

psychosis, regarding genetic vulnerability and/or other environmental factors, possibly also mediated by psychological mechanisms. Long-term modifications to the transcriptome are likely mediated by epigenetic mechanisms. There is also growing evidence supporting an association between childhood trauma and adulthood dysregulation of the immune system, which could help clarify the relationship between trauma and mental disorders, namely psychosis.

**Objectives:** Review evidence regarding the relationship of childhood trauma, immune system and psychosis.

**Methods:** Literature review using Medline database.

**Results:** The prevalence and severity of childhood trauma is characterized by both biological alterations and increased risk of experiencing symptoms of psychosis. Childhood trauma, namely through its effects on IL6 levels, may be a risk factor for schizophrenia in general. Some studies point to a direct relationship between childhood trauma, immunity and psychosis when examined along a continuum from non-clinical controls to psychotic disorders such as schizophrenia.

**Conclusions:** For better understanding this association, these findings must be replicated in larger cohorts. If the impact of childhood trauma on immune function in adulthood does indeed contribute to psychopathology, an improved understanding of this relationship may lead to new and possibly more specific treatment options. Other clinical implications of these findings include increased emphasis in establishing more comprehensive screening of early trauma in patients with psychotic symptoms, as well as the importance of screen and follow children who report traumatic events for emergence of psychotic symptoms.

**Keywords:** childhood trauma; immune system; psychosis

## EPP1017

### Systemic endotoxemia as a probable factor in reducing the treatment effectiveness of endogenous psychosis

S. Zozulya<sup>1\*</sup>, I. Otman<sup>1</sup>, I. Oleichik<sup>2</sup>, I. Anikhovskaya<sup>3</sup>, M. Yakovlev<sup>3</sup> and T. Klyushnik<sup>1</sup>

<sup>1</sup>Laboratory Of Neuroimmunology, Mental Health Research Centre, Moscow, Russian Federation; <sup>2</sup>Clinical Department Of Endogenous Mental Disorders And Affective States, Mental Health Research Centre, Moscow, Russian Federation and <sup>3</sup>Laboratory Of Systemic Endotoxemia And Shock, Institute of General Pathology and Pathophysiology, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1260

**Introduction:** Inflammation is an important factor in the pathogenesis of endogenous psychosis. An inducer of inflammatory reactions can be endotoxin aggression of intestinal origin.

**Objectives:** To determine the level of inflammation markers and indicators of systemic endotoxemia in blood of patients with endogenous psychosis in relation to assessment of the treatment effectiveness.

**Methods:** 25 patients with endogenous psychosis (F20, F25) were examined before and after treatment. The control group consisted of 25 healthy people. The activity of inflammatory markers - leukocyte elastase,  $\alpha$ 1-antitrypsin, antibodies to S-100B, and indicators of systemic endotoxemia - endotoxin concentration and antiendotoxin immunity activity were measured in blood serum. The treatment effectiveness was assessed by the dynamics of inflammatory markers.

**Results:** Based on the results of determining the studied parameters before treatment, all patients were divided into two groups. In the

1st group (6 patients, 24%), an increase of inflammatory markers activity and high concentration of endotoxin in the blood serum were revealed ( $p < 0.001$ ,  $p < 0.05$ , respectively). In the 2nd group (19 patients, 76%), only activation of inflammatory reactions ( $p < 0.001$ ) was detected. After therapy in the 1st group of patients, there was no positive dynamics of all studied markers, which indicated an active course of the pathological process. In the 2nd group, the normalization of inflammatory markers was shown ( $p < 0.05$ ), which corresponded to the formation of remission.

**Conclusions:** The results indicate that endotoxic aggression contributes to reduction of the effectiveness of endogenous psychosis therapy and can be considered as an additional therapeutic target.

**Keywords:** endogenous psychosis; inflammatory markers; treatment effectiveness; systemic endotoxemia

## EPP1018

### Immune heterogeneity of non-psychotic mental disorders

S. Zozulya<sup>1\*</sup>, L. Androsova<sup>1</sup>, I. Otman<sup>1</sup>, T. Vetlugina<sup>2</sup>, V. Nikitina<sup>2</sup> and T. Klyushnik<sup>1</sup>

<sup>1</sup>Laboratory Of Neuroimmunology, Mental Health Research Centre, Moscow, Russian Federation and <sup>2</sup>Laboratory Of Clinical Psychoneuroimmunology And Neurobiology, Mental Health Research Institute, Tomsk National Research Medical Center, Tomsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1261

**Introduction:** Current studies indicate the involvement of inflammation in the pathogenesis of chronic non-infectious diseases, and therefore it is of interest to study the role of inflammation markers in non-psychotic mental disorders (NPMD).

**Objectives:** To identify a number of inflammatory markers in serum of patients with NPMD.

**Methods:** 73 patients with NPMD were examined (F43.2; F06.6). The comparison group consisted of 76 patients with endogenous psychosis (EGP) (F20.0; F25.0). The control group included 80 healthy people. The serum activity of leukocyte elastase (LE),  $\alpha$ 1-proteinase inhibitor ( $\alpha$ 1-PI) and the level of autoantibodies (aAb) to neuroantigens were determined.

**Results:** Three groups of patients with different variants of inflammatory response to the pathological process were identified. In group 1 (23.3%), all indices corresponded to the control values, which indicated the absence of the pathological process in brain. In group 2, there was a significant increase in activity both LE and  $\alpha$ 1-PI compared to control ( $p < 0.05$ ). This type of immune reaction characterized a balanced inflammatory response. It was found in 52% of patients with NPMD and in all patients with EGP. The aAb level also exceeded the control values ( $p < 0.05$ ). Group 3 (24.7%) showed an increase in  $\alpha$ 1-PI activity ( $p < 0.05$ ), but not in LE activity compared to control. Insufficient LE activity reflects a decrease in the functional activity of neutrophils.

**Conclusions:** The immune heterogeneity of NPMD according to the level of inflammatory markers was identified. 52% of patients with NPMD have a pronounced activation of inflammatory reactions accompanied by increased levels of aAb to neuroantigens.

**Keywords:** non-psychotic mental disorders; inflammatory markers

## EPP1019

### Features of inflammatory reactions and clinical picture in elderly and young patients with schizophrenia

L. Androsova<sup>1\*</sup>, A. Barkhatova<sup>2</sup>, V. Sheshenin<sup>3</sup>, S. Zozulya<sup>1</sup>, I. Otman<sup>1</sup>, V. Pochueva<sup>3</sup> and T. Klyushnik<sup>1</sup>

<sup>1</sup>Laboratory Of Neuroimmunology, Mental Health Research Centre, Moscow, Russian Federation; <sup>2</sup>Department For The Study Of Endogenous Mental Disorders And Affective States, Mental Health Research Centre, Moscow, Russian Federation and <sup>3</sup>Department Of Gerontological Psychiatry, Mental Health Research Centre, Moscow, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1262

**Introduction:** It is known that the intensity of inflammation weakens with age, and therefore it is of interest to study the clinical features of schizophrenic process in relation to the level of inflammatory markers.

**Objectives:** To determine the level of inflammatory markers (the activity of leukocyte elastase (LE) and  $\alpha$ 1-proteinase inhibitor ( $\alpha$ 1-PI), autoantibodies (aAB) to neurotrophin S100b and myelin basic protein) in plasma in different years old groups of patients with schizophrenia.

**Methods:** Two groups of patients with schizophrenia were examined: the 1st group - 19 women aged 60 to 78 years; the 2nd group - 24 women aged 19 to 42 years.

**Results:** An increase in activity both of LE and  $\alpha$ 1-PI was found in young patients. This characterizes a balanced inflammatory response. Elderly patients showed a similar increase in the activity of  $\alpha$ 1-PI, however, LE activity did not exceed the control values. Insufficient LE activity probably characterizes a decrease in the functional activity of neutrophils. The negative correlation was revealed between the activity of LE and TotPsy (PANSS) in the group of elderly patients ( $r=-0.62$ ,  $p<05$ ) and positive correlation between aAB to S100b and TotNeg in both groups ( $r=0.56$  and  $r=0.49$ ,  $p<05$  respectively). There is relationship between age, the activity of psychopathological symptoms and the rate of development of schizophrenia: the rapid course and variety of disorders at a young age, against the poverty of symptoms and a slow rate in the elderly.

**Conclusions:** There is relationship between the features of inflammatory reactions and clinical picture in elderly and young patients with schizophrenia.

**Keywords:** schizophrenia at young and old age; inflammatory markers

## EPP1020

### A case of late-onset and long term of anti-nmda-receptor encephalitis in a 50-year-old patient with psychosis and cognitive decline

Y. Palchikova<sup>1\*</sup>, N. Zalutskaya<sup>1</sup>, N. Gomzyakova<sup>1</sup>, V. Mikhailov<sup>2</sup> and A. Natalia<sup>3</sup>

<sup>1</sup>Geriatric Psychiatry, V. M. BEKHTEREV NATIONAL RESEARCH MEDICAL CENTER FOR PSYCHIATRY AND NEUROLOGY, St. Petersburg, Russian Federation; <sup>2</sup>Of Epilepsy, V.M. Bekhterev National Medical Research Center for Psychiatry and Neurology, Saint Petersburg, Russian Federation and <sup>3</sup>Radiology, V. M. BEKHTEREV

NATIONAL RESEARCH MEDICAL CENTER FOR PSYCHIATRY AND NEUROLOGY, St.Petersburg, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1263

**Introduction:** Anti-NMDA-receptor encephalitis is a severe rare acute form of encephalitis caused by an autoimmune process with the synthesis of autoantibodies to the glutamate receptors. The average age of onset is estimated to be 23-25 years. A typical clinical picture consist of prodromal, psychotic, areactive, hyperkinetic phases, and a phase of gradual regression of symptoms. The disease usually lasts for a several weeks with spontaneous recovery or fatal outcome and caused by neoplastic process. Our case demonstrates that the course of anti-NMDAR encephalitis is possible at more mature age in the form of a long process with cultural features, without significant catadrome, inflammation and associated neoplastic process.

**Objectives:** 50-year-old woman complained about hypomnesia, anosmia and disomnia. The disease began with impaired consciousness, disorientation, seizures and memory loss 4 years ago. After 3 weeks IgG to the herpes simplex and cytomegalovirus were detected. Then after a discharge with no improvement and visit of Lama, the symptoms described above spontaneously reduced and schizophrenia-like psychosis developed, accompanied by mild neurological and severe neurocognitive symptoms, weight loss, intolerance to antipsychotics in minimal daily doses. This state was maintained till 2020.

**Methods:** Examination included: CBC, metabolic panel, coagulogram, tumor markers, CSF, MRI, PET, specialists.

**Results:** CBC, metabolic blood analysis, tumor markers - within the reference values. CSF: cytosis 9/3, glucose 5.5 mmol/l, Pandi++, Nonnet-Apeltau+, antibodies to the NMDA receptor - 8. MRI: signs of the consequences of encephalitis. PET: no signs of metabolic activity of the malignant process.

**Conclusions:** This case brings additional data about a cause, age of onset, duration and trigger factors for anti-NMDAR encephalitis.

**Keywords:** Anti-N-Methyl-D-Aspartate Receptor Encephalitis; Herpes Simplex; Neurobehavioral Manifestations; schizophrenia-like psychosis

## EPP1021

### Neuropsychiatric symptoms of multiple sclerosis: A case report

P. Espada Dos Santos\*, J. Facucho-Oliveira, D. Esteves-Sousa, M. Costa, M. Albuquerque, A. Fraga, M. Marinho and P. Cintra  
Psiquiatria E Saúde Mental, Hospital de Cascais Dr. José de Almeida, Alcabideche, Portugal

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.1264

**Introduction:** Multiple Sclerosis (MS) is an immune-mediated inflammatory demyelinating disease of the central nervous system. Concomitant psychiatric diseases are frequent in MS, with depression and anxiety disorders constituting the majority. The presence of psychotic disorders with MS is rare. Several studies have reported that psychotic symptoms usually develop after the neurological signs of MS and they are mostly linked to the side effects of treatment with interferon or with corticosteroids.