

Theory of mind deficits in two neuropsychiatric populations: patients with mesial temporal lobe epilepsy and schizophrenia

A. Bala¹, Ł. Okruszek², M. Szantroch³, A. Rysz³, A. Marchel³

¹*Faculty of Psychology, University of Warsaw, Poland*

²*Institute of Psychology, Polish Academy of Science, Poland*

³*Department of Neurosurgery, Medical University of Warsaw, Poland*

Background: Patients with schizophrenia (SCZ) have been widely reported dysfunctional in their ability of emotion recognition as well as understanding of social signals. Interestingly, similar deficits have been found in population of patients with mesial temporal lobe epilepsy (MTLE). The common feature of both conditions is a dysfunction of limbic system network which is believed to underlie emotional and social processing. Aim of the study was to compare these two clinical populations. **Methods:** The study involved patients with MTLE (n=31), schizophrenia (n=48) and a healthy controls group (HC; n=47). Groups were matched in terms of age, sex and education. The all subjects were examined with a Reading Mind in the Eyes Test (RMET) which evaluates emotion recognition and theory of mind. Patients with schizophrenia were additionally assessed with Positive And Negative Syndrome Scale (PANSS). **Results:** Results showed, that RMET scores of both epilepsy (p0,001) and schizophrenia (p0,05) groups were lower than in HC, but similar to each other (p0,05). In the next step patients with schizophrenia were split into two groups with respect to the PANSS scores. Analysis showed that SCZ patients with high level of positive symptoms performed similar to MTLE (p0, 05) and worse than HC (p0, 05), while those with low level of positive symptoms performed similar to control group (p0,05) and better than MTLE (p0,05). No differences were found for the median-split with regard to negative symptoms. **Conclusions:** MTLE patients present theory of mind dysfunctions similar to those found in the individuals with schizophrenia with high positive symptoms.