

MEETING ABSTRACT

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Facial emotion recognition in schizophrenia: neuropsychological and psychosocial correlates

Jan Jaracz*, Marta Grzechowiak, Lucyna Raczkowiak, Janusz Rybakowski

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Background

There is evidence that facial emotion recognition is disturbed in schizophrenic patients [1] and is associated with other neurocognitive deficits [2]. Some evidence suggests that affect recognition is an important aspect of psychosocial functioning of patients with schizophrenia [3]. In this study we assessed recognition of facial emotional expression in schizophrenic patients and its relationship with selected clinical and neuropsychological variables as well as with social functioning.

Materials and methods

Twenty-three patients (mean age 32.3 SD 8.7; mean duration of illness 100 months SD 80) who met the DSM-IV criteria for schizophrenia-paranoid type, hospitalized at the Department of Adult Psychiatry University of Medical Sciences in Poznań, Poland were involved in the study. At time of testing the mean PANSS score was 86.6 (SD 17.7). To assess facial emotion recognition we applied the computerized Penn Emotional Facial Recognition (ER40) task [4]. Cognitive performance was studied using Wisconsin Card Sorting Test. Social functioning was measured with Social Functioning Scale. The control group of healthy volunteers matched for gender and age was included.

Results

Patients performed worse than control group on the total correct responses, particularly recognition of faces expressing fear ($p = 0.002$) and sadness ($p = 0.02$). The median time for correct response was significantly longer ($p = 0.004$) in schizophrenic group. Patients gave more positive anger, happy and neutral responses, and need more time to identify correctly expression of

fear ($p = 0.005$), happy ($p = 0.03$) neutral (0.03) and sad ($p = 0.005$) faces. The number of correct responses correlated negatively with number of preservative errors. There was no association of facial emotion expression recognition and social functioning was found.

Conclusions

Schizophrenic patients performed worse on emotion recognition test than control group. Dysfunction of prefrontal cortex may negatively influence the recognition of emotions.

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Department of Adult Psychiatry, University of Medical Sciences Poznań, Poland