

Association between Amisulpride Treatment and Dopamine D3 Receptor Gene Polymorphisms in Korean Schizophrenic Patients

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Objectives: The aim of this study is to evaluate the association between *rs6280* and *rs905568* genetic polymorphism of *DRD3* gene and the treatment response of amisulpride.

Methods: After six weeks treatment of amisulpride, 125 schizophrenia patients were interviewed based on the Positive and Negative Syndrome Scale (PANSS) and the Clinical Global Impression-Severity (CGI-S). The genotyping for *rs6280* and *rs905568* was performed using TaqMan single nucleotide polymorphism (SNP) genotyping assay.

Results: There was no significant difference in the frequency of genotype and allele of *rs6280* between the responders and non-responders based on the total, positive, and general score of PANSS and CGI-S score. However, there was a significant association between this SNP and treatment response in the negative score of PANSS ($\chi^2 = 5.23$, $p = 0.022$). There was no significant association between *rs905568* and the response in positive, negative, general, and total PANSS score and CGI-S score.

Conclusions: This is the first positive association study between *DRD3* gene and the treatment response of negative symptoms to amisulpride in Korean schizophrenia patients. A larger scale research on more SNP of the *DRD3* gene will make a progress in the study of pharmacogenetics on the treatment response of the amisulpride.

Keywords: Treatment response, Amisulpride, *DRD3* gene, Polymorphisms *rs6280*.

Biography:

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