

Autism

TCM Anti-Cancer Centre
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Alternative names

Autistic disorder/autism spectrum; Infantile autism; Autistic-like/autistic tendencies; High-functioning autism; Low-functioning autism; Pervasive developmental delay

Definition

Autism is a complex developmental disorder that appears in the first 3 years of life, though it is some times diagnosed much later. It affects the brain's normal development of social and communication skills.

Autism is a spectrum that encompasses a wide continuum of behavior. Core features include impaired social interactions, impaired verbal and nonverbal communication and restricted and repetitive patterns of behavior.

Symptoms may vary from quite mild to quite severe. Mild autism is known as Asberger's syndrome.

Causes, incidence, and risk factors

Autism is a physical condition linked to abnormal biology and neurochemistry in the brain. The exact causes of these abnormalities remain unknown, but this is a very active area of research.

In the past, autism was thought to be a mental illness caused by bad parenting. No scientific evidence supports this idea, which has since been rejected.

Genetic factors seem to be important. Language and cognitive abnormalities are more common in relatives of autistic children. Chromosomal abnormalities and other neurological problems are also more common in families with autism.

In the general population, autism affects up to 0.2% of children, but the risk of a couple having a second autistic child increases more than 50 times -- to 10-20%. An identical twin is far more likely to also have autism than a fraternal twin or another sibling would be -- all of these facts suggest a strong genetic influence on the condition.

Autism affects boys 3 to 4 times more often than girls. Family income, education, and lifestyle do not seem to affect the risk of autism.

Some parents be concerned that the MMR vaccine that children receive at 1 year of age may cause autism. This theory was based on the fact that the incidence of autism has increased steadily since around the same time MMR vaccination began and on the fact that children with the regressive form of autism tend to regress at around the time the MMR vaccine is given.

Several major studies have found no connection between the vaccine and autism, however, and the American Academy of Pediatrics has officially stated there does not appear to be a causal link.

Some doctors attribute the increased incidence in autism to our newer definitions of autism. The term "autism" now includes a wider spectrum of children. For example a child who is

diagnosed with high-functioning autism today may have been thought to simply be odd or strange 30 years ago.

Symptoms

Most parents of autistic children suspect that something is wrong by the time the child is 18 months old and seek help by the time the child is 2 (though the diagnosis is usually not made until long after that). Children with autism typically have difficulties in verbal and nonverbal communication, social interactions, and pretend play. In some, aggression -- toward others or self -- may be present.

Some children with autism appear normal before age 1 or 2 and then suddenly "regress" and lose language or social skills they had previously gained. This is called the regressive type of autism.

People with autism may perform repeated body movements, show unusual attachments to objects or have unusual distress when routines are changed. Individuals may also experience sensitivities in the senses of sight, hearing, touch, smell, or taste. Such children, for example, will refuse to wear "itchy" clothes and become unduly distressed if forced because of the sensitivity of their skin. Some combination of the following areas may be affected in varying degrees:

- Communication
 - Is unable to start or sustain a conversation
 - Develops language slowly or not at all
 - Repeats words
 - Reverses pronouns
 - Uses nonsense rhyming
 - Communicates with gestures instead of words
 - Has a short attention span
- Social interaction
 - Shows a lack of empathy (can't understand that other people feel differently or know different things)
 - Has difficulty making friends
 - Is withdrawn
 - Prefers to spend time alone rather than with others
 - Is less responsive to social cues such as eye contact or smiles
- Sensory impairment
 - Has heightened or decreased senses of sight, hearing, touch, smell, or taste
 - Mouths objects
 - Rubs surfaces
 - Has diminished response to pain
 - Does not startle at loud noises
 - May withdraw from physical contact because it is overstimulating or overwhelming
- Play
 - Shows a decreased level of pretend or imaginative play
 - Shows a decreased level of imitation of the actions of others
 - Prefers solitary or ritualistic play
- Behaviors
 - Uses repetitive body movements
 - Shows a strong need for sameness
 - "Acts out" with intense tantrums
 - Has very narrow interests
 - Demonstrates perseveration (an obsessive interest in a single item, idea, activity, or person)
 - Displays an apparent lack of common sense

- Shows aggression to others or self
- Is overactive or is very passive

Signs and tests

Routine developmental screening should be performed for all children at all well-child visits to their pediatrician. Further evaluation is warranted if there is concern on the part of the clinician or the parents. This is particularly true whenever a child fails to meet any of the following language milestones:

- Babbling by 12 months
- Gesturing (pointing, waving bye-bye) by 12 months
- Single words by 16 months
- Two-word spontaneous phrases by 24 months (not just echoing)
- Loss of any language or social skills at any age.

These children might receive an audiologic evaluation, a blood lead test, and a screening test for autism such as the Checklist for Autism in Toddlers (CHAT) or the Autism Screening Questionnaire.

A clinician experienced in the diagnosis and treatment of autism is usually necessary for the actual diagnosis. Because there is no biological test for autism, the diagnosis will often be based on specific criteria laid out as A, B, and C in the *Diagnostic and Statistical Manual IV* as follows:

Diagnostic Criteria for Autistic Disorder

A. A total of six or more items from (1), (2), and (3), with at least two from (1) and one each from (2) and (3): :

1. Qualitative impairment in social interaction, manifest by at least two of the following:
 - Marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures and gestures, to regulate social interaction
 - Failure to develop peer relationships appropriate to developmental level
 - Lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by lack of showing, bringing, or pointing out objects of interest)
 - Lack of social or emotional reciprocity
2. Qualitative impairment in communication, as manifest by at least one of the following:
 - Delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
 - In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
 - Stereotyped and repetitive use of language, or idiosyncratic language
 - Lack of varied, spontaneous make-believe, or social imitative play appropriate to developmental level
3. Restrictive repetitive and stereotypic patterns of behavior, interests, and activities, as manifested by at least one of the following:
 - Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
 - Apparently inflexible adherence to specific nonfunctional routines or rituals
 - Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
 - Persistent preoccupation with parts of objects.

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

1. Social interaction
2. Language as used in social communication
3. Symbolic or imaginative play

C. The disturbance is not better accounted for by Rett's disorder or childhood disintegrative disorder.

The other pervasive developmental disorders include Asperger's syndrome, Rett syndrome, childhood disintegrative disorder, pervasive developmental disorder - not otherwise specified (PDD-NOS), or atypical autism.

Expectations (prognosis)

Autism remains a challenging condition for individuals and their families, but the prognosis today is much better than it was a generation ago. At that time, most people with autism were placed in institutions. Today, with appropriate therapy, many of the symptoms of autism can be improved, though most people will have some symptoms throughout their lives. Most people with autism are able to live with their families or in the community.

Acupuncture treatment:

Scalp Acupuncture and Back Meridian Massage.