

YPSP01-14 - CD28 GENE POLYMORPHISM WITH RESPECT TO AFFECTIVE SYMPTOMS IN SCHIZOPHRENIA

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Introduction: Schizophrenia is complex and clinically heterogeneous psychiatric disorder that has an evidenced genetic basis. Several reports indicate a possible role of the activation of the immune system in the pathogenesis of schizophrenia. CD28 is a molecule expressed on T-cells that provides the major co-stimulatory signal required for activation of immune response. For many years now, it has been strongly advocated that biological underpinnings of schizophrenia should be investigated with respect to subpopulations of subjects defined by homogenous symptomatology.

Objectives: To investigate the association of polymorphism of the CD28 gene (T17int3C) with respect to schizophrenia symptomatology.

Material and methods: 105 patients diagnosed with schizophrenia according to ICD-10 criteria and 380 controls were included in the study. The patients were diagnosed using the Operational Criteria for Psychotic Illness checklist (OPCRIT). Based on confirmatory factor analysis on OPCRIT items performed by Serretti et al. (2004), in our study we considered five factors of symptomatology (mania, positive symptoms, disorganization, depression and negative symptoms).

Results: There was significant difference in distribution of genotypes between patients with schizophrenia with co-occurring manic symptoms and without co-occurring manic symptoms (respectively CC and/or TC: 23% vs. 47%, TT: 77% vs. 53%, $p=0,040$). There was also difference in distribution of genotypes between patients with schizophrenia with co-occurring depressive symptoms and without co-occurring depressive symptoms (respectively CC and/or TC: 24% vs. 47%, TT: 76% vs. 53%, $p=0,043$).

Conclusion: We have shown that CD28 gene polymorphism might increase risk for affective (depressive and/or manic) symptom dimension in schizophrenic patients.