

Attention impairment in first-degree relatives of schizophrenic patients : Neuropsychological and neurophysiological evidence

Madkour, O. Kamal, S. A. Hashem, A. Ras

The Egyptian Journal of Psychiatry (Print).

1998 n21

This study aimed to prove that first degree relatives (FDR) show impairment in selective attention compared to healthy controls; this would give support for heritability of attentional impairment in schizophrenia.

Study design: not mentioned but can be described as Cross- sectional, case control study.

Fifty-five first-degree relatives (FDR) of schizophrenic patients and 30 healthy controls (age and sex matched) are subjected to neuropsychological assessment using Cancellation Tests (Cancellation Letters Test and Cancellation Digits Test) and Reaction Time and neurophysiological investigation using P300 component of auditory evoked cortical potential.

Results showed that as regards neuropsychological tests; a) Cancellation Letters Test reveals statistically significant difference with the FDR need more time and make more errors. b) Cancellation Digits Test reveals that both groups need comparable time; however the FDR make more errors. As regards neurophysiological investigation; a) auditory evoked cortical potential, FDR have statistically significant longer latency and lower amplitude of P300 wave. b) Reaction time is longer and response stimulus percentage is lower in FDR compared to healthy controls and the difference is statistically significant.

There is impairment of attention in FDR of schizophrenic patients. The use of neuropsychological and neurophysiological investigations could identify high risk individuals who are vulnerable to development of schizophrenia and thus, preventive interventions could be directed to those individuals to avoid or delay the onset of schizophrenia.