P-1327 - A GENOME-WIDE ASSOCIATION STUDY OF ATTENTION AND EXECUTIVE FUNCTION IN SCHIZOPHRENIA

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Objective: We used Genome-wide association study (GWAS) to explore related genes for schizophrenia with attention and executive function of cognition as endophenotypes.
Methods: Trial making tests were used to assess attention and executive function of 98 schizophrenia patients and 60 normal controls. HumanHap660 BeadArray was used to genotype and 464,301 SNPs passed quality control checks. Taking SNPs as analytic factors, age, gender and education years as covariates, trial making tests as quantitative traits, we used PLINK software to complete main effect analyses of the case group and the control group.
Results: 2 SNPs residing on PTPRC were associated with attention deficit（rs3767742，P =1.83×10^{-5}，rs12409128，P =4.50×10^{-6}），10 SNPs which locate in UGT2A1, VPS13A and CNTN1 respectively were associated with executive function deficit（rs10011630，P =5.88×10^{-8}，rs4148284，P =5.88×10^{-8}，rs4148283，P =5.88×10^{-8}，rs4148282，P =5.88×10^{-8};rs7030802，P =2.91×10^{-6}，rs12343395，P =4.30×10^{-6}，rs7035855，P =2.91×10^{-6}，rs7039192，P =2.91×10^{-6};rs12316203，P =2.91×10^{-6}，rs13328933，P =2.91×10^{-6}），moreover, these SNPs have interaction with individual schizophrenia state.
Conclusions: PTPRC, UGT2A1, VPS13A and CNTN1 may be the susceptibility genes for schizophrenia that merit further investigation.

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