

EPV0803

The activity of platelet enzymes and subpopulation composition of monocytes in schizophrenia

T. Prokhorova*, I. Boksha, Z. Sarmanova, O. Savushkina and E. Tereshkina

FSBSI "MENTAL HEALTH RESEARCH CENTRE", Moscow, Russian Federation

*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1431

Introduction: The studies on various groups of patients with schizophrenia revealed impairments in immune system, glutamatergic, and antioxidant systems contributing substantially in schizophrenia pathogenesis.

Objectives: To search for links between the activities of platelet enzymes involved in glutamate and glutathione metabolism and monocytes' subpopulation compositions in patients with schizophrenia and to identify possible correlations of the biomarkers with clinical data. Research objectives: determination of subpopulation ratio of monocytes; measurement of the activity levels of glutamate dehydrogenase (GDH), phosphate-activated glutaminase (PAG), glutathione reductase (GR) and glutathione S-transferase (GST) in blood platelets; search for correlations between these parameters and the scores by psychometric scales.

Methods: The study included 36 women aged 16-45 years with acute schizophrenia hospitalized in the Mental Health Research Centre with their current condition assessed as depressive-delusional. The control group consisted of 17 women 18-45 years old without somatic or mental pathology. GDH, PAG, GR and GST activities were measured by spectrophotometric methods, and numbers of monocyte subpopulations - "classical", "intermediate", "non-classical" - by flow cytometry. The Hamilton Depression Rating Scale (HAMD-17) was used to assess depression severity. The data was processed using the Statistica 8.0 software.

Results: The detected changes in monocyte subpopulations' composition towards the increase in the proportion of cells having a pro-inflammatory phenotype (CD14++CD16+ "intermediate") indicated the activation of inflammatory reactions. Also, the activities of platelet enzymes of glutathione metabolism (GR and GST) were significantly decreased ($p < 0.05$). Moreover, GDH and GST activities significantly correlated with the scores by HAMD-17 ($r = 0.40$, $p = 0.022$ and $r = 0.45$, $p = 0.030$, respectively). The results indicate the presence of pathological inflammatory process, the decrease in activities of glutathione antioxidant metabolism enzymes and a link to glutamate metabolism involvement (GDH) in the studied patient group.

Conclusions: The identified redistribution in the monocyte subpopulations' composition and decrease in the activity of enzymes involved in glutamate metabolism and antioxidant system indicate the involvement of the immune, glutamate and antioxidant systems in the pathogenesis of schizophrenia and may reflect a functional interaction between these systems.

Disclosure of Interest: None Declared

Psychopathology

EPV0805

Unitarity or multiplicity of the psychosis: neverending question in psychopathology.

J. J. Martínez Jambrina

Psychiatry, Hospital San Agustín, Aviles, Spain

doi: 10.1192/j.eurpsy.2024.1432

Introduction:

- Introduce the topic of the continuity of psychoses and its relevance in contemporary psychiatry.
- Present authors as Henry EY, Jim van Os and Germán Berrios as key figures in the discussion on this topic, highlighting Ey, Dr. Jim van Os's significant contributions to the understanding of the continuum of psychosis, Germán Berrios's historical and cultural perspectives, and the importance of Bartolomé Llopis's critical viewpoint. We also review the evolutionary approach about mental disorders as a keypoint in this discussion.

Objectives: Analyzing and comparing the theses of Jim van Os, Ey, Germán Berrios, and Bartolomé Llopis's critical perspective. about the continuum of the psychosis and the importance of this never-ending question for its use in the clinical practice.

Methods: I will present a detailed literature review and a textual analysis of their writings.

Results:

- Provide a brief description of Jim van Os's theses highlighting his key ideas:
- **Dimensional Approach:** promotes a dimensional approach to understanding psychosis, viewing psychotic experiences as continuous variables rather than categorical entities. This challenges the traditional diagnostic system.
- **Psychotic-Like Experiences:** His research focuses on "psychotic-like experiences" (PLEs) in non-clinical populations, including mild hallucinations or paranoid thoughts.
- **Transdiagnostic Perspective:** His work contributes to a transdiagnostic perspective, suggesting flexibility in diagnostic boundaries in psychiatry.
- Next, introduce Germán Berrios's theses on the same topic, emphasizing his historical and cultural perspectives and recognition of individual variability.
- Finally, introduce Bartolomé Llopis's critical perspective:
- Llopis criticizes simplistic models of psychosis, arguing that they fail to capture the complexity of individual experiences.
- He advocates for comprehensive assessments that consider not only symptomatology but also the unique contexts and histories of individuals.
- While Ramón y Cajal is best known for his contributions to neuroscience and neuroanatomy, he did not directly apply Darwinian principles to his work in those fields. However He believed that an understanding of the evolutionary history of