The study of Association of DRD2 Gene TaqI Polymorphism with Attention Deficit Hyperactivity Disorder a Population Sample of Children in Iranian-Azeri

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Abstract:
ADHD (Attention deficit hyperactivity disorder) is a multifactorial disorder that has defined by hyperactivity, impulsivity and attention deficits. Various neurotransmitters such as dopamine can play a role in its pathophysiology. The aim of this study was to examine the association of two common single nucleotid polymorphisms in DRD2 gene, Taq I A (T/C) and Taq I B (G/A), with ADHD risk among Iranian-Azeri population. A study of case–control association was performed with 89 samples with attention deficit hyperactivity disorder and 96 healthy subjects. Peripheral blood samples were used for Genomic DNA extraction by salting-out method. SNP genotyping was carried out by PCR-RFLP technique. The collected data were analyzed through jvastant online statistics software, using Chi-square (v2), with a significance level of 0.05. There was not significant difference in the allele and genotype frequencies between ADHD and TaqIB polymorphism in cases and controls (p>0.05). In the Taq IA of DRD2 gene, TT homozygous dominants and CC homozygous recessives were more frequent in case group than in control group but there was not significant difference observed. In the other hand, T/C heterozygotes were more frequent in the control group than the case group, and difference was significant (p