



Auditory Processing Disorder

What is an auditory processing disorder?

An auditory processing disorder (APD) is the inability to attend to discriminate, recognize or comprehend what is heard, despite normal hearing and intelligence.

APD is a complex problem. Humans hear when energy we recognize as sound travels through the ear and is changed into electrical information that is interpreted by the brain. “Disorder” means something is adversely affecting the processing or interpretation.

APD is also known as:

- central auditory processing disorder (CAPD)
- auditory perception problem
- listening comprehension deficit
- central auditory dysfunction
- central deafness or word deafness

What causes APD?

The cause is uncertain. Human communication relies on taking in complicated perceptual information from the outside world through the senses, and interpreting that information in a meaningful way. Human communication also requires certain mental abilities such as attention and memory. Researchers still do not understand exactly how all of these processes work.

Although your child may hear normally, they may have difficulty interpreting what they do hear. APD may be associated with conditions such as dyslexia, attention deficit disorder, autism, autism spectrum disorder, specific language impairment, pervasive developmental disorder or developmental delay.

How do I know if my child has APD?

Children with APD typically have normal hearing and intelligence. However, they may have:

- trouble paying attention to and remembering information presented orally
- difficulty in carrying out multi-step directions
- poor listening skills, particularly in noisy environments
- trouble processing information in a timely manner
- central deafness or word deafness.
- problems understanding language
- difficulty with reading, comprehension, spelling and vocabulary

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What do I do if my child has APD?

If you suspect your child may have APD, contact your pediatrician and share your concerns with him or her. The pediatrician may refer you to a specialist to further evaluate your child.

It is important to rule out the ability to hear as the problem. An audiologist is the specialist who will rule out hearing concerns, then conduct a series of tests to determine if an auditory processing problem exists.

If your child receives a diagnosis of APD from the audiologist, he/she will be referred to a speech therapist (speech-language pathologist).

The speech therapist determines the language areas affected by the auditory processing disorder. The information provided by the audiologist is crucial to the speech therapist's assessment of your child and the recommendation of an appropriate treatment plan.

How much will my child improve with treatment?

The outlook for every child is different depending on a variety of factors. The severity of the disorder, the cause of the disorder, the child's age when treatment begins, individual response to treatment, and the support of parents and teachers all make a difference.

Will APD affect my child in school?

Children with APD typically can hear information, but have difficulty attending to, storing, locating, retrieving or clarifying information to make it useful for learning and social purposes. This can have a negative impact on language acquisition and academic performance.

What can Courage Kenny Kids therapists do to help children with Auditory Processing Disorders?

Once referred by the physician, the speech therapist evaluates and works with your child on classic language therapy, targeting the language areas affected by auditory processing.

For example, therapy begins in a one-to-one, sound-controlled environment and progresses to a more natural sound environment.

Therapy includes having your child listen and respond to conversation with noise present. Once this skill is mastered, the therapist has your child listen and respond to conversation with common background chatter present.

Again, after referred by the physician, an occupational therapist evaluates and works with your child on a program called "Therapeutic Listening." This is an auditory intervention that uses organized sound patterns in specialized music to impact all levels of the nervous system. Your child will listen to music through specialized headphones in the clinic and at home under the direction of the therapist.

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A program called “Interactive Metronome (IM)” also may be used in your child’s treatment. This brain-based rehabilitation program improves the processing abilities that affect attention, motor planning and sequencing. Improvements in those areas result in improved attention, concentration and language processing.

Therapists will help modify your child’s listening environment at home, in the community and in the classroom. They will teach compensatory strategies to your child and provide treatment that will directly remediate the disorder.

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