

## EPP0432

### Plasma concentrations of IL-8, IFN- $\gamma$ and IL-1 $\beta$ in schizophrenia patients with subgroup analysis of first episode drug naïve patients

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**Introduction:** Increased plasma concentrations of proinflammatory cytokines are found in chronic schizophrenia patients, patients with first episode and in individuals with high risk for psychosis. The most replicated findings are increased concentrations of IL-6, TNF- $\alpha$  and IL-1 $\beta$  through different phases of the disorder while the results for two important proinflammatory cytokines IL8 and IFN- $\gamma$  were not consistent.

**Objectives:** Primary objective of this study was to assess differences in concentrations of IL-8, IFN- $\gamma$  and IL-1 $\beta$  between schizophrenia patients and healthy controls, Secondary objective was to explore differences in first episode drug naïve patients.

**Methods:** We measured plasma concentrations of IL-8, IFN- $\gamma$  and IL-1 $\beta$  in 64 healthy controls and 64 schizophrenia patients during acute exacerbation and remission phase. 25% were drug naïve first episode schizophrenia patients. The patients were matched by age, sex and body mass index and exclusion criteria included obesity class 2 or higher, any concomitant organic mental or neurological disorder, acute or chronic inflammatory disease, and use of immunomodulatory drugs or psychoactive substances.

**Results:** Levels of IL-8 were significantly lower in patients with schizophrenia in acute phase and remission compared to healthy controls ( $p=0,009$  for acute phase and  $p=0,020$  for remission). There was no significant difference in the levels of IFN- $\gamma$  and IL- $\beta$  between schizophrenia in acute phase and remission and healthy controls ( $p>0,05$ ). In schizophrenia patients there was no difference in the levels of IFN- $\gamma$ , IL- $\beta$  and IL-8 between acute phase, remission and healthy controls ( $p>0,05$ ). There was no difference in plasma levels of IL-8, IFN- $\gamma$  and IL-1 $\beta$  between first episode drug naïve and previously treated schizophrenia patients.

**Conclusions:** Our research did not find disturbance of plasma levels of IFN- $\gamma$  and IL-1 $\beta$  in schizophrenia patients, although the increase of IL-1 $\beta$  was the most replicated finding up to date. Interestingly and contrary to expected the finding of significantly decreased levels of IL-8 in schizophrenia patients requires further research since IL-8 plays a vital role in the inflammatory pathway and may be implicated in cognitive dysfunction.

**Disclosure of Interest:** None Declared

## EPP0433

### Association of anti-thyroid autoantibodies with neuropsychiatric features in patients with affective and schizophrenia spectrum disorders

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**Introduction:** A growing body of evidence has shown the association between autoimmune thyroiditis and mental illness (Rege *et al.* AUS N J S Psychiatry 2013; 300 141-154). Identifying the neuropsychiatric features associated with thyroid antibody positivity could have significant implications for diagnostic and therapeutic strategies. However, the link between anti-thyroid antibodies and precise underlying pathophysiology requires future research.

**Objectives:** The aim of the present study was to conduct a retrospective evolution in patients diagnosed with schizophrenia spectrum disorder and affective disorder who were screened for anti-thyroid antibodies at the time of their hospitalization and to investigate neuropsychiatric features of anti-thyroid antibody-positive patients.

**Methods:** A total of 143 inpatients diagnosed with schizophrenia spectrum disorders and affective disorders between 2021 and 2023 were screened for anti-thyroid antibodies such as thyroid peroxidase (TPO) and thyroglobulin (TG). All patients were women. In order to elucidate the subsequent neuropsychiatric clinical features of individuals with positive anti-thyroid antibodies, the retrospective examination was conducted based on Neuropsychiatric Inventory-Q (NPI-Q) and DSM-V diagnostic criteria utilized at the time of hospitalization.

**Results:** The main age of the patients was 48.2 (SD 10.4). A total of 143 inpatients with schizophrenia spectrum disorders and affective disorders were screened for anti-thyroid antibodies at the time of their hospitalizations. %23.1 (n=33) tested positive for at least one of the anti-TG or anti-TPO. All patients were euthyroid. The neuropsychiatric diagnoses are shown in Table 1. The most common neuropsychiatric features assessed by NPI-Q are shown in Table 2. 12.1% (n=4) of all patients were treated with IV steroid Pulse therapy.

**Table 1.** Neuropsychiatric syndrom-level diagnostic patterns according to DSM-V

	Patients with positive thyroid autoantibodies (n=33)
Manic syndrome	10 (30.3%)
Psychotic Syndrome	19 ( 57.6%)
Depression syndrome	5 (15.2%)
Catatonia	10 (30.3%)
Exited	6 (18.2%)
Stuporus	2 (6.1%)
Fluctuating	2 (6.1%)