Impact of allergy on children with attention deficit hyperactivity disorder


Abstract

BACKGROUND:
Attention deficit hyperactivity disorder (ADHD) is commonly present worldwide, causing serious problems to those affected. ADHD was suggested to be secondary to allergic disorder or its medication. Both ADHD and allergy depend on complex environmental and genetic interaction, and they meet the hypersensitivity criteria.

OBJECTIVE:
Detect the percentage of allergy in ADHD children, the common allergic disorders and allergens, and the effect of allergy on symptom and severity of ADHD.

MATERIAL AND METHODS:
100 children with ADHD were subjected to psychiatric assessment for ADHD type and severity, history of allergy, skin prick test to common environmental allergens, serum total IgE levels and open food challenge. Comorbid neuropsychiatric disorders, below average intelligence quotient (IQ), and chronic illnesses were excluded. A control of 60 healthy children was chosen to compare the results of skin prick test and serum total IgE levels.

RESULTS:
35 ADHD children (35%) were allergic. Most cases had combined allergic rhinitis and bronchial asthma (25%). Common allergens were hay dust (43%) followed by different pollens (37.5%). There were statistical significant differences between coexistence of allergy, type of ADHD, early onset and severity of symptoms.

CONCLUSION:
Children with ADHD had an increased prevalence of allergic diseases. Evaluation of allergy in ADHD is mandatory, to decrease the burden of the condition.