

The Seven Types of ADD -- and How to Treat Each One

Daniel Amen, MD

One ADHD expert says there are many types of ADHD. He explains them here, and offers his treatment plans for managing them.

As the founder of six Amen Clinics, I bring a multidisciplinary approach to diagnosing and treating brain based disorders including attention deficit disorder and coexisting conditions. For over twenty years, I've used SPECT brain scans (along with other diagnostic techniques) to develop individual, targeted treatment plans for each patient. Early on, I discovered through brain SPECT patterns that attention deficit is not a single or a simple disorder.

My ADD Is Not Your ADD

ADD, anxiety, depression, bipolar disorder, autism, and other conditions are not single or simple disorders. They all have multiple types. ADD affects many areas of the brain—the prefrontal cortex and cerebellum primarily, but also the anterior cingulate, the temporal lobes, the basal ganglia, and the limbic system. The seven types of ADD that I studied are based around three neurotransmitters—dopamine, serotonin, and GABA.

Classic ADD

This is the easiest type to spot: Primary symptoms are inattentiveness, distractibility, hyperactivity, disorganization, and impulsivity. Scans of the brain show normal brain activity at rest, and decreased activity, especially in the prefrontal cortex, during a concentration task. People with this type of ADD have decreased blood flow in the prefrontal cortex, cerebellum, and the basal ganglia, the last of which helps produce the neurotransmitter dopamine.

Treating Classic ADD

The goal here is to boost dopamine levels, which increases focus. I do it with either stimulating medications—Ritalin, Adderall, Vyvanse, Concerta—or stimulating supplements like rhodiola, green tea, ginseng, and the amino acid L-tyrosine. Getting lots of physical activity also helps increase dopamine, as does taking fish oil that is higher in EPA than DHA.

Inattentive ADD

This type, as well as Classic ADD, have been described in The Diagnostic and Statistical Manual (DSM) of Mental Disorders since 1980. This type is associated with low activity in the prefrontal cortex and low dopamine levels. Symptoms are short attention span, distractibility, disorganization, procrastination. People with this type are not hyperactive or impulsive. They can be introverted and daydream a lot. Girls have this type as much as, or more than, boys.

Treating Inattentive ADD

Inattentive ADD is usually responsive to treatment. It is often possible to change the course of a person's life if he or she is properly treated. The goal, as with Classic ADD, is to boost dopamine levels. I use the supplements like the amino acid L-tyrosine, which is a building block of dopamine. Take it on an empty

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stomach for maximum effect. I often prescribe a stimulant like Adderall, Vyvanse or Concerta. I put patients on a high-protein, lower-carbohydrate diet, and I have them exercise regularly.

Over-Focused ADD

Patients with this type have all of the core ADD symptoms, plus great trouble shifting attention. They get stuck or locked into negative thought patterns or behaviors. There is a deficiency of serotonin and dopamine in the brain. When the brain is scanned, you see that there's too much activity in the area called the anterior cingulate gyrus, which is the brain's gear shifter. This overactivity makes it difficult to go from thought to thought, task to task, and to be flexible.

Treating Over-Focused ADD

The goal is to boost serotonin and dopamine levels in the brain. Treatment is tricky. People with Over-Focused ADD get more anxious and worried on a stimulant medication. I use supplements first—L-tryptophan, 5-HTP, saffron, and inositol. If supplements don't help with symptoms, I prescribe Effexor, Pristiq, or Cymbalta. I avoid a higher-protein diet with this type, which can make patients mean. Neurofeedback training is another helpful tool.

Temporal Lobe ADD

This ADD type has core ADD symptoms along with temporal lobe (TL) symptoms. The TL, located underneath your temple, is involved with memory, learning, mood stability, and visual processing of objects. People with this type have learning, memory, and behavioral problems, such as quick anger, aggression, and mild paranoia. When the brain is scanned, there are abnormalities in the temporal lobes and decreased activity in the prefrontal cortex.

Treating Temporal Lobe ADD

I use the amino acid GABA (gamma-aminobutyric acid) to calm neuronal activity and inhibit nerve cells from overfiring or firing erratically. Taking magnesium—80 percent of the population are low in this mineral—helps with anxiety and irritability. Anticonvulsant medications are often prescribed to help with mood instability. For learning and memory problems, I use ginkgo or vinpocetine.

Limbic ADD

This type looks like a combination of dysthymia or chronic low-level sadness and ADD. Symptoms are moodiness, low energy, frequent feelings of helplessness or excessive guilt, and chronic low self-esteem. It is not depression. This type is caused by too much activity in the limbic part of the brain (the mood control center) and decreased prefrontal cortex activity, whether concentrating on a task or at rest

Treating Limbic ADD

The supplements that work best for this type of ADD are DL-phenylalanine (DLPA), L-tyrosine, and SAME (s-adenosyl-methionine). Wellbutrin is my favorite medication for this type of ADD. Researchers think it

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works by increasing dopamine. Imipramine is another option for this type. Exercise, fish oil, and the right diet will help a person with Limbic ADD better manage symptoms.

Ring of Fire ADD

Patients with this type don't have an underactive prefrontal cortex, as with Classic and Inattentive ADD. Their entire brain is overactive. There is too much activity across the cerebral cortex and many of the other parts of the brain. I call it "ADD plus." Symptoms include sensitivity to noise, light, touch; periods of mean, nasty behavior; unpredictable behavior; talking fast; anxiety and fearfulness. In brain scans, it looks like a ring of hyperactivity around the brain.

Treating Ring of Fire ADD

Stimulants, by themselves, may make symptoms worse. I start out with an elimination diet, if I suspect an allergy is involved, and boost the neurotransmitters GABA and serotonin through supplements and medication, if necessary. I prescribe GABA, 5-HTP, and L-tyrosine supplements. If I prescribe medication, I start with one of the anticonvulsants. The blood pressure medicines guanfacine and clonidine may be helpful, calming overall hyperactivity.

Anxious ADD

People with this type have hallmark ADD symptoms, and they are anxious, tense, have physical stress symptoms like headaches and stomachaches, predict the worst, and freeze in anxiety-provoking situations, especially where they may be judged. When the brain is scanned, there is high activity in the basal ganglia, large structures deep in the brain that help produce dopamine. This is the opposite of most types of ADD, where there is low activity in that region.

Treating Anxious ADD

The treatment goal is to promote relaxation and boost GABA and dopamine levels. ADD stimulants, taken alone, make patients more anxious. I first use a range of "calming" supplements—L-theanine, relor, magnesium, and holy basil. Depending on the patient, I prescribe the tricyclic antidepressants imipramine or desipramine to lower anxiety. Neurofeedback also works to decrease symptoms of anxiety.