

ADHD drugs and their long term impact

Contributed by Isaac Eliaz, M.D., M.S., L.Ac.

Drugs generally prescribed to treat Attention Deficit Hyperactivity Disorder (ADHD; DSM-IV®) are stimulant medications, such as amphetamines and methylphenidate.

Unfortunately, there are very few studies on the long term impact of these drugs. The widespread diagnosis and prescribing of medications for ADHD is a relatively recent phenomena.

Most studies on ADHD drugs are to prove the short term effectiveness of the drugs, such as the elimination of symptoms and immediate results in areas such as behavior and academic performance. The long-term effectiveness of the following commonly prescribed brand names have not been systematically evaluated in controlled trials longer than the durations indicated: Adderall 3 weeks; Concerta 4 weeks; Daytrana 7 weeks; Dexedrine (no data); Focalin 6 weeks; Focalin XR 7 weeks; Metadate CD 3 weeks; Methylin (no data); Ritalin LA 2 weeks; Strattera 9 weeks.¹

While long-term studies on both effectiveness and side effects are lacking, enough adverse effects have been documented thus far to prompt the Food and Drug Administration to require ADHD Drug Manufacturers to notify patients about Cardiovascular Adverse Events and Psychiatric Adverse Events, as well as list other warnings.² (FDA announcement and press release on February 21, 2007 available for viewing at:

<http://www.fda.gov/bbs/topics/NEWS/2007/NEW01568.html> A summary of these adverse events and warnings is given at the end of this article.

Controversy - Is ADHD a real disorder?

In 2003, approximately 4.3% of children aged 4-17 years were reported to have been diagnosed with ADHD and were taking medication for the disorder.³ Debate rages over the issue of ADHD. Much of the debate seems to center on whether ADHD is a valid mental disorder or not. In January 2002, an "International Consensus Statement on ADHD" was signed by numerous doctors in the field of ADHD proclaiming that ADHD is a valid medical disorder because "the scientific evidence indicating it is so is overwhelming."⁴ In spite of this statement, criticism and debate continue.

As of this date, a biological cause for ADHD has not been conclusively determined and there is no diagnostic test for ADHD. Diagnosis is made after the evaluation of symptoms using the criteria outlined by the Diagnostic & Statistical Manual for Mental Disorders (DSM-IV-TR). The prescribing of medication is contingent on ADHD being classified and regarded as a mental disorder. Some contend ADHD's classification as a mental disorder is contentiously value-laden.⁵ Social critics point out our current educational system favors certain behaviors and abilities over others. Other critics question the ethics and appropriateness of giving behavior altering medications to children altogether, regardless of diagnosis. Experts in the field of mental health point out that many of the symptoms of ADHD can fall into the category of other disorders (such as Post Traumatic Stress). There is concern that the diagnosis of ADHD can mask more taboo issues such as childhood sexual abuse, trauma and neglect, since symptoms of these can be the same or similar to those of ADHD.⁶ Some critics concede that ADHD is a genuine disorder, but express concern that many are misdiagnosed and/or prescribed medications unnecessarily. Some medical practitioners believe that ADHD, as a validly diagnosed disorder, can be treated more safely and effectively over the long term using alternatives to medication. Medical experts in favor of medication argue that the benefits of medicating for this disorder far outweigh the consequences of not medicating.

The above summary of various arguments merely serves to point out how deceptively complex this issue is. All of this needs to be taken into consideration when determining the chronicity and severity of the child's symptoms and deciding on a course of action and treatment. Medications often present a cost effective and convenient solution over the short term, but as is explicitly stated by the pharmaceutical companies themselves on drug labels, the long-term effects of ADHD drugs in children have not been well established or studied. Due to the complexity of this issue, caution is needed when deciding on a course of treatment. Given the bewildering array of drug choices, lack of long-term studies on

effectiveness and side effects, and the human fallibility and bias of experts, parents need to exercise healthy skepticism and play an active part in understanding their child's problems and not rely on one source of information. ADHD drug labels now state, "Adequate diagnosis requires the use not only of medical but of special psychological, educational, and social resources. Learning may or may not be impaired. The diagnosis must be based upon a complete history and evaluation of the child and not solely on the presence of the required number of DSM-IV® characteristics." The labels also state, "Drug treatment may not be indicated for all children with this syndrome."⁷

Parents are strongly advised to read all label and medication guidelines of the ADHD drug that may apply. Labels and medication guidelines for commonly prescribed ADHD drug are available for viewing at:
<http://www.fda.gov/cder/drug/infopage/ADHD/default.htm>

Parents are also advised to learn as much as possible on their own about ADHD (and the controversy surrounding it.) Most important, parents are reminded to not neglect their own common sense, instincts and intuition about what would be the most loving and beneficial solution for their child in the long run.

A Summary of Adverse events, Warnings and Precautions associated with ADHD drugs

(Please consult specific medication labels for more detail. Please also consult labels for more documentation on Precautions and various Adverse Reactions.)

Serious Cardiovascular Events - Sudden death has been reported in children and adolescents with structural cardiac abnormalities or other serious heart problems in association with ADHD drug treatment at usual doses.

Hypertension and Other Cardiovascular Conditions - Stimulant medications cause a modest increase in average blood pressure and average heart rate and individuals may have larger increases.

Psychiatric Adverse Events:

Pre-Existing Psychosis - ADHD drugs may exacerbate symptoms of a pre-existing mental disorder.

Bipolar Illness - ADHD drugs may exacerbate a pre-existing bi-polar illness.

Emergence of New Psychotic or Manic Symptoms - Symptoms such as hallucinations, delusional thinking, or mania in children and adolescents without prior history of psychotic illness or mania can be caused by stimulants at usual doses.

Aggression - Patients taking ADHD drugs need to be monitored for the appearance of or worsening of aggressive behavior or hostility.

Long-Term Suppression of Growth - While comprehensive research is still lacking, preliminary studies indicate a link between adhd drugs and suppression of growth.

Seizures - Some risk of seizures. Patients with history of seizures should not take adhd drug.

Visual Disturbance - Difficulties with accommodation and blurring of vision have been reported.

Tics - Amphetamines can exacerbate motor and phonic tics and Tourette's syndrome.

Suicidal Ideation in Children and Adolescents (documented thus far for only STRATTERA (atomoxetine) in short-term studies) - Anyone considering the use of STRATTERA in a child or adolescent must balance this risk with the clinical need.

BIBLIOGRAPHY

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Isaac Eliaz, M.D., M.S., L.Ac.

Isaac

Eliaz, M.D., M.S., L.Ac., is a pioneer in the field of integrative medicine, and a respected author, researcher, clinical practitioner, and frequent guest lecturer on integrative medical approaches to health, cancer prevention and treatment. He is an active researcher who has published several clinical studies in peer-reviewed journals.