Poster Presentation

Investigation of the Relationship between ZNF804A and DISC1 Polymorphisms in RS61886494 and RS12133766 Positions in Schizophrenic Patients

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Abstract

Schizophrenia is a mental disorder characterized by abnormal social behavior and failure to understand reality. The aim of this study was to determine the relation between FOLH1 and DISC1 genes polymorphism in patients with schizophrenia in Iran. In this study, 50 patients with schizophrenia and 50 healthy controls were evaluated. PCR-RFLP was used for FOLH1 gene and Tetra-ARMS for the DISC1 gene for evaluation of single nucleotide polymorphism in both groups of patients and control. For enzymatic digestion of PCR products, the positions of RS61886494 and RS12133766 were used for enzyme MseI and BseLI and incubated for 37 hours at 16°C. The frequency of CC, CT and TT genotypes for FOLH1 gene in RS61886494 region was 92%, 8%, and 0%. In the DISC1 gene, the frequency of GG, GA, and AA genotypes in the RS12133766 region was 84%, 8%, and 8%. For FOLH1 gene in RS61886494 region, the frequency of CC and TT genotypes in patients was 2% and 6% lower in healthy people, while the CT genotype in patients was 8% higher in healthy people. Interestingly, TT genotype was not observed in patients and healthy genotype CT was not observed. Regarding the DISC1 gene, the results showed that the frequency of GG and AA homozygote genotypes in the patients was higher in the RS12133766 region when the heterozygote GA was high in healthy people and was not observed in patients with this heterozygote.

Keywords: Schizophrenia, Polymorphism, Disc1, Folh1

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