

Objectives: to evaluate the effect of a single dose of intranasal OXT (24UI) on affective empathy in individuals with refractory schizophrenia and healthy controls.

Methods: a double-blind, randomized, placebo-controlled clinical trial was conducted. A convenience sample of 51 adult men (mean age 34.4 ± 7.6 , >10 years of education) was recruited, 20 of whom were diagnosed with refractory schizophrenia according to the DSM-5 (exclusively using clozapine or clozapine + mood stabilizer and/or benzodiazepine) and 31 healthy controls. They were randomized into four groups and received OXT or placebo (PLA – vehicle: SCH-OXT (N=11), SHC-PLA (N=9), HC-OXT (N=15), HC-PLA (N= 16)). Before and after 50 minutes of administering the substance, they performed an affective empathy task (Multifaceted Empathy Test – MET).

Results: the baseline levels of affective empathy of patients with schizophrenia were lower compared to healthy controls when faced with negative stimuli ($p=0.003$), but not positive ones ($p=0.39$). After the administration of OXT and PLA (post-pre), a small increase in empathy levels was observed in all groups, which did not reach statistical significance (positive stimuli: Δ SCH-OXT = 0.16 ± 1.08 ; Δ SHC-PLA = 0.53 ± 1.44 , Δ HC-OXT = 0.02 ± 0.67 , Δ HC-PLA = 0.24 ± 0.45 , $p=0.85$; negative stimuli: Δ SCH-OXT = 0.20 ± 1.31 ; Δ SHC-PLA = 1.16 ± 0.79 , Δ HC-OXT = 0.12 ± 0.99 , Δ HC-PLA = 0.31 ± 0.57 , $p=0.11$).

Conclusions: the acute effects of intranasal OXT did not favor improvements in the levels of affective empathy, either in patients with schizophrenia or in healthy controls, contrary to the hypotheses of this study. The limited sample size and context-dependent aspects of OXT may explain these findings. These methodological limitations must be overcome in future studies. The effects associated with chronic use of the hormone should be the subject of future studies.

Disclosure of Interest: None Declared

EPV1006

Lymphocyte level and selected cognitive functions in patients with schizophrenia – preliminary results

B. Nycz and K. Krysta*

Department of Rehabilitation Psychiatry, Medical University of Silesia, Katowice, Poland

*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1591

Introduction: Schizophrenia is a mental disorder characterized by negative symptoms, such as cognitive impairment. Recent reports indicate the importance of the immune system in the pathophysiology of schizophrenia. The development of inflammation affects cognitive functioning.

Objectives: The aim of the study was to analyze the association between the level of lymphocytes in venous blood and selected cognitive functions in patients with schizophrenia.

Methods: Lymphocyte levels were determined in the venous blood of patients suffering from schizophrenia and the control group. Additionally, a verbal fluency test (VFT) and a Stroop test were conducted on the same day. The VFT evaluates the ability to express words, and the Stroop test assesses verbal working memory. The inclusion criteria were age up to fifty years, and for the study

group – diagnosis of schizophrenia and treatment with neuroleptics. Exclusion criteria included organic brain diseases, electroconvulsive therapy, and use of benzodiazepines within 48 hours before the study. Currently, six patients and six healthy people have been studied.

Results: Patients diagnosed with schizophrenia have an increased lymphocyte concentration in the blood compared to healthy individuals constituting the control group. There are discrepancies in the results of the phonemic fluency test, no significant differences were found between schizophrenics and the control group. Healthy men and women achieved higher results in the semantic fluency test compared to men and women with schizophrenia. Women constituting the control group achieved higher results in the Stroop test compared to women suffering from schizophrenia. Table 1 illustrates the concentration of lymphocytes in venous blood and the number of points in the phonemic fluency test, semantic fluency test, and in the Stroop test of the study and the control groups.

Image:

People included in the study	Sex	Concentration of lymphocytes in venous blood [K/uL]	Number of points in the phonemic fluency test	Number of points in the semantic fluency test	Number of points in the Stroop test
Study group	Male	1,22	40	47	20
		1,65	30	44	17
		2,13	40	45	20
		1,53	34	41	20
	Female	1,6	33	44	36
		1,61	40	62	21
Control group	Male	2,7	14	27	30
		1,51	32	32	39
		1,53	26	26	46
		4,33	51	46	33
	Female	1,91	39	41	25
		1,53	59	52	22

Conclusions: Patients with schizophrenia are characterized by higher levels of immune system parameters and worse results in terms of semantic fluency. Men with schizophrenia showed no verbal working memory deficits. In turn, women with schizophrenia obtained worse results in the verbal working memory test. In conclusion, there is evidence of immune system activation in schizophrenia, which affects the cognitive functioning of patients.

Disclosure of Interest: None Declared

EPV1008

The SLC6A1 Mutation Schizophrenia case — A Comprehensive Case Study With iPSC Generation

V. Mikhailova¹, N. Kondratyev¹, M. Alfimova¹, V. Kaleda¹, T. Lezheiko¹, M. Ublinsky², V. Ushakov^{3,4,5}, I. Lebedeva¹, A. Galiakberova^{6,7}, A. Artyuhov⁶, E. Dashinimaev^{6,8,9} and V. Golimbet^{1*}

¹Clinical Genetics Laboratory, Mental Health Research Center; ²Department of Radiation Diagnostics, Clinical and Research Institute of Emergency Pediatric Surgery and Trauma; ³Institute for