Auditory Processing Disorder in Children—Symptoms and Treatments

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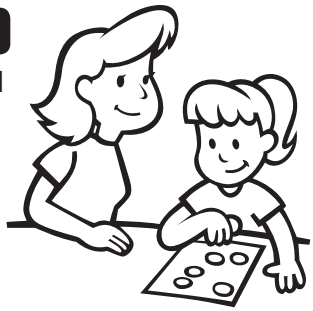
What Is Auditory Processing Disorder?



We hear when sound travels through the ear and changes into electrical information interpreted by the brain. *Auditory processing* describes the process of our brains recognizing and interpreting sound. *Auditory processing disorder (APD)* refers to a breakdown of auditory information beyond the physical ability to hear, at the level of the central nervous system. Therefore, *central auditory processing disorder (CAPD)* is another widely-used term for APD (National Institute on Deafness and Other Communication Disorders, 2004, ¶ 3).

Children with APD may have difficulty recognizing subtle differences between sounds in words or may have difficulty with interpretation of longer strands of auditory information, such as verbal directions. Regardless, children with APD often have significantly increased difficulty in the presence of background noise.

Although children with attention deficit disorder, autism, pervasive development disorder, and other such global deficits may demonstrate poor listening skills, they do not necessarily have APD. Other disorders such as these often affect a child's ability to attend to and interpret auditory information because they usually affect the same areas of the central nervous system—which can make differential diagnosis quite challenging. However, APD is not a symptom, nor a result of such high-order, global deficits (Bellis, n.d., ¶ 2).

Diagnosing Auditory Processing Disorder

The cause of APD is still unknown. Because other disorders may demonstrate similar symptoms, it is necessary for an audiologist to use several tests to determine an actual diagnosis of APD (Bellis, n.d., ¶ 6). However, all children with APD do not have the same strengths and weaknesses. A child with APD may vary drastically from another child with APD in terms of specific abilities. Therefore, it is imperative that a multi-disciplinary team use a battery of assessment procedures to determine specific strengths, weaknesses, and treatment procedures for a child with APD. This team may include an audiologist, speech-language pathologist, psychologist, educator, pediatrician, or other related professionals.

Common Symptoms of Auditory Processing Disorder

You may notice that children with APD have trouble paying attention to material presented orally; have problems performing multi-step directions; have poor listening skills; need extended time to process information; have low academic performance; have behavior problems; have some form of language difficulty; and have difficulty with reading, comprehension, spelling, and vocabulary (NIDCD, 2004, ¶ 6).

Treatment of Auditory Processing Disorder

Remember that all children with APD are not the same. Below are some common strategies and techniques to help children with APD, but keep in mind that successful strategies and tools may vary significantly for each child. Several strategies you may hear about include:

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- **Auditory trainers**—The teacher wears a microphone to transmit sound, and the student wears a headset to receive the sound. This strategy cuts out any extraneous noise and lets the child focus solely on what the teacher says.
- **Environmental modifications**—A change in seating placement and classroom acoustics may improve the listening environment.
- **Exercises to improve language-building skills**—These activities increase the ability to learn new words and broaden a child's language base.
- **Auditory memory enhancement**—This method reduces the number of details presented in information to a few at a time.

You can find more information about APD from the organizations in the list below.

National Institute on Deafness and Other Communication Disorders—http://www.nidcd.nih.gov/health/voice/auditory.asp

American Speech-Language-Hearing Association—http://www.asha.org/default.htm

American Academy of Audiology—www.audiology.org

Resources

Bellis, T. J. (n.d.). *Understanding auditory processing disorders in children*. Retrieved December 2, 2009, from http://www.asha.org/public/hearing/disorders/understand-apd-child.htm

National Institute on Deafness and Other Communication Disorders. (Updated 2004). *Auditory processing disorder in children*. Retrieved December 3, 2009, from http://www.nidcd.nih.gov/health/voice/auditory.asp

Helpful Products

The list of Super Duper® products below may be helpful when working with children who have special needs. Visit www.superduperinc.com and type in the item name or number in our search engine. Click the links below to see the product description.

HearBuilder™ Following Directions – Professional Edition
Item #HBPE-133

HearBuilder™ Following Directions – Home Edition
Item #HBHE-122

HearBuilder™ Phonological Awareness – Professional Edition
Item #HBPE-255

HearBuilder™ Phonological Awareness – Home Edition
Item #HBHE-244

Auditory Memory for Quick Stories
Item #AMLQ-110

Auditory Memory High-Interest Quick Stories™
Item #AMLQ-220

Auditory Memory for Short Stories Fun Deck®
Item #FD-53

Look Who's Listening!® Board Game
Item #GB-512

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