

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^{1*}, L. Smirnova¹ and A. Semke²

¹Tomsk National Research Medical Center of the Russian Academy of Sciences, Mental Health Research Institute, Tomsk, Russian Federation and ²Mental 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. Epimakhova¹, E. Ermakov², D. Kazantseva³, D. Parshukova¹, E. Dmitrieva^{1*}, L. Smirnova¹, S. Ivanova¹ and A. Semke⁴

¹Tomsk National Research Medical Center of the Russian Academy of Sciences, Mental Health Research Institute, Tomsk, Russian Federation; ²Institute of Chemical Biology and Fundamental Medicine, Laboratory Of Repair Enzymes, Novosibirsk, Russian Federation; ³Siberian State Medical University, Department Of Biomedicine, Tomsk, Russian Federation and ⁴Mental 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^{1*}, G. Sulejmanpasic², A. Hrnjica¹ and Š. Šarkić-Bedak¹

¹Psychiatric hospital, Women Department, Sarajevo, Bosnia and Herzegovina and ²Clinical 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