EFFICACY OF ATTENTION DEFICIT HYPERACTIVITY DISORDER TREATMENT METHODS IN CHILDREN

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Relevance: Attention deficit hyperactivity disorder (ADHD) is a neurobehavioral disorder that is defined by persistent and maladaptive symptoms of hyperactivity/impulsivity and inattention. ADHD is associated with several comorbid conditions and disorders such as mood disorders, disruptive behavior disorders and learning disabilities. Attention Deficit Hyperactivity Disorder is a severe public health issue affecting both children and adults worldwide. The ADHD prevalence is estimated to be 7 to 8% of school-age children and 4 to 5% in adults [1]. Evaluating efficacy of its treatment techniques would prevent misuse of medication and help children affected by aforementioned condition by improving their learning and social functioning.

Objectives: To analyze different medication and treatment methods of ADHD in children and establish the most efficacious of them. To determine a therapy including multiple treatment methods if possible.

Materials and methods: Analysis and assessment of American scientific studies, articles and guidelines on treatment of ADHD have been conducted. Sources have provided information on different treatment methods, such as pharmacological (including stimulants and non-stimulants) and non-pharmacological (including alternative and complementary therapies).

Results: The stimulant drugs tested seemed equally effective. Stimulants as methylphenidate (MPH) and lisdexamfetamine (LDX) have proven to be effective against ADHD symptoms in children with little side effects. Tricyclic antidepressants may be effective also but are recommended only when children have been refractory to 2 or more stimulant drugs or have intolerable adverse effects [2]. Non-stimulants can also be used if a child does not respond to stimulant medications or doesn't tolerate stimulants due to side-effects. According to the referenced studies, traditional Chinese medicines were found to compare favorably with methylphenidate, positive results were claimed for gingko biloba. Omega-3 fatty acids have not been found to be efficacious. Non-pharmacological treatments such as school intervention, cognitive behavioral therapy have also been described as efficient. Parent Behavior Training can also be beneficial for children as a long-term treatment for a chronic condition. Peers, school personnel and family must support the patient.

Conclusion: Recent research and novel drug developments have provided new treatment options both with stimulants and non-stimulants for children with ADHD. Progress in non-medical therapies now provides several options for patients who cannot or will not use medications, and for the many medication-treated patients who continue to show residual disability. The most efficacious therapy for ADHD patients should include both pharmacological and non-pharmacological treatments with an emphasis on individuality. Patients should be monitored and their treatment should be adjusted respectively by their doctor according to their personal needs and unwanted side-effects of drugs.

References

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