Continuous performance task in attention deficit hyperactivity disorder children

Ann A Abdel Kader, Nagwa A Mohamed, Basma B El Sayed, Omnia R Amin, Islam F Halawa

Egypt J Neurol Psychiatry Neurosurg 2016;53:19-22

Background
Poor behavioural inhibition is the central impairment in attention deficit hyperactivity disorder (ADHD). At present, there is no reliable objective measure to detect ADHD. A proper pinpointing evaluation for ADHD depends mainly on the history from parents, family members as well as teachers and schoolmates, by means of questionnaires and conduct rating scales.

Objective
The aim of this study was to detect continuous performance task (CPT) (test of variants of attention) changes in children suffering from ADHD compared with normal children.

Patients and methods
CPT, Conners' parent rating scale and Wechsler intelligence scale were done for two groups of children each containing 39 children, a group of ADHD children and the other a normal control group.

Results
We found a significant difference between the mean total IQ score among the ADHD patients group compared with control group. Comparing both groups revealed statistically significant increase in omission, commission and reaction time among patients. A significant negative correlation was found between age on one side and IQ, hyperactivity and psychosomatic subscales, hyperactivity and total DSM-IV scores on the other hand and between commission and opposition, restlessness subscales and ADHD index and also between reaction time and restlessness and emotional index. There was a significant positive correlation between omission and hyperactivity and anxiety subscales, restlessness and emotional indices and DSM-IV hyperactive and total scores. In addition, there was a significant positive correlation between perfectionism and commission and also between reaction time and inattention and social problems subscales.

Conclusion
CPT can have a substantial role in objective identification of ADHD.