ATTENTION

Medical doctors will freely admit that there is no primary medical diagnostic for ADD or AD(H)D--no test or series of tests that can be administered that will tell with certainty whether the condition is present, and to what degree. Diagnosis is largely from symptoms, based on the doctor's personal observations and on interviews with parents and teachers.

Neither is the treatment for ADD standardized. Medication dosages are adjusted by trial and error until the dosage is found that most successfully modifies the symptoms. Again, treatment is based on observation, rather than specific medical criteria. Even though effort is put into the accurate collection of that data, the reality seems to be that both the diagnosis and treatment of attention deficits are subjective rather than objective.

These points are not intended as criticisms. They are raised only to introduce an important question--in the absence of a defined medical diagnosis, shouldn't careful consideration be given to the possibility that some attention deficits might be symptoms of other conditions, and that if those other conditions were addressed, the attention might improve?

Two examples come to mind:

1. For children with language deficits, communication can be a hard, frustrating task. If a child has a "receptive language deficit," he or she has difficulty getting meaning from what others are saying. If a child cannot make consistent sense out of other people's talk, then the task of communication becomes an exercise largely without value. Listening to others—teachers, parents, etc.—is so boring that the child is hard pressed to find a reason to continue it. The child begins to avoid conversations—passively or actively, consciously or unconsciously, the child drifts toward activities that are less frustrating. This comes across to others as an auditory attention problem.

2. Learning is compromised when children have vision deficits or difficulties with processing what they see. If the eyes or head hurt when the child reads, or if the print is blurry, or if the page seems unstable, it will be much harder for the child to get information from the page than it is for children without those difficulties. Desk tasks become uncomfortable or boring, and the child therefore has a difficult time paying attention to the page. Before long is he looking up, or looking around the room, or looking out the window, or daydreaming—anything to avoid having to deal with what is on the page. To an observer, the child seems to have a visual attention problem.

In both of the above examples, the problem was not an attentional deficit, although it might have seemed to be at first glance. Other difficulties were causing the lack of attention. This is not intended to suggest that ADD never exists as a primary problem. But, it makes sense that, if what seems to be an attentional deficit is really a reaction or adaptation to other types of learning difficulties, those difficulties should be addressed first, before the child is medicated.

Even if the child has genuine attention problems, there may be ways of intervening that will reduce or eliminate medications. One alternative to medication may be the Interactive Metronome (IM) program. During IM training, the student listens to a series of rhythmic beats through headphones. As he listens, the student must perform repetitive hand and foot exercises in conjunction with those beats. His hands and feet are connected to sensors, and the student receives auditory feedback that tells him whether his responses are too fast, too slow, or on time. This allows him to constantly refine his timing and movement.

Interactive Metronome was originally developed to enhance rhythmic skills in musicians. However, as it was used it was found to also have an effect on other areas, including attention span, distractibility, sequential thinking, impulsiveness, fine and gross motor control, control of aggression, fluency in reading and math, and handwriting.

IM training affects the planning, sequencing, and execution of motor impulses (movement). Because so many tasks depend upon coordinated motor control—speech, writing, general muscular coordination, eye movements, etc.—the fine-tuning of motor control affects academic areas that use those skills (for example, improved eye movements affect reading fluency). Children with ADHD have below-normal activity in the prefrontal region of the brain responsible for refined motor control; therefore, systematically training the brain's motor planning and sequencing affects attentional skills. And, because this region of the brain coordinates with other parts of the brain, IM training has an impact on thinking, reasoning, processing, and organizational skills that involve timing and sequencing. By refining the underlying brain timing skills, many areas of performance are affected.

At Restored Hope Remedial Services, we carefully test for underlying contributors to attention problems. If we find such factors, we correct them. If we think that Interactive Metronome could be helpful, we make that recommendation. For attention problems, as with many factors that contribute to learning difficulties, there is ***Hope***.

For more information about Interactive Metronome, please refer to the website, www.interactivemetronome.com.