

Neuropeptide Y Levels in Children and Adolescents with Attention Deficit Hyperactivity Disorder.

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Abstract

OBJECTIVE:

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common psychiatric disorders in adolescence, however, the etiology has not been described. Neuropeptide Y (NPY) is one potential factor that may be involved in the etiology of ADHD. The goal of this study was to evaluate NPY levels in children with ADHD and compare the findings to healthy controls.

METHODS:

Forty-eight ADHD patients and 40 healthy controls were included in this study. The age range of ADHD patients was 6 to 16 years. All patients were diagnosed according to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V).

RESULTS:

The NPY levels of children with ADHD were compared to healthy controls but were not significantly different ($t(86) = -0.887, p = 0.378$). NPY levels were similar ($F = 0.191, p = 0.826$) between ADHD presentations, and included 8 children with predominantly hyperactive-impulsive type (14.3%), 14 children with predominantly inattentive type (30.4%), and 26 children with a combined type (55.4%). There was also no difference between ADHD patients using medical treatment, ADHD patients not using medical treatment, and control subjects in terms of NPY levels ($F = 0.572, p = 0.566$). There was a significant positive correlation between age and NPY levels in the ADHD group ($r = 0.349, p = 0.015$).

CONCLUSION:

This study demonstrated that the NPY levels of ADHD subjects were not different than those of controls. Future studies with homogeneous phenotypes and a larger sample population are needed.