P03-74 - **INDIVIDUAL GENETIC VARIATION AND RESPONSE TO ANTIPSYCHOTIC MEDICATIONS**

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Schizophrenia is a severe mental disorder with relatively high occurrence in general population (around 1%). Classical genetic studies (Family, twin and adoption) undoubtedly prove its genetic etiology. On the other hand genetics studies are important in exploration of innate mechanisms responsible for specific response to antipsychotic medications. Significant differences in therapeutic responses to antipsychotic agents in patients suffering from schizophrenia were observed and therefore pharmacogenetics of antipsychotics represents main focus in current psychiatric genetics studies.

This is particularly observed at polymorphisms in dopamine and serotonin receptor genes, but also some other biomolecules involved in signal transduction mechanism such are regulators of G-protein signalling in brain (RGS4). In order to test this hypothesis, association between certain variants of RGS4 linked polymorhic marker and responsiveness status towards antypsychotics was evaluated within the group of 52 psychiatric patients under antipsychotics treatment. No association between specific allele or genotype for RGS4 linked loci and therapeutical response using Fisher´s Exact Test was found (P>0.05).

https://doi.org/10.1016/S0924-9338(10)71184-6 Published online by Cambridge University Press