

## IMAGES OF THE ADD MIND

Everyone has “ADD days”; but a person who has ADD is dealing with a problem that have affected their life from the beginning years. Not being able to concentrate; difficulty with starting or finishing tasks; impulsivity; constantly on the go. All of these and more are some of the symptoms of ADD. There are a lot of other problems people can have that look a lot like ADD, but they aren't. Therefore, it is extremely important that ADD is properly diagnosed in order for a person to receive the proper treatment. To complicate matters further, it is not the case that a person simply has ADD or does not have it. Instead, ADD is what we call a ‘continuum’ disorder and can be anywhere from mild to severe. Moreover, there are anywhere from six to eight identifiable subtypes of ADD; each of which has varying characteristics and significantly different requirements for treatment.

At the ADD Institute in Kalamazoo we feel that ADD must not only be accurately diagnosed, but that the various subtypes must be identified. Medical evaluation, psychological assessment and case history are invaluable tools in diagnoses, but we feel that studying the activity of the brain is essential. That is why we offer state of the art computerized imaging of brain electrical activity called Quantitative Electroencephalography or QEEG. In combination with other diagnostics, QEEG does allow highly accurate identification of brain activity patterns consistent with ADD. Current research has shown that the accuracy of identifying ADD when it is actually present is well in excess of ninety percent. Moreover, computerized images called “topographical brain maps” allow for identifying the various subtypes of ADD. We feel that this is of vital importance because such subtyping leads to much more accurate decisions about treatment choices. For example, one ADD subtype shows significantly slow brain electrical activity in the front of the brain, called the frontal lobes. This type of ADD will often respond best to a stimulant medication such as Ritalin or Adderal. On the other hand another type of ADD can show too

much activity in a particular area in the front of the brain called cingulate gyrus. Whereas the first type of ADD is associated with “under focused”, the second type can be what we call “over focused.” This person has trouble shifting their attention and can get “stuck” on certain thoughts or activities. This is called Obsessive/Compulsive Disorder or OCD. Sometimes the person will also have involuntary moments or vocalizing called Tourette’s Disorder. These people respond best to antidepressants like Zoloft. Other examples of ADD subtypes each require their own treatment approach. At the ADD Institute we conduct a full range of evaluation and cooperate with a person’s own physician to provide an accurate and immediately useful diagnosis. Based upon our brain imaging studies, we will provide your physician with information which will enable him/her to select a proper medication if such treatment is indicated.

At the ADD Institute we also offer a treatment option to be consistent along with or, in some cases instead of medication. It is called “Neurofeedback”, a highly advanced form of biofeedback training wherein a person learns to train their own brain activity. A small sensor is attached to the scalp which detects underlying electrical activity of the brain. This activity is sent to a computer where it is changed into a video display, such as a game, and a sound such as a pleasant tone. Whenever a person is paying attention and sitting quietly, one can score points and this rewards the brain for producing the right activity. Like any other type of practice and exercise this leads to a strengthening of brain activity and the person starts to improve their attention. If the problem is mostly impulsivity or hyperactivity, a particular type of brain activity is rewarded which enables the person to strengthen their activity to practice self-control. Numerous published studies have shown that neurofeedback is a very effective form of treatment and there are now 10-year follow-up studies showing that the treatment lasts over time.

At the ADD Institute, the clinical staff is the most experienced in the State of Michigan in both general biofeedback and Neurofeedback.

Our goal at the ADD Institute is to provide highly accurate diagnoses of ADD and related disorders. Our electrical brain imaging studies are found nowhere else in the area and we combine them with complete historical, psycho-social, medical, and neuro metric assessments. We cooperate fully with physicians in selecting treatment approaches and we offer a full range of individual and family counseling. We also feel that working with teachers and the schools is essential. Since ADD is strongly associated with heredity (among other factors), we will also frequently ask that others in a family with ADD be treated along with the patient. Optimal functioning is our goal. To understand the person we need to understand the brain. That is why we produce Images of the ADD Mind.

R. Williams, Ph.D.

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