

## EPV1353

### Clinical specificities of depression with overvalued ideas in slow progressive schizophrenia

A. Barkhatova\* and O. Kolyago

Mental Health Research Center, Department Of Endogenous Mental Disorders And Affective Conditions, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1998

**Introduction:** Despite the high interest in affective aspects of endogenous depression, the question of overvalued ideas remains unclear.

**Objectives:** To determine the clinical features of depression with overvalued ideas in the context of slow progressing schizophrenia. **Methods:** The study involved 102 people, including 62 women and 40 men diagnosed with slow progressing schizophrenia, with moderate or severe depression, with the predominance of overvalued ideas (F21 in ICD-10). The control group had 110 people with similar distribution by sex and age all diagnosed with a depressive state formed in the context of slow progressing schizophrenia, without overvalued ideas. Research methods were mainly clinical-psychopathological and clinical-catamnestic.

**Results:** In the majority of observations (62.5%) in the comparison group, showed an uncomplicated form of depression, only limited to affective level. In the (37.5%) left, depression was characterized by a structural polymorphism, in addition to affective disorders, there were other psychopathological syndromes observed. In the main group, an inverse relationship was observed: uncomplicated depression in 29.2% of cases, while the overwhelming majority of cases (70.8%) experienced atypical depressions, disharmony of the affective triad, as well as an increase in the concomitance of neurotic and psychopathic symptoms were observed.

**Conclusions:** The cohort of patients with slow progressive schizophrenia with depression is heterogeneous, while the features of the course of the disease correlate both with the presence or absence of overvalued formations in the picture of depression, and with the features of the modification of the overvalued ideas during the disease.

**Disclosure:** No significant relationships.

**Keywords:** Overvalued ideas; depression; schizophrenia

## EPV1352

### High-frequency rTMS in the treatment of depressive symptoms in schizophrenia: a neurophysiological profile of respondents and nonresponders

V. Kaleda<sup>1\*</sup>, A. Pomytkin<sup>1</sup> and I. Lebedeva<sup>2</sup>

<sup>1</sup>FSBSI «Mental Health Research Centre», Department Of Youth Psychiatry, Moscow, Russian Federation and <sup>2</sup>FSBSI «Mental Health Research Centre», Lab.neuroimaging And Multimodal Analysis, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.1999

**Introduction:** Depressive symptoms in schizophrenia have a high prevalence – up to 20-60 %, at the different illness stages. Non-pharmacological treatment, namely rTMS, seems like a promising approach that lacks side-effects typical for antidepressants. rTMS is widely applied in the treatment of depression, however the studies within schizophrenia domain are still rather few

**Objectives:** The aim was to examine a potential of neurophysiological data for prediction of the effects of rTMS in the treatment of patients with schizophrenia with depressive symptoms

**Methods:** 20 male patients with schizophrenia (F20.004, F20.014, F20.414, ICD-10) were examined at the stage of incomplete remission with predominance of prolonged (more than 6 months) treatment resistant depressive symptoms. An examination (clinical and neurophysiological (oddball ERP and EEG) fragments) was repeated twice - before and after a course of 10 Hz rTMS (left DLPFC, 2000 pulses per session, 15 sessions).

**Results:** Poor outcome was associated with initially higher coherence in alpha and lower - in beta1 EEG bands. The amplitudes of non-target N100 and mismatch negativity didn't differ the groups of responders and nonresponders

**Conclusions:** The disturbances within brain networks of beta1 and alpha generators merit attention as potential neurophysiological markers with predictive value in rTMS treatment of patients with schizophrenia with depressive symptoms.

**Disclosure:** No significant relationships.

**Keywords:** TMS; schizophrenia; Depression; EEG

## EPV1353

### The first psychotic episode with religious delusion in adolescence and young adults: premanifest stage

V. Kaleda<sup>1\*</sup>, U. Popovich<sup>1</sup>, N. Romanenko<sup>1</sup> and E. Gedeveni<sup>2</sup>

<sup>1</sup>FSBSI «Mental Health Research Centre», Department Of Youth Psychiatry, Moscow, Russian Federation and <sup>2</sup>FSBSI «Mental Health Research Centre», Researching Group Of Specific Forms Of Mental Disorders, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2000

**Introduction:** The study of the premanifest stages of the first psychotic episode with religious delusion is relevant due to the lack of clarity in differentiating normal religiosity from pathological and, as a consequence, a relatively longer period of an untreated psychotic state, which negatively affects both the course of the disease and its outcomes. Another important factor is the high risk of antisocial, autoaggressive and suicidal behavior at different stages of the disease.

**Objectives:** The aim of the study is to identify the conditions for the formation of religious delusion in adolescence and young adults, to analyze the correlations between religiosity at the pre-manifest stage and the subsequent manifest psychotic episode with religious delusions of different content.

**Methods:** The 57 male patients at a young age (16-25 years) with a manifest psychotic episode (F20, F25 according to ICD-10) with religious delusion (delusion of sin (21,6 %), delusion of demonic possession (29,4 %), antagonistic and messianic delusion (39,2 %), oneiroid with religious content (9,8 %)) were studied with the clinical-psychopathological, psychometric (PAS) methods. The religiosity of patients in premorbid was assessed with the Duke University Religion Index (DUREL) questionnaire.

**Results:** Of greatest importance in the formation of psychotic episode with religious content is hereditary burden, premorbid personality structure, high scores on the PAS scale.

**Conclusions:** The presence or absence of religiosity in premorbid doesn't matter to formation of psychotic episode with religious delusion.

**Disclosure:** No significant relationships.

**Keywords:** young age; religious delusion; manifest psychotic episode; religiosity in premorbid

## EPV1354

### Marker of schizophrenia with enduring negative symptoms

E. Dmitrieva<sup>1\*</sup>, L. Smirnova<sup>1</sup> and A. Semke<sup>2</sup>

<sup>1</sup>Tomsk National Research Medical Center of the Russian Academy of Sciences, Mental Health Research Institute, Tomsk, Russian Federation and <sup>2</sup>Mental Health Research Institute, Tomsk National Research Medical Center of the Russian Academy of Sciences, Department Of Endogenous Disorders, Tomsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2001

**Introduction:** The relevance of this study is determined by the need to search for biological markers of schizophrenia. The detection and validation of such molecules can become the basis for the creation of additional paraclinical diagnostic methods or contribute to the creation of targets for individual pharmacotherapy, which is an important task of modern fundamental medicine.

**Objectives:** Comparative proteomic analysis of serum in schizophrenic patients with positive and negative symptoms.

**Methods:** The study includes 10 healthy donors and 27 patients with schizophrenia. Samples preparation included: serum purification from major proteins via affinity chromatography, 1D-PAGE proteins separation, in-gel tryptic hydrolysis, LC-MS/MS mass-spectrometry (Orbitrap Q-exactive HF mass spectrometer, Agilent Technologies). Identification of proteins was carried out using Mascot software Ver. 2.1 («Matrix Science», USA). Proteins for quantitative analysis were selected in view of the DISGENET database. Quantitative LC-MS-SRM analysis of selected protein was performed on QQQ TSQ Vantage (Thermo Scientific) with labeled peptide standards.

**Results:** Receptor-interacting serine/threonine-protein kinase 1 was selected for quantitative assessment. Significant differences were revealed in the RIPK1 concentrations in the serum of schizophrenic patients with negative and positive symptoms ( $p=0.02$ ). The serum concentration of RIPK1 in patients with negative symptoms is tenfold in patients with positive symptoms.

**Conclusions:** Receptor-interacting serine/threonine-protein kinase 1 can be considered a biomarker of negative symptoms of schizophrenia based on a significant increase in serum concentration. *Mass spectrometric analysis was carried out of the "Human Proteome" Core Facility of the Institute of Biomedical Chemistry Moscow. Support by Grant of RSF № 18-15-00053P.*

**Disclosure:** No significant relationships.

**Keywords:** schizophrenia; proteomics; biomarker; negative symptoms

## EPV1356

### DNA-hydrolyzing catalytic IgGs from schizophrenia patients do not affect cell viability of the SH-SY5Y human neuroblastoma cell line

E. Epimakhova<sup>1</sup>, E. Ermakov<sup>2</sup>, D. Kazantseva<sup>3</sup>, D. Parshukova<sup>1</sup>, E. Dmitrieva<sup>1\*</sup>, L. Smirnova<sup>1</sup>, S. Ivanova<sup>1</sup> and A. Semke<sup>4</sup>

<sup>1</sup>Tomsk National Research Medical Center of the Russian Academy of Sciences, Mental Health Research Institute, Tomsk, Russian Federation; <sup>2</sup>Institute of Chemical Biology and Fundamental Medicine, Laboratory Of Repair Enzymes, Novosibirsk, Russian Federation; <sup>3</sup>Siberian State Medical University, Department Of Biomedicine, Tomsk, Russian Federation and <sup>4</sup>Mental Health Research Institute, Tomsk National Research Medical Center of the Russian Academy of Sciences, Department Of Endogenous Disorders, Tomsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2002

**Introduction:** DNA-hydrolyzing catalytic IgGs have caspase-dependent cytotoxic effects in autoimmune diseases. Recently, DNA-hydrolyzing IgGs have been discovered in schizophrenia. However, their cytotoxic properties have not been studied.

**Objectives:** To assess the effect of serum IgGs with DNA-hydrolyzing activity of schizophrenia patients on the cell viability of the SH-SY5Y human neuroblastoma cell line.

**Methods:** Serum of 8 patients with paranoid schizophrenia in the acute phase and 7 mentally and somatically healthy persons were used. IgG was purified from serum by affinity chromatography on Protein-G-Sepharose columns. The DNA hydrolyzing activity of IgG was assessed by the degree of hydrolysis of the pBluescript plasmid. The cell viability of the SH-SY5Y human neuroblastoma cell line after exposure to purified IgG preparations was assessed by high-throughput screening on the CellInsight CX7 platform (Thermo Scientific, USA) using the fluorescent dyes propidium iodide and Hoechst.

**Results:** Of the 8 IgG preparation obtained, 4 drugs had high DNA-hydrolyzing activity. All tested IgG preparations from healthy donors were inactive. One-way ANOVA analysis of the proportion of dead cells of the SH-SY5Y line after exposure to antibodies (0.1 mg/ml) showed no significant differences in the proportion of dead cells ( $p=0.688$  after 24 hours;  $p=0.831$  after 48 hours). Similar results were obtained at a higher concentration of antibodies - 0.2 mg/ml.

**Conclusions:** Thus, it has been shown *in vitro* that IgGs isolated from the serum of schizophrenia patients with or without DNA-hydrolyzing activity does not exhibit cytotoxic properties against the SH-SY5Y human neuroblastoma cell line. *Support by Grant of RSF № 18-15-00053P.*

**Disclosure:** No significant relationships.

**Keywords:** neuroblastoma cell line; schizophrenia; DNA-hydrolyzing activity

## EPV1357

### Adjunctive treatment with aripiprazole for olanzapine-induced hyperprolactinemia

S. Bise<sup>1\*</sup>, G. Sulejmanpasic<sup>2</sup>, A. Hrnjica<sup>1</sup> and Š. Šarkić-Bedak<sup>1</sup>

<sup>1</sup>Psychiatric hospital, Women Department, Sarajevo, Bosnia and Herzegovina and <sup>2</sup>Clinical Centre University of Sarajevo, Psychiatric Clinic, Sarajevo, Bosnia and Herzegovina

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.2003

**Introduction:** Hyperprolactinemia is a common unwanted antipsychotic-induced adverse effect, particularly in female patients, and can induce poor adherence to treatment. Aripiprazole