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To indicators of the detection of alleles and genotypes of polymorphism (rs1695) IIe 105 Val *FGB* gene in pregnant women in Uzbekistan

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Background & Aim: The search for genetic markers associated with the development of placental insufficiency is the most important task for understanding the pathogenesis, treatment and prevention of the disease. The purpose of our research was to determine the frequency of polymorphisms of hemostasis and fibrinolysis genes: *FGB*, in pregnant women, and to identify the distribution patterns of these polymorphisms in the clinical course of fetoplacental insufficiency (FPN).

Method: The object and subject of the study were pregnant women, patient DNA samples and the fibrinolysis gene (rs1695) IIe 105 Val of the *FGB* gene. The study included 50 pregnant women aged from 20 to 45 years who were observed at the base of the clinic of the National Scientific Practical Medical Center for obstetrics and gynecology Ministry of Health of the Republic of Uzbekistan.

Result: The results of clinical, instrumental and functional studies among 50 pregnant women showed a high detectability of FPN in 40, which accounted for 80% of cases. Molecular genetic analysis of distribution frequencies of alleles and genotypes of IIe 105 Val polymorphism of the *FGB* fibrinolysis gene among 80 DNA samples in 40 pregnant women with FPN in 87.5% of cases revealed the presence of a normal allele A and in 12.5% of cases -the allele G, respectively. (X2=0.1; P=0.8; OR=1.2; 95% CI 0.306-4.983). Whereas, in the control group in 10 pregnant women without FPN, the frequency of occurrence of the normal allele A of the *FGB* gene was 85%, whereas the mutant A IIe 105 Val allele of the *FGB* gene was 15%, respectively. Indicators of the frequency distribution of genotypes by RCS of IIe 105 Val polymorphism of the *FGB* gene in the main group of pregnant women with FPN showed that the observed frequency of A/A genotypes was found in 75.0%, heterozygous A/G genotypes-25.0% and homozygous-G/G-0%, respectively, whereas the expected frequency of the genotypes of group A/A and heterozygous A/G were 76.6% and 21.8%, respectively and G/G-in 1.56% of cases. For the IIe 105Val *FGB* gene in the group of pregnant women with PSP, the empirical (Hobs) distribution of genotypes corresponds to the theoretically expected (Hexp) in PSC ($p>0.05$).

Conclusion: Analysis of the obtained results shows that the distribution of all genotypes of the A/G polymorphism of the *FGB* gene in the group of pregnant women with FPN and the control of healthy individuals corresponds to RCS. The study of the genetic structure of this marker revealed a tendency to increase the expected mutant in the main group of pregnant women with NEF in relation to the group without NEF (10% and 2.25%, respectively). The results require further study of this gene in pregnant women.

Biography

Nigora Mavlyanova is the Scientific Leader of the Youth Applied Grant from the Republican Specialized Scientific and Practical Medical Center of Obstetrics and Gynecology, Ministry of Health of the Republic of Uzbekistan. She is a Member of the Association of Obstetricians and Gynecologists of the Republic of Uzbekistan. She has published over 20 articles in famous magazines.

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