

Attention deficit hyperactivity disorder

Definition

Attention deficit hyperactivity disorder (ADHD) is a problem of not being able to focus, being overactive, not being able control behavior, or a combination of these. For these problems to be diagnosed as ADHD, they must be out of the normal range for a person's age and development.

Alternative Names

ADD; ADHD; Childhood hyperkinesis

Causes, incidence, and risk factors

ADHD usually begins in childhood but may continue into the adult years. It is the most commonly diagnosed behavioral disorder in children. ADHD is diagnosed much more often in boys than in girls.

It is not clear what causes ADHD. A combination of genes and environmental factors likely plays a role in the development of the condition. Imaging studies suggest that the brains of children with ADHD are different from those of children without ADHD.

Symptoms

Symptoms of ADHD fall into three groups:

- Not being able to focus (inattentiveness)
- Being extremely active (hyperactivity)
- Not being able to control behavior (impulsivity)

Some people with ADHD have mainly inattentive symptoms. Some have mainly hyperactive and impulsive symptoms. Others have a combination of different symptom types. Those with

mostly inattentive symptoms are sometimes said to have attention deficit disorder (ADD). They tend to be less disruptive and are more likely not to be diagnosed with ADHD.

Inattentive Symptoms

- Fails to give close attention to details or makes careless mistakes in schoolwork
- Has difficulty keeping attention during tasks or play
- Does not seem to listen when spoken to directly
- Does not follow through on instructions and fails to finish schoolwork or chores and tasks
- Has problems organizing tasks and activities
- Avoids or dislikes tasks that require sustained mental effort (such as schoolwork)
- Often loses toys, assignments, pencils, books, or tools needed for tasks or activities
- Is easily distracted
- Is often forgetful in daily activities

Hyperactivity Symptoms

- Fidgets with hands or feet or squirms in seat
- Leaves seat when remaining seated is expected
- Runs about or climbs in inappropriate situations
- Has problems playing or working quietly
- Is often "on the go," acts as if "driven by a motor"
- Talks excessively

Impulsivity Symptoms

- Blurts out answers before questions have been completed
- Has difficulty awaiting turn
- Interrupts or intrudes on others (butts into conversations or games)

Signs and tests

If ADHD is suspected, the individual should be evaluated by a health care professional. There is no test that can make or exclude a diagnosis of ADHD. The diagnosis is based on a pattern of the symptoms listed above. When the person with suspected ADHD is a child, parents and teachers are usually involved during the evaluation process.

Most children with ADHD have at least one other developmental or mental health problem, such as a mood, anxiety or substance use disorder; a learning disability; or a tic disorder. A doctor can help determine whether these other conditions are present.

Treatment

Treating ADHD is a partnership between the health care provider and the patient. If the patient is a child, parents and often teachers are involved. For treatment to work, it is important to:

• Set specific, appropriate goals.

- Start medicine and/or talk therapy.
- Follow-up regularly with the doctor to check on goals, results, and any side effects of medicines. During these visits, information should be gathered from the patient and if relevant, parents and teachers.

If treatment does not seem to work, the health care provider will likely:

- Confirm the person has ADHD
- Check for medical conditions that can cause similar symptoms
- Make sure the treatment plan is being followed

Medicines

Medicine combined with behavioral treatment often works best. There are several different ADHD medicines that may be used alone or in combination. The health care provider will decide which medicine is right based on the person's symptoms and needs.

Psychostimulants (also known as stimulants) are the most commonly used ADHD medicines. Although these drugs are called stimulants, they actually have a calming effect in people with ADHD.

Follow the health care provider's instructions on how to take ADHD medicine.

Some ADHD medicines have side effects. If the person has side effects, contact the health care provider right away. The dosage or medicine itself may need to be changed.

Therapy

Therapy for both the patient and if relevant, the family, can help everyone understand and gain control of the stressful feelings related to ADHD.

A common type of ADHD therapy is called behavioral therapy. It teaches children and parents healthy behaviors and how to manage disruptive behaviors. For mild cases of ADHD, behavioral therapy alone (without medicine) can sometimes be effective.

Support groups can help the patient and family connect with others who have similar problems.

Other tips to help a child with ADHD include:

- Talk regularly with the child's teacher.
- Keep a consistent daily schedule, including regular times for homework, meals, and outdoor activities. Make changes to the schedule in advance and not at the last moment.
- Limit distractions in the child's environment.
- Make sure the child gets a healthy, varied diet, with plenty of fiber and basic nutrients.
- Make sure the child gets enough sleep.
- Praise and reward good behavior.
- Provide clear and consistent rules for the child.

There is little proof that alternative treatments for ADHD such as herbs, supplements, and chiropractic are helpful.

Expectations (prognosis)

ADHD is a long-term, chronic condition. If it is not treated correctly, ADHD may lead to:

- Drug and alcohol abuse
- Not doing well in school
- Problems keeping a job
- Trouble with the law

One third to one half of children with ADHD continue to have symptoms of inattention or hyperactivity-impulsivity as adults. Adults with ADHD are often able to control behavior and mask difficulties.

Calling your health care provider

Call the doctor if you or your child's school staff suspect ADHD. You should also tell the doctor about:

- Problems at home, school, and with peer relationships
- Side effects of ADHD medicine
- Signs of depression

References

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