STRUCTURAL ACE - GENE POLYMORPHISM IN PATIENTS OF UZBEK NATIONALITY WITH DILATED CARDIOMYOPATHY

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BACKGROUND
Dilated cardiomyopathy - a disease often genetically determined, depending on the nationality

OBJECTIVE
To study the distribution of I/D polymorphism markers of ACE-genes in the Uzbek nationality with dilated cardiomyopathy (DC).

METHODS
Study included 102 DC patients (39 female, 63 male), with clinical signs of II-IV FC heart failure NYHA. Duration of disease was 12.8±1.8 months. Control group included 65 healthy volunteers. All studied patients underwent clinical examination, Echocardiography, ECG, clinical-functional and laboratory methods of analysis and DNA extraction.

RESULTS
The results obtained demonstrated prevalence of I/D genotype and absence of significant differences in frequency alleles I and D of ACE gene in individuals of Uzbek nationality suffering from DCMP. Control group had other pattern of genotype and alleles distribution of polymorph marker of ACE gene: DD- genotype was verified in 12 (20%) patients, ID genotype – in 14 (23,3%), II-genotype – in 34 (56,7%) (P<0,01; χ²=22,2). D-allele was revealed in 41(34,2%) cases, I-allele – in 79 (65,8%) cases (p<0,001; χ²=22,8). The results obtained in healthy subjects showed significant accumulation of I-allele and II –genotype I/D-polymorph marker ACE gene.

CONCLUSION
For the first time there was ID polymorphism of ACE gene in patients of Uzbek nationality with DC. There was shown prevalence of ID heterozygote genotype in the patients with DC and reliable prevalence of I-allele and II genotype in healthy subjects.