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9th World Congress on EPIGENETICS AND CHROMOSOME

June 23, 2022 | Webinar

To Results of the Detectability of C/T Genotype Polymorphisms of the 807(rs1126643)ITGA2-α2 Gene in Pregnant Women of Uzbekistan

Mavlyanova Nigora Narimanovna

Republican Specialized Scientific and Practical Medical Center for Obstetrics and Gynecology, Uzbekistan

Fetal Loss Syndrome is a major global health problem. According to statistics, fetal loss syndrome in the structure of neonatal morbidity ranges from 47 to 68%, which is the result of ineffective antenatal measures for the prevention and treatment of placental insufficiency. The search for genetic markers associated with the development of fetal loss syndrome is the most important task for understanding the pathogenesis, treatment and prevention of the disease.

92 pregnant women were examined in terms of gestation from 8-36 weeks: 40 women with physiological pregnancy and timely delivery, observed from early gestational age in antenatal clinics in Bukhara and Samarkand region (control group), and 52 pregnant women with SPP hospitalized in departments OPB of Bukhara and Samarkand region (main group). ITGA2 encodes the alpha-2 integrin protein, a membrane glycoprotein known as GPIa (platelet glycoprotein Ia, or very late activation protein (VLA), which is expressed on the membranes of various cells, including megakaryocytes, fibroblasts, and platelets. On the platelet membrane, GPIa forms a complex with GPIIa, one of the collagen receptors.

Increased expression of GPIa/IIa receptors on the cell surface was found on the surface of platelets in homozygotes for the T allele (T/T genotype), while a decrease in expression was observed in homozygotes for the C allele (C/C genotype). The presence of the T allele is associated with an increase in the rate of platelet adhesion, which may be a risk factor for thrombophilia. The works of various researchers have shown an association between the presence of the T allele and the risk of developing myocardial infarction, ischemic stroke, and thromboembolism, especially at a younger age. The study of polymorphism is also recommended to assess the risk of thrombosis after angioplasty, stenting of the coronary arteries. By identifying the genotype for this marker, it is possible to assess the genetic predisposition to myocardial infarction, stroke, thromboembolism and take appropriate preventive measures.

The results of molecular genetic studies of the ITGA2-α2 gene indicate that in pregnant women the association of polymorphisms of favorable C/C genotypes of the ITGA2-α2 gene is most often detected - 81.3% (73/80), the association of heterozygous C/T variants - was detected - in 8.7% of cases, while homozygous unfavorable T/T variants were not detected in our cases. The detection of unfavorable C/T association genotypes of the ITGA2-α2 gene polymorphisms was most often noted at a young active age.The association of C/T polymorphism of the ITGA2-α2 gene with the risk of developing fetal growth restriction syndrome is not significant. ($\chi 2=0.2$; $P>0.05$OR=1.37; 95%CI: 0.29-6.56)A preliminary analysis of molecular genetic studies shows that the functionally unfavorable T allele and the association of the C/T genotype polymorphism of the ITGA2-α2 gene polymorphism is not a significant determinant of an increased risk of developing ORPS in Uzbekistan ($\chi 2<0.16$; $P>0.05$).

Biography

Mavlyanova Nigora Narimanovna is working Ministry of Health of the Republic of Uzbekistan, Republican Specialized Scientific and Practical Medical Center for Obstetrics and Gynecology. Her research areas include topics related to Obstetrics and Gynecology. She is the author of many articles which of those is this abstract entitled “To results of the detectability of C/T genotype polymorphisms of the 807(rs1126643)ITGA2-α2 gene in pregnant women of Uzbekistan”.

nigora-m@yandex.ru