The role of the 807 gene ITGA2 (c759 C>T) integrin polymorphism in patients with type 2 diabetes mellitus in the development of myocardial ischemia in Azerbaijan

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Abstract

Relevance of the topic: Ischemic heart disease is one of the main causes of disability and mortality in patients with Type 2 Diabetes Mellitus (DM2). The search for early predictors is of great practical importance.

Objective: To evaluate the role of polymorphic variants of the İTGA2 alpha 2 integrin gene in the development of myocardial ischemia in patients with type 2 diabetes mellitus.

Materials and methods: The study included 48 patients with Coronary Heart Disease (CHD) aged 55.6+8.5 years, out of which 21 patients were diagnosed with T2DM and 27 people were not diagnosed with T2DM (control group).

Polymorphisms of the ITGA2 gene (c759 C>T) integrin were studied by the MALDI-TOF mass spectrometer (Seguenom, USA) Statistical analysis was performed using the Statistic software for Windows.

Results: In the study group of patients with T2 diabetes mellitus, polymorphism of the İTGA2 integrin gene responsible for platelet aggregation, the prevalence of the mutant variant in the homozygous form of TT was revealed in 61.9% of patients. SS in homozygous form in 47.5% of patients.

Conclusion: A statistically significant difference in the incidence of TT gene polymorphism, the İTGA2 integrin, was found in Azerbaijani patients with T2DM compared with the group of people without diabetes. The data obtained suggest that carriers of the TT variant have a high risk of thrombus formation. Require additional preventive measures are required and treat thrombotic complications in T2DM patients.

Biography

Nazirova Vafa Balabay is affiliated to the Special Medical Health Complex, Baku, Azerbaijan. Her research interests reflect in her wide range of publications in various national and international journals.