
IL3R GENE RS6603272 VARIANT AND CSFR2A GENE RS4129148 VARIANT IN PATIENTS WITH SCHIZOPHRENIA

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Introduction Schizophrenia has genetic, epigenetic and environmental components. Recent reports showed that the IL3 gene, colony stimulating factor 2 receptor alpha (CSF2RA), beta (CSF2RB) and IL-3 receptor alpha (IL3RA), the IL-specific receptor subunits for CSF2 and IL3, respectively, are associated with schizophrenia.

Aims Association analyses of rs6603272 variant of the IL3R gene and rs4129148 variant of CSFR2A gene with schizophrenia have been studied.

Methods We had 166 schizophrenic patients and 246 healthy controls. In both case control studies, a PCR-RFLP method was used.

Results The genotype frequencies of the IL3R gene rs6603272 variant were TT, 54.8, TG, 40.4, GG, 4.8 % in cases, TT, 57.7, TG, 36.2 and GG, 6.1% in controls. The frequency of T allele in controls and cases was 76% and 75% respectively. Similarly, the genotype frequencies of the CSFR2A gene rs4129148 variant were GG, 44.6; GC, 39.8; CC, 15.7 % in cases and GG, 43.9; GC, 43.1; and CC, 13.0% in controls. The G allele frequency was 64% in cases and 65% in controls.

Conclusion In our study, we did not find an association between the rs6603272 variant of IL3RA gene and schizophrenia ($\chi^2=0.896$; $P=0.639$). Nor did we find an association between the CSFR2A rs4129148 variant and schizophrenia ($\chi^2=0.770$; $P=0.681$)