Understanding Auditory Processing Disorders in Children

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“Okay class, before you open your science book to page 95 for the next lesson, get out your homework from yesterday, and place it in the right hand corner of your desk for me to review, then we’ll be ready to start.”

While other students go about the task the teacher has given, one child takes out his social studies book and stares into space.

Does this sound familiar? Is this possibly your child? Maybe he has a hearing loss? But, wait a minute ... he passed a hearing test at your pediatrician’s office. Nevertheless, your son doesn’t seem to be able to keep up in class, misunderstands instructions at home and constantly says “huh?” or “what?”

Why didn’t he follow the teacher’s directions? Not listening? Distracted? Not paying attention? Any of these explanations is possible. Or maybe your son hears the sound, but has a problem processing or understanding what is being said to him – particularly when speech is complex, the words are spoken rapidly or there is lots of noise around him.

To learn more about whether your child may have an auditory processing problem and how the Doctors of Audiology at Advanced Hearing Care can help, please continue reading this special report.

What is an Auditory Processing Deficit?

The inability to understand spoken language in a meaningful way in the absence of what is commonly considered a hearing loss is called an auditory processing deficit (APD). It is a complex problem that affects about 5% of school-aged children. A child with an auditory processing problem may have difficulty understanding speech in the presence of background noise, such as a noisy classroom or difficulty understanding a speaker with a faster rate of speech or foreign accent. The child may be unable to comprehend spoken directions. There may also be difficulty discriminating and identifying individual speech sounds.

What are the behaviors of children suspected of having APD?

Symptoms of APD can range from mild to severe and come in many different forms. If you think your child may have a pro-
cessing issue, you should consider the following questions:

- Does your child constantly say “huh?” or “what?” despite having known hearing sensitivity that is normal?
- Does your child confuse words such as “math” for “bath”?
- Does your child have difficulty following directions that are given verbally?
- Does your child have difficulty listening or paying attention in noisy situations?
- Is your child easily distracted or unusually bothered by loud or sudden noises?
- Are noisy environments challenging to your child?
- Does performance improve when your child is in a quiet setting?
- Is abstract information difficult for your child to understand?
- Is your child forgetful and disorganized?
- Does your child have a history of middle ear problems?

Children may also present with a variety of academic characteristics that will lead teachers and parents to suspect APD. Does your child exhibit:

- Poor expressive and receptive language abilities
- Poor reading, writing and spelling skills
- Poor phonics and speech sound discrimination
- Difficulty taking class notes
- Difficulty learning a foreign language
- Behavioral, psychological or social problems resulting from poor language and academic skills

An auditory processing deficit is very complex and often misunderstood because many of the behaviors and academic characteristics can also appear in other conditions like learning disabilities, attention deficit disorders and even depression. Although APD is often confused with ADD/ADHD, it is possible to have both. APD can also be present along with a speech or language impairment and a specific learning disability.

How is APD diagnosed?

Audiologists are the healthcare professional that will diagnose whether your child has an actual auditory processing deficit. This is done by utilizing specialized equipment to evaluate the central auditory processing system under different conditions of auditory signal distortion and competition. The Doctors of Audiology at Advanced Hearing Care have over twenty years of experience in this area and can easily assess the peripheral and central auditory system of your child using a battery of tests. The tests assess how effectively the auditory nervous system handles complex auditory information. It goes well beyond the simple pure tone hearing screening test that is performed in school or your pediatrician’s office. The test results are then used to develop educational, remedial intervention and compensatory strategies for your child.
It must be noted that it is important to involve a multi-disciplinary team when dealing with the complexity of auditory processing disorders. Your team should consist of a psychologist, physician, teacher, parents, audiologist, speech-language pathologist and if needed, an occupational therapist, vision therapist and reading specialist. All of these professionals will work together to provide the best outcome for your child.

**What are the treatments for APD?**

It is important to understand that there is not one “cure all” method for treating APD. Treatment for auditory processing disorders must be highly individualized and be based off the diagnosis made by your Audiologist.

Management and treatment for APD will generally focus on three primary areas. Environmental modifications and teacher/parent suggestions can improve your child’s access to auditory information. Remediation techniques usually designed by a Speech Language Pathologist will enhance auditory weaknesses. Provision of compensatory strategies can be designed to teach your child how to maximize the use of auditory information.

Treatment may also include working with an Occupational Therapist, a Vision Therapist and/or a Reading Specialist to help your child overcome auditory processing difficulties.

The degree to which your child’s auditory processing deficits will improve with treatment and therapy cannot be determined in advance. In some cases, children with APD developmentally mature and seem to “outgrow” their disorder over time, while others may exhibit auditory processing issues for the rest of their lives. It must be noted that with appropriate intervention, all children with APD can become more active listeners and be more confident in listening and learning situations.
When should my child be tested for APD?

There are some requirements that must take place before a child can be tested for an Auditory Processing Deficit. First, the child must have normal peripheral hearing sensitivity, adequate receptive and expressive speech and language skills and normal to near normal intellectual function (I.Q. of at least 85). Testing can be performed as young as the age of six but interpretation of test results will be made with caution. Comprehensive diagnostic testing occurs at the age of eight when your child’s auditory processing system is more developed.

APD Testing at Advanced Hearing Care is divided into