

Results: An increase of inflammatory markers in both groups compared to controls was found ($p < 0.05$). The highest values of IL-6, LE, CRP, $\alpha 1$ -PI and anti-S100-beta antibodies in FEP patients were revealed ($p = 0.03$). After the treatment, the positive trend of inflammatory markers in FEP patients ($p < 0.05$), but not in JD with ASSS patients was detected (except LE activity, $p < 0.05$).

Conclusions: The results confirm the pathogenic role of inflammation in the development of endogenous mental disorders. The inflammatory markers studied reflect the activity of the pathological process in the early stages of schizophrenia.

Disclosure: No significant relationships.

Keywords: attenuated symptoms of schizophrenic spectrum; first-episode psychosis; inflammatory markers; juvenile depression

EPV0492

Effects of long-term therapy with quetiapine and olanzapine on parameters of immunity and cytokine levels in patients with schizophrenia

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Introduction: The study of effects of long-term antipsychotic therapy in patients with schizophrenia is relevant.

Objectives: To study effects of long-term antipsychotic therapy on parameters of immunity and cytokine levels in patients with schizophrenia.

Methods: We examined 20 schizophrenic patients, who received quetiapine (group 1) and 17 - olanzapine (group 2) for more than 6 months before admission in the hospital as the main anti-recurrence therapy. Persons aged 20-63 years with length of the follow-up of the disease ≥ 1 year were included. The investigations included: phenotyping of immunocompetent cells into CD differentiation clusters by flow cytometry; mitogen-induced, spontaneous production of cytokines (IL2, IFN- γ , IL-4, TNF- α) were identified with use of kits for enzyme-linked immunosorbent assay (ELISA).

Results: It was shown that patients of group 1 in comparison with group 2 were characterized by lower values of CD3- lymphocytes ($p = 0.049$), higher values of the spontaneous production of IFN- γ ($p = 0.01$), mitogen-induced production of IL-2 ($p = 0.043$) and IL-4 ($p = 0.059$). In all examined low level of mitogen-induced of IFN- γ ($p = 0.0001$) and TNF α ($p = 0.002$; $p = 0.0001$), high level of spontaneous production of TNF α ($p = 0.001$) were revealed in relation to control.

Conclusions: It was found that the acute period of schizophrenia after prolonged treatment with atypical antipsychotics is accompanied by immunological imbalance and dysregulation of the cytokine system. More severe immune disorders when hospitalized

during the exacerbation period were revealed in patients who had been receiving antipsychotic therapy with the atypical antipsychotic quetiapine for a long time. This can be associated with the features of the mechanism of action of atypical antipsychotics.

Disclosure: No significant relationships.

Keywords: Psychoneuroimmunology; schizophrenia; Antipsychotics

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Autoantibody profiles are associated with specific clinical features in psychotic disorders

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Introduction: Immune system abnormalities exist across a range of psychiatric disorders. Autoimmunity, characterized by the production of antibodies against the body's own antigens, is a feature of immune system dysfunction and could play a role in mental disorder pathophysiology. Better understanding of the associations of auto-immunoglobulin G (IgG) repertoires with clinical features of mental illness could yield novel models of psychosis pathophysiology and markers for biological patient stratification.

Objectives: To undertake global screening for auto-IgG expression in a large cohort of people with psychotic disorders; to determine whether associations exist between autoantibody expression and clinical features.

Methods: Cross-sectional quantification of auto-IgGs in blood plasma of 461 people with established psychotic disorder diagnoses. For global screening, pooled samples of phenotypically representative patient groups were exposed to planar protein microarrays containing 42,000 human antigens. For targeted profiling, expression levels of 380 autoantibodies were quantified by suspension bead array (SBA) in each patient's plasma.

Results: We identified highly individual autoantibody profiles with no evidence for co-expression patterns. We found 6 autoantibodies robustly associated with specific psychopathology: anti-AP3B2, detected in 5% of the cohort of whom 100% had persecutory delusions; anti-TDO2 (5% of the cohort, 100% hallucinations); anti-CRYGN (4%, 86% initial insomnia); anti-APMAP (3%, 86% poor appetite); anti-OLFM1 (2.5%, 100% above median cognitive function); and anti-WHAMMP3 (2%, 90% anhedonia and dysphoria). Examination of the auto-IgG binding site on the TDO2 protein revealed a putative pathophysiological mechanism involving the kynurenine pathway.

Conclusions: We identified 6 frequently occurring autoantibodies that were associated with specific clinical features in people with psychotic disorders.