

ADHD and neuropsychological functioning

A. Pasini, C. Paloscia, R. Alessandrelli, M.C. Porfirio, P. Curatolo

Department of Child Neuropsychiatry "Tor Vergata" University, Rome, Italy

Frontal circuits functioning is considered a critical issue to understand the pathophysiology of attention deficit hyperactivity disorder (ADHD). In this study we evaluated ADHD patients compared to a community control group. All the subjects included in the study were drug naïve and they were evaluated with K-SADS-PL, CPRS, CTRS scales and WISC-R. Executive functions were assessed with a neuropsychological battery (WCST, Tower of London, CPT II, Stroop Test, DBT, Verbal Fluency Test and a visual version of n-Back working memory test). The executive functions performance were controlled for age, IQ, and for non-EF tasks (CBTT, Rey Figure, Categories Test, WISC-R: vocabulary and block design) related to non-executive components of the EF tasks.

Patients with ADHD showed impairment in planning, cognitive flexibility, sustained attention, inhibition and visual working memory. After controlling for age, IQ, and non EF tasks results, only visual working memory deficit, interference control, and reaction times at the different interstimulus intervals on CPT remained.

pasini@uniroma2.it