Study of MNSODA16V gene polymorphisms of genes involved in type II diabetes patients in the population of Mazandaran province

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Abstract
One of the genes that can play a role in increasing the incidence of type 2 diabetes is the MNSODA16V gene. In this study, the relationship between this gene and type 2 diabetes mellitus among Mazandaran people was studied. About 1cc of blood containing EDTA (CBC) plasma were obtained from 50 infected and 50 individuals. In order to determine the amount and quality of DNA, two methods of quantitative evaluation using spectrophotometric method and qualitative evaluation using electrophoresis were used. In order to estimate the DNA concentration, 4 μl of the DNA base solution was mixed with one μl of the sampler buffer and evaporated once in the wells of 1.2% agarose gel in the TAE buffer. To evaluate the PCR product, 2% agarose gel was performed. 5 μl of the product of each reaction, with 1 ml of color, was transferred to gel wells and electrophoresis at 100 volts for 1.5 hours. The gel was stained in Ethidium bromide solution (0.5 mg / ml) for 20 minutes, and then transferred to distilled water from the dye gel apparatus. Unfortunately, due to the repeated use of up to 3 times and the use of the DNA extraction kit, this is not the work process and needs to be further explored. For this reason, this study shows little success with the association of MNSODA16V polymorphism and also requires more study in different populations to better understand the role of MNSODA16V.

Keywords: Gene, MNSODA16V, Polymorphism, Population of Mazandaran province, Type 2 diabetes.