The data on the relationship between polymorphism of HTR1B and DBH genes and attention-deficit hyperactivity disorder in adults with or without substance use disorders

Khademi M, Razjouian K, Davari-Ashtiani R, Arabgol F, Jafari F, Darvish H.


Abstract

There is a positive relationship between attention-deficit hyperactivity disorder and tendency toward drug use in numerous studies. The present study was aimed to investigate the relationship between polymorphism of serotonin receptor 1B gene (HTR1B) and Dopamine beta-hydroxylase gene (DBH) with attention-deficit hyperactivity disorder in adults with or without substance use disorders. In the present case-control study, as many as 355 individuals entered the present study and was categorized in different groups: control healthy group, substance use disorders group, and attention-deficit hyperactivity disorder group. For confirming attention-deficit hyperactivity disorder in adults, demographic and Conners forms were used. Moreover, SCID-I questionnaire was used to confirm or reject the individual's suffering from substance use disorders and other psychiatric diseases. The polymorphism of abovementioned genes was conducted by polymerase chain reaction (PCR) and restriction fragment length polymorphism (RFLP). In case of DBH gene-Rs2519152, the findings indicated that TT, TC, and CC genotypes and T and C alleles are not different in the attention-deficit hyperactivity disorder group, substance use disorder group, the group with patients suffering from both disorders, and control group. Moreover, the frequency of TT, TA, and AA genotypes as well as T and A alleles was same in the attention-deficit hyperactivity disorder group, substance use disorder group, the group with patients suffering from both disorders, and control group.