Motor Proficiency in Children with Attention Deficit Hyperactivity Disorder: Associations with Cognitive Skills and Symptom Severity


Abstract

OBJECTIVES:
Of children with Attention Deficit Hyperactivity Disorder (ADHD), 45-70% have motor skill problems, which can adversely affect social competence, peer relations, and academic skills. The aim of this study is to assess motor skills in school-aged children with ADHD, and to elucidate if there are any relationships between ADHD symptoms and cognitive function.

METHOD:
Included in this study were 58 children (38 ADHD, 20 controls) between 8-11 years of age. Children were diagnosed with ADHD via the Schedule for Affective Disorders and Schizophrenia for School-Aged Children Present and Lifetime Version. The parents were asked to fill out the Conner's' Parent Rating Scale - Revised Short Turkish Form to determine the symptom domains and the symptom severity. The Wechsler Children's Intelligence Scale-IV was used to assess cognitive skills, and the Bruininks -Oseretsky Motor Proficiency Test was used to assess motor skills.

RESULTS:
Children with ADHD had impaired performance in many motor skill areas compared to the controls. Impairments in fine motor skills were correlated with problems in attention, working memory, and processing speed. In the ADHD group, age was not correlated with motor skills enhancement.

CONCLUSION:
The multistage clinical evaluation of ADHD should include screening for problems in motor skills. If deficiencies are found, the child should be clinically evaluated for motor proficiency and, if necessary, should be referred for appropriate objective assessment and intervention programs.