

Fall is here, school is in session, and hopefully all our children are enjoying their school experience, learning and reaching their potential. Unfortunately we see a fair number of children who do not do as well in school as we would expect. These children are often very distractible, inattentive, and unable to focus on a task that takes any degree of concentration. Attention Deficit Hyperactivity Disorder, or ADHD, is a fairly common condition that affects as many as 8 % of school aged children. With proper diagnosis and treatment these children can succeed and do well in school, paving their way to a productive future.

The way I explain ADHD to parents is that there is a part of the frontal lobe of the brain I like to call the "air traffic controller" whose job is to filter all the different stimulations and senses your brain is being bombarded with at any given time. The ATC tells the rest of the brain what information is important and needs to be focused on (like listening to a teacher give test directions) and what the brain needs to ignore (like the sound of a dog barking outside the classroom window). If this controller is not active or "asleep", as it is in an ADHD patient, the brain will have a hard time paying attention to the boring but important stuff of school work and instead focus on what it finds more interesting (like the dog barking). Children with ADHD are therefore able to stay on tasks if it's something they really enjoy, for example playing with legos or video games. However when it comes to doing something like household chores or completing a math sheet for homework, they get easily distracted from the task at hand.

The hallmark symptoms of ADHD are not giving close attention to detail and making careless mistakes, trouble keeping attention on tasks, not seeming to listen when spoken to directly, not following instructions and failing to finish school work, troubles with organization, dislike of things that take a lot of mental effort for a long period of time, and being forgetful in daily activities. Children with ADHD are also fidgety, talk excessively, have difficulty remaining in their seats, have trouble taking turns and raising their hands.

There are numerous other reasons why children may not do well in school which can mimic ADHD symptoms. Medical conditions such as hypothyroidism, vision and learning impairment, and low IQ can reveal themselves as school failure. Sleep disordered breathing, a mild form of sleep apnea , which prevents the child from getting a restful night's sleep due to enlarged tonsils and adenoids obstructing the child's airway, can cause school performance problems. Another cause of school failure can be due to a specific learning disability. In simple terms a learning disability results from differences in the way a person's brain is wired. Children with learning disabilities are as smart as their friends but they may have difficulty reading, writing, spelling or organizing information if taught in conventional ways. Other causes of school issues can be due to emotional problems such as depression or a sign of family dysfunction such as divorce, financial hardship, or inconsistent parenting.

The diagnosis of ADHD is based on taking interviews of the child, parents, teachers , and coaches .Often standardized questionnaires are used to gather information about the child. Other medical conditions are ruled out and learning disabilities are screened for by the school or psychologist. In order to diagnose a child with ADHD, the child must have had symptoms from an early age (before 7 years old), have symptoms present in two or more settings (school, home, playground), and there must be clear evidence of significant

impairment in social or school functioning.

Treatment of ADHD first centers on behavioral modification and classroom help.

Techniques such as having the child sit in front of the classroom to help focus on the teacher, making sure that the student's homework is done in a controlled environment without distraction from siblings or television, and making reminder lists for the child to follow are just a few things that can be done to help these children succeed. If there are behavioral problems such as opposition or defiant behavior, psychological counseling can be beneficial. A specific class of medication, stimulants, have been shown to have a tremendous positive effect on children diagnosed with ADHD. The stimulants work by "waking up" the air traffic controller mentioned earlier so that the child is able to pay attention to what is important and filter out the less important things their minds are being exposed to. Stimulants work similarly to caffeine in a way, helping the child stay more alert and focused. Numerous scientific studies have shown the beneficial effects of stimulants in ADHD with excellent safety profiles. Some appetite suppression is seen with stimulant use, but there is no evidence that these medications have any effect on long term growth. ADHD patients treated with stimulants have been shown to have better long term outcomes and academic success than untreated children.

Other issues may come up when having an ADHD affected child. Some patients may have a coexisting learning disability that needs to be addressed with learning modifications in the classroom. Some ADHD children have sleep problems requiring interventions. ADHD teens have higher rates of traffic violations once they start driving. With diagnosis and treatment these children can overcome their disability and have great success in the future. If you have a child who is struggling in school, I encourage you to talk to that child's doctor or teacher so that the cause for their failures can be identified and addressed.