CRITERIA FOR AD/HD

Attention-Deficit/Hyperactivity Disorder from DSM-IV (Prefrontal Cortex System)

Either (1) or (2) needed for diagnosis

(1) six (or more) of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

Inattention

___ 1. often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
___ 2. often has difficulty sustaining attention in tasks or play activities
___ 3. often does not seem to listen when spoken to directly
___ 4. often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
___ 5. often has difficulty organizing tasks and activities
___ 6. often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
___ 7. often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
___ 8. is often easily distracted by extraneous stimuli
___ 9. is often forgetful in daily activities

(2) six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

___ 1. often fidgets with hands or feet or squirms in seat
___ 2. often leaves seat in classroom or in other situations in which remaining seated is expected
___ 3. often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
___ 4. often has difficulty playing or engaging in leisure activities quietly
___ 5. is often "on the go" or often acts as if "driven by a motor"
___ 6. often talks excessively

Impulsivity

___ 7. often blurts out answers before questions have been completed
___ 8. often has difficulty awaiting turn
___ 9. often interrupts or intrudes on others (e.g., butts into conversations or games)

The onset of at least some symptoms must be before age seven and they must have lasted at least for six months. In order to make the diagnosis, some impairment from the symptoms is present in two or more settings (e.g., school [or work] and at home). There must also be clear evidence of clinically significant impairment in social, academic, or occupational functioning. The severity of the disorder is rated as mild, moderate or severe.

Based on DSM-IV criteria, there can be three subtypes:

AD/HD, combined type,
if both criterion for 1 and 2 are met

AD/HD, predominantly inattentive type,
if criterion 1 is met but criterion 2 is not

AD/HD, predominantly hyperactive-impulsive type,
if criterion 2 is met but criterion 1 is not

The boys with AD/HD combined or predominantly hyperactive-impulsive type are often identified early in life. The level of hyperactivity, restlessness and impulsivity causes them to stand out from others. AD/HD predominantly inattentive type girls, on the other hand, may be ignored because they get labeled as "social butterflies." Even as we near the next century, societal expectations are different for girls than they are for boys.

Brain studies of patients with classic AD/HD reveal a decrease in brain activity in the frontal lobes of the brain in response to an intellectual challenge. The harder these people try to concentrate, the worse it gets. Having less activity in the front part of the brain is a very uncomfortable state of mind. Due to this many of these kids unconsciously become very stimulation seeking. Increased activity level, restlessness and humming are common ways these kids try to stimulate themselves. Another way these kids try to turn their brains on is by causing turmoil. If they can get their parents to yell at them or somehow cause increased turmoil at home or in the classroom that might cause increased activity in their frontal lobes and make them feel more tuned in. Again, this is not a conscious phenomenon. These children do not know that they are doing this to

become turned on. It seems many of these kids become addicted to the turmoil. They repeatedly get others upset with them even though there is no benefit to their behavior.

The parents of these children commonly report that they are experts at getting them upset. One mother told me that when she wakes up in the morning she promises herself that she won't yell or get upset with her 8 year old son. Yet, invariably by the time he is off for school there have been at least three fights and both of them feel terrible. When I explained the child's unconscious need for stimulation to the mother she stopped yelling at him. When parents stop providing the negative stimulation (yelling, spanking, lecturing, etc.) these children decrease the negative behaviors. Whenever you feel like screaming at one of these kids talk as softly as you can. At least in that way you're breaking their addiction to turmoil and lowering your blood pressure.

Classic ADHD is usually very responsive to stimulant medications, such as Ritalin, Dexedrine, Cylert, Desoxyn, and Adderal. These medications "turn on" the frontal lobes and prevent the shutdown which often occurs with ADD.

Additional Symptoms Notes For ADHD:

1. Restless, fidgety

- like a mosquito buzzing around the environment, or a bullet ricocheting off the walls,
- jitterbug, others note excessive movement
- legs or fingers in constant motion
- hyperactivity

2. Problems remaining seated

- up, down, all around
- swinging around in seat
- constantly up

3. Easily distracted by extraneous stimuli

- trouble remaining focused
- hears whatever else is going on
- if someone drops a pencil three rows over, attention immediately goes to the
- pencil and distracts them from their task

4. Problems taking turns

- need to have way immediately
- often tries to cut to the front of the line
- alienates themselves socially from others

5. Responds impulsively or without thinking

- most people have a little brake in their brain that causes them to think before they act; people with ADD seem to be missing that brake and react often without forethought

6. Problems completing things

- homework, school work, chores
- start many things that they do not finish

7. Difficulty with sustained attention or erratic attention

- short attention span for most things
- people with ADD may be able to concentrate on things that are new (sitting in the pediatrician's office), novel, highly interesting (video games) or frightening (dad coming home from work after mom has called him out of a meeting)

8. Shifts from one uncompleted activity to another

- with a short attention span, the ADD person often will go from activity to activity, toy to toy or project to project

9. Difficulty playing quietly

- often described as noisy, loud or intrusive (this may be very difficult for a mother who is sensitive to noise)

10. Talks excessively

- phrases such as "motor mouth," or "who put a quarter in you" are often heard with these people

11. Interrupts frequently

- blurts out answers in class even after being warned not to time after time. Often this is upsetting and embarrassing for parents

12. Doesn't seem to listen

- this may seem somewhat selective, people with ADD often absorb less than 30% of what is said, causing misperception and misinterpretation

13. Disorganization

- book bag
- homework
- room
- desk
- office
- paperwork
- time (often late or in a hurry)
- overall organization is a problem

14. Takes high risks

- these children are at risk for accidents (running into the street without thinking, getting hold of medication that is left out, climbing up cupboards or on top of appliances, etc.)

Additional ADD Symptoms

- often poor handwriting; as adults, they may print
- trouble writing, even though they may be able to say what they are thinking. They have trouble writing what they are thinking (this has been termed finger agnosia)
- often have difficulty getting to sleep and have trouble getting up in the morning
- cannot tune out the edges and concentrate on the middle
- poor memory, scattered
- poor follow through
- homework takes forever
- they tend to be very stimulation-seeking and are experts at getting others angry at them
- easily frustrated
- poor eye tracking
- poor self-esteem, especially with late diagnosis
- chronic failure to master social and academic situations
- unpleasant reaction from others due to their behavior
- suffer from an overdose of criticism
- children are often demoralized and may look depressed
- decreased coordination compared to peers
- many have "soft neurological signs" such as fine motor problems

HALLMARKS OF ADD without Hyperactivity

(helpful indicators for AD/HD, Predominantly Inattentive Type)

(Also Prefrontal Cortex System)

Six or more of the following symptoms are indicative of ADD without hyperactivity.

___ 1. Difficulty with sustained attention or erratic attention span
___ 2. Easily distracted by extraneous stimuli
___ 3. Excessive daydreaming
___ 4. Disorganized
___ 5. Responds impulsively or without thinking
___ 6. Problems completing things
___ 7. Doesn't seem to listen
___ 8. Shifts from one uncompleted activity to another
___ 9. Often complains of being bored
___10. Often appears to be apathetic or unmotivated
___11. Frequently sluggish or slow moving
___12. Frequently spacey or internally preoccupied

The onset of these symptoms often becomes apparent later in childhood or even adolescence. The brighter the individual, the later symptoms seem to become a problem. The symptoms must be present for at least six months and not be related to a depressive episode. The severity of the disorder is rated as mild, moderate or severe. Even though these children have many of the same symptoms of the people with AD/HD, they are not hyperactive and may, in fact, be hypoactive. Girls are frequently missed because they are more likely to have this type of ADD. In addition, they may: daydream excessively, complain of being bored, appear apathetic or unmotivated, appear frequently sluggish or slow moving or appear spacey or internally preoccupied -- the classic "couch potato." Most people with this form of ADD are never diagnosed. They do not exhibit enough symptoms that "grate" on the environment to cause people to seek help for them. Yet, they often experience severe disability from the disorder. Instead of help, they get labeled as willful, uninterested, or defiant. As with the AD/HD subtype, brain studies in patients with ADD, inattentive subtype reveal a decrease in brain activity in the frontal lobes of the brain in response to an intellectual challenge. Again, it seems that the harder these people try to concentrate, the worse it gets. ADD, inattentive subtype is often very responsive to stimulant medications listed above, at a percentage somewhat less than the AD/HD patients.

HALLMARKS OF ADD
Overfocused Type
(Cingulate System)

Six or more of the following symptoms are indicative of ADD overfocused (1 and 2 are needed to make the diagnosis).

___ 1. Difficulty with sustained attention or erratic attention span
___ 2. Easily distracted by extraneous stimuli
___ 3. Excessive or senseless worrying
___ 4. Disorganized or superorganized
___ 5. Oppositional, argumentative
___ 6. Strong tendency to get locked into negative thoughts, having the same thought over and over
___ 7. Tendency toward compulsive behavior
___ 8. Intense dislike for change
___ 9. Tendency to hold grudges
___10. Trouble shifting attention from subject to subject
___11. Difficulties seeing options in situations
___12. Tendency to hold on to own opinion and not listen to others
___13. Tendency to get locked into a course of action, whether or not it is good for the person
___14. Needing to have things done a certain way or becomes very upset
___15. Others complain that you worry too much

People with ADD, overfocused subtype, tend to get locked into things and they have trouble shifting their attention from thought to thought. This subtype has a very specific brain pattern, showing increased blood flow in the top, middle portion of the frontal lobes. This is the part of the brain that allows you to shift your attention from thing to thing. When this part of the brain is working too hard, people have trouble shifting their attention and end up "stuck" on thoughts or behaviors.

This brain pattern may present itself differently among family members. For example, a mother or father with ADD overfocused subtype may experience trouble focusing along with obsessive thoughts (repetitive negative thoughts) or have compulsive behaviors (hand washing, checking, counting, etc.). The son or daughter may be oppositional (get stuck on saying no, no way, never, you can't make me do it), and another family member may find change very hard for them.

This pattern is often very responsive to new "anti-obsessive anti-depressants," which increase the neurotransmitter serotonin in the brain. I have nicknamed these medications as my "anti-stuck medications." These medications include Prozac, Paxil, Zoloft, Anafranil, Luvox and Effexor. When these medications are not helpful, or even seem to make things worse, the new antipsychotic medications can be very helpful. These include Risperdal, Zyprexa and Seroquel.

HALLMARKS OF ADD
Depressive Type
(Deep Limbic System)

Six or more of the following symptoms are indicative of ADD depressive subtype (1 and 2 are needed to make the diagnosis).

___ 1. Difficulty with sustained attention or erratic attention span
___ 2. Easily distracted by extraneous stimuli
___ 3. Moodiness
___ 4. Negativity
___ 5. Low energy
___ 6. Irritability
___ 7. Social isolation
___ 8. Hopelessness, helplessness, excessive guilt
___ 9. Disorganization
___10. Lowered sexual interest
___11. Sleep changes (too much or too little)
___12. Forgetfulness
___13. Low self-esteem

It is very important to differentiate this subtype of ADD from clinical depression. This is best done by evaluating the symptoms over time. ADD, depressive subtype, is consistent over time and there must have been evidence from childhood and adolescence. It does not just show up at the age of 35 when someone is going through serious stress in their life. It must be a pattern of behavior over time. Major depressive disorders tend to cycle. There are periods of normalcy which alternate with periods of depression.

The medications used for ADD, depressive subtype include standard antidepressants, such as Tofranil (imipramine), Norpramin (desipramine), and Pamelor (nortryptiline), the newer antidepressants such as Prozac (fluoxetine), Effexor (venlafaxine) and Wellbutrin (buprion), and the stimulants. Clinically, I have been very impressed with the ability of stimulants to help this subtype of ADD. This is why it is very important to differentiate this subtype from primary depressive disorders.

HALLMARKS OF ADD
Explosive Type
(Temporal Lobes)

Six or more of the following symptoms are indicative of ADD violent, explosive (1 and 2 are needed to make the diagnosis).

___ 1. Difficulty with sustained attention or erratic attention span
___ 2. Easily distracted by extraneous stimuli
___ 3. Impulse control problems
___ 4. Short fuse or periods of extreme irritability
___ 5. Periods of rages with little provocation
___ 6. Often misinterprets comments as negative when they are not
___ 7. Irritability builds, then explodes, then recedes; often tired after a rage
___ 8. Periods of spaciness or confusion
___ 9. Periods of panic or fear for no specific reason
___10. Visual changes, such as seeing shadows or objects changing shape
___11. Frequent periods of deja vu (feelings of being somewhere before even though you never have)
___12. Sensitivity or mild paranoia
___13. History of a head injury or family history of violence or explosiveness
___14. Dark thoughts; may involve suicidal or homicidal thoughts
___15. Periods of forgetfulness or memory problems

In my clinical experience, temporal lobe symptoms are found in approximately 10-15% of patients with ADD. Temporal lobe symptoms can be among the most painful. These include periods of panic or fear for no specific reason, periods of spaciness or confusion, dark thoughts (such as suicidal or homicidal thoughts), significant social withdrawal, frequent periods of deja vu, irritability, rages, and visual changes (such as things getting bigger or smaller than they really are). Temporal lobe dysfunction may be inherited or it may be caused by some sort of brain trauma.

Temporal lobe symptoms associated with ADD are often very responsive to antiseizure medications, such as Tegretol, Neurontin, or Depakote.

HALLMARKS OF ADD
Ring of Fire Type
(Multiple Hot Areas around the Cortex)

Six or more of the following symptoms are indicative of ADD Ring of Fire (1 and 2 are needed to make the diagnosis).

___ 1. Difficulty with sustained attention or erratic attention span
___ 2. Easily distracted by extraneous stimuli
___ 3. Angry or aggressive
___ 4. Sensitive to noise, light, clothes or touch
___ 5. Frequent or cyclic mood changes (highs and lows)
___ 6. Inflexible, rigid in thinking
___ 7. Demanding to have their way, even when told no multiple times
___ 8. Periods of mean, nasty or insensitive behavior
___ 9. Periods of increased talkativeness
___ 10. Periods of increased impulsivity
___ 11. Unpredictable behavior
___ 12. Grandiose or "larger than life" thinking
___ 13. Talks fast
___ 14. Appears that thoughts go fast
___ 15. Appears anxious or fearful

Hallmark symptoms of this type include irritability, hyperactivity, excessive talking, overfocus issues, extreme oppositional behavior, and cyclic periods of calm behavior alternating with intense aggressive behavior. The ring of fire brain pattern shows excessive activity across the whole cortical surface, as opposed to classic ADD which shows decreased activity with concentration. Ring of fire ADD may represent a variant of bipolar disorder and ADD. It is often helped with either anticonvulsant medication or the new antipsychotic medications such as Risperdal or Zyprexa. Stimulant medications often intensify the overactivity and make symptoms worse. St. John's Wort and medications which increase serotonin often make this type much worse.