

## **P-1270 - CYTOKINES LEVELS IN SCHIZOPHRENIA PATIENTS AND IN THEIR FIRST- DEGREE BIOLOGICAL RELATIVES**

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**Introduction:** It is hypothesized that in the etiology of schizophrenia genetic and environmental factors are involved. Between the environmental events linked to the causation of this condition an immune dysfunction has been described. First degree biological relatives of people with schizophrenia also have an increased incidence of autoimmune diseases.

**Objectives:** The aim of this work was to examine the serum levels of proinflammatory cytokines (IL-1 $\beta$ , sIL-2R IL-6, IL-12p70, TNF- $\alpha$  and IFN- $\gamma$ ) as well as of anti-inflammatory cytokines (IL-4 and IL-10) in male patients with schizophrenia and in their first degree-biological relatives.

**Methods:** Blood samples were obtained from patients with a diagnosis of schizophrenia in a stable psychopathological condition (n=36), first degree biological relatives of those patients and a healthy control group (n=26). Serum interleukins were analyzed using a commercial ELISA preparation (Bender MedSystems). We used non-parametric test for statistical analysis.

**Results:** Patients with schizophrenia showed significantly higher serum levels of proinflammatory cytokines (sIL-2R, IL-6, TNF- $\alpha$ , IFN- $\gamma$  and IL12-p70) and lower serum levels of the anti-inflammatory cytokine IL-4 than in the healthy control group. The unaffected first-degree relatives showed changes in proinflammatory cytokines (sIL-2R, IL-6 and TNF- $\alpha$ ,) in the same way as the corresponding schizophrenia patients, but at a lower level than the healthy control group.

**Conclusions:** Ours findings suggest that sIL-2R, IL-6 and TNF-a may be biologic vulnerability markers for psychiatric disorders and also these alterations might have an hereditably pattern.