genotypes of *TaqI* polymorphic variant between persons who are smokers and non-smokers in the control group ($\chi^2=3,263$, $P=0,196$). Among patients with AIS persons, non-smokers, with genotype T/T was 42.5% with genotype T/t – 46.7%, with genotype t/t – 10.8%, and smokers – 34.0%, 52.0% and 14.0% respectively. Statistically significant differences in the distribution of SNP between the smokers and smokers with IAI is not found ($\chi^2=1,146$, $P=0,564$).

In both groups, the main and control were not revealed association between genotype and patients habit to the smoking.

THE DISTRIBUTION OF GENOTYPES FOR THE A69314G POLYMORPHISM TNAP GENE IN THE CONTROL GROUP AND IN PATIENTS WITH ACUTE CORONARY SYNDROME

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Introduction. Tissue non-specific alkaline phosphatase (TNAP) promotes mineralization by hydrolysis inorganic phosphate (Pi) of inorganic pyrophosphate (PPi). Nowadays, there are more than 3500 single-nucleotide polymorphisms of TNAP gene. Most researched such polymorphism appeared in connection with the TNAP gene mechanisms of calcification of the vascular wall, leading to the development of acute coronary syndrome.

The purpose of the study. To investigate the distribution of genotypes for the A69314G polymorphism gene TNAP in healthy individuals and in patients with acute coronary syndrome (ACS).

Materials and methods. Venous blood of 118 ACS patients were genotyped for the polymorphism by PCR. All statistical analyses were performed using the Statistical Package for Social Science program (SPSS for Windows, version 17.0). The χ^2 -test was used for comparison of the allele and genotype frequencies between different study subgroups. Differences were considered statistically significant with a P-value < 0.05.

Discussion of results. From the analysis of the results of individual genotype frequencies for the A69314G polymorphism gene TNAP in the control group and in patients with ACS can be seen that in patients with ACS value homozygotes for the major allele (A/A), carriers of the minor allele (A/G+G/G) was 83,6% and 16,4%, while in the control group, the corresponding figures amounted to 69,5% and 30,5%. Differences in the distribution of different variants of genotype between patients with ACS and healthy patients go beyond statistical significance ($\chi^2 = 6,302$, $P = 0,012$).

Conclusions. There is a significant difference in the distribution of genotypes for the A69314G polymorphism gene TNAP between healthy and sick persons with ACS.