

# **Risk of mild head injury in preschool children: relationship to attention deficit hyperactivity disorder symptoms.**

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## **Abstract**

**AIM:**  
To investigate whether there is an association between mild head injury (MHI) and attention deficit hyperactivity disorder (ADHD) symptoms in preschool children.

**METHODS:**  
The study included a patient group of 30 children aged 3-6 years with mild head trauma and a control group of 30 healthy and age- and sex-matched children. The symptoms of ADHD were evaluated using the Conners' Parent Rating Scale-Revised Long (CPRS-RL) form.

**RESULTS:**  
The mean age was  $4.73 \pm 1.13$  years in the patient group and  $4.65 \pm 0.99$  years in the control group. No significant differences were determined between the groups in terms of age, gender, parents' age and education ( $p > 0.05$ ). The total subscale points as reported by the parents of the children with MHI were significantly higher than those for the control group in terms of the following subscales: oppositional, cognitive problems/inattention, hyperactivity, social problems, ADHD index, Conners' Global Index (CGI)-Irritability-Impulsiveness, CGI-Emotional Lability, CGI-Total and DSM-IV ADHD symptoms ( $p < 0.05$ ). A history of previous trauma treated in emergency services was determined in eight of the 30 patients (26.7%).

**CONCLUSIONS:**  
The findings of this study suggest that preschool children with MHI have more pre-injury ADHD symptoms and oppositional and emotional-behavioural symptoms than healthy children without trauma. Clinicians should screen children with MHI for ADHD symptoms and refer them for treatment when necessary. Evaluation of children presenting with MHI by a child psychiatrist may prevent repetition of injuries.