

cellular oxidative damage by measuring lipid peroxidation (LPO) levels and the antioxidant defense system by the evaluation of catalase (CAT) and superoxide dismutase (SOD) activities.

Results: In the present work, we observed a significant increase in LPO levels in both SCH and BD disorders that was not neutralized by the antioxidant defense. It was found that SCH patients, despite exhibiting greater activities of SOD and CAT compared to BD individuals, also showed significantly higher levels of oxidative damage. The differential oxidative profile observed between SCH and BD individuals allowed to perform an individually analysis of patients diagnosed with FEP. Although it was not possible to identify the type of psychotic disorder of all the patients with FEP, the results obtained showed that while several individuals exhibited an oxidative profile similar to that observed in SCH patients, other individuals presented a profile very similar to that found in patients with BD.

Conclusions: The current work reveals that LPO is a potential indicator of worse prognosis after being differentially modified in both SCH and BD. Moreover, SOD and CAT have been identified, by presenting an opposite profile between patients with SCH and BD, as potential preliminary biomarkers for a discriminatory diagnosis in an early stage of the disorder.

Disclosure of Interest: None Declared

EPP0671

Dynamics of contrast-frequency characteristics of the visual system in patients with schizophrenia

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doi: 10.1192/j.eurpsy.2023.967

Introduction: Visual impairment in schizophrenia is of interest as a potential biomarker of the mental state. The study of visual impairment in patients with schizophrenia is difficult due to the fact that visual perception can be influenced not only by the patient's condition, but also by age, drug treatment, concomitant eye diseases, etc. To reduce the influence of these factors, we studied visual disturbances in schizophrenic patients in dynamics at the second and eighth weeks of stable antipsychotic single treatment.

Objectives: To reveal changes in visual impairment in inpatients with schizophrenia on the background of changes in mental state.

Methods: Eleven inpatients with schizophrenia who received antipsychotic monotherapy and thirteen healthy subjects of the same age and sex were included in the study. Examinations were performed at weeks 2 and 8 of treatment. The contrast-frequency characteristics of the visual system were examined using computer visocontrastometry. Visocontrastometry was performed in Gabor element contrast detection (gratings) with spatial frequencies of 0.4, 0.6, 0.8, 1.0, 4.0, 10.0 and 17.9 cycles/degree. Images of Gabor elements of different spatial frequency were repeated in random order 8 times each. The severity of the mental state was assessed during the interview using the PANSS (Positive and Negative Syndrome Scale).

Results: Patients' total PANSS score at week 2 averaged 94.09 ± 17.58 and at week 8 averaged 52.45 ± 6.06 ; at week 8 the

total score was significantly lower than at week 2 ($V = 66$, p -value = 0.004). In the low-frequency region after treatment, patients tended to have lower thresholds ($V = 2207$, p -value = 0.060), but both at week 2 and week 8, thresholds were significantly higher in patients than in the healthy group ($W = 7233$, p -value < $2.2e-16$, $W = 6924.5$, p -value = $1.204e-11$, respectively). Mid-range frequencies increased at week 8 compared with week 2 ($V = 925$, p -value = 0.003), but were also lower at weeks 2 and 8 than in the healthy group ($W = 1479$, p -value = $7.247e-12$, $W = 3156.5$, p -value = 0.004, respectively). In the high frequency region, thresholds also increased after the treatment ($V = 908$, p -value = $2.084e-05$), at week 2, thresholds in patients were significantly lower than in healthy controls ($W = 2574.5$, p -value = $2.757e-07$), and at week 8, thresholds in the patient and healthy groups were not different ($W = 4759.5$, p -value = 0.461).

Conclusions: The impairments in the low spatial frequencies in schizophrenic patients appear earliest and, apparently, are the most persistent. Changes in the middle and high frequencies appeared to be more variable with changes in the mental state. Unfortunately, our design does not allow us to judge the persistence of the revealed changes. Further prospective studies are needed to investigate the relationship of visual disturbances with other symptoms.

Disclosure of Interest: None Declared

This work was supported by a grant from the Russian Science Foundation (project no. 22-18-00074).

EPP0672

Sleep disorders in patients with a first psychotic episode: a case-control study

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doi: 10.1192/j.eurpsy.2023.968

Introduction: Patients with chronic schizophrenia experience significant disturbances in the quality and quantity of their sleep and it had been mainly attributed to severity of symptoms and antipsychotic use. Recent studies suggested that antipsychotic-naïve early course patients with schizophrenia and their non-psychotic first-degree relatives also show altered sleep quality.

Objectives: In this study we aimed to compare sleep parameters in antipsychotic-naïve first-episode schizophrenia patients to their healthy siblings and age- and sex-matched healthy controls.

Methods: We conducted a cross-sectional, descriptive case-control study in the Psychiatry « G » department at Razi Hospital, for a period of six months. Our sample consisted of three groups: a group of schizophrenic patients, a group of their healthy siblings and a group of healthy controls. The three groups were matched by age and sex. The Positive and Negative Syndrome Scale (PANSS) was used to assess the severity of symptoms in patients with schizophrenia. The Morningness-Eveningness Questionnaire (MEQr), Epworth Sleepiness Scale (ESS), and Pittsburgh Sleep Quality Index (PSQI) were used in the three groups to assess Circadian preference, daytime sleepiness and sleep quality.

Results: There was no significant difference between the groups regarding the chronotype. Patients had significantly higher daytime