

P01-199 - DEVELOPMENTAL LAG IN ADHD - CROSS SECTIONAL STUDY WITH CONTINUOUS PERFORMANCE TEST

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**Objectives:** Several clinical and neuroimaging studies suggest developmental lag in children with ADHD, which normalizes in late adolescence. However, studies using dimensional behavioral and neuropsychological assessment point to the persistent nature of deficits.

**Methods:** Two hundred five children with diagnosis of ADHD (187 boys, 18 girls; age 10.9±2.7) and 155 healthy controls (80 boys, 75 girls; age 10.3±2.3) were recruited. Both (unmedicated for 48 hours) patients and healthy controls were assessed with Continuous Performance Test (CPT).

**Results:** Patients with ADHD made more errors and less hits than healthy control children, respectively (19.9±17.4 vs. 16.0±16.2;  $p=0.02$ ) and (38.0±8.6 vs. 41.4±6.2;  $p<0.001$ ). In early school age (7-9 years) children with ADHD performed worse than healthy children in terms of reaction time, number of errors and number of hits, respectively (864.9±111.0 vs. 799.9±116.2;  $p<0.001$ ), (32.7±20.2 vs. 23.4±19.6;  $p<0.001$ ), (33.1±9.0 vs. 39.0±6.1;  $p<0.001$ ). In older school age (10-12 years) and in adolescence (13-17 years) significant differences were observed only in number of hits, respectively (40.3±7.5 vs. 43.0±6.0;  $p=0.002$ ) and (41.3±6.7 vs. 44.9±2.0;  $p=0.03$ ).

**Conclusions:** Young children with ADHD may show more pervasive cognitive deficits, than older children and adolescents. More specific neuropsychological dysfunction may be a trait of ADHD patients, irrespectively of age. These results may suggest existence of several attentional systems, which mature in different developmental periods.