Dear Elizabeth,
Doctors say my three-year-old grandson is exhibiting early signs of Auditory Processing Disorder. What exactly is this? And what are the treatments?
– Dalila Acosta

Elizabeth's Tips

- APD affects how children recognize & interpret what they hear
- Contact your pediatrician or local school district to request an evaluation
- If health care professionals suspect early symptoms of APD, seek treatment

Expert Advice

An auditory processing disorder (APD or CAPD) is a disorder in “how” auditory information is processed in the brain. It can be thought of as a “listening disorder” not a hearing disorder. The problem is in the brain – not in the ear.

Symptoms

The symptoms of APD are extremely varied, however, some of the most common are:

- Children who say “huh” or “what” frequently
- Children who don’t look or respond when their name is called
- Children who give slow or delayed responses to people talking to them
- Children who mispronounce typical word sounds
- Children who have difficulty following oral directions
- Children who misunderstand what is asked or said to them ...these children usually answer off topic or don’t answer at all.
- Children who are easily distracted or become confused especially when there is background noise
- Children who avoid loud noises (cover their ears) even around common household noises
- Children who show delays in acquiring language
- Children who evidence difficulty learning phonics, reading and spelling

Symptoms of APD can actually be seen in infancy, however, they usually become noticed at about age 18-24 months.
APD can not be formally diagnosed by an audiologist until age 7 years, when the auditory system has maturated (fully developed). However, by age 5 speech-language pathologists, audiologists and/or psychologists can administer a sound based screening test along with auditory based language tests and determine if the child is “at risk” or “showing signs of APD.”

**Misdiagnosis**
Most often auditory processing disorder is misdiagnosed as attention deficit. The is because most APD children have a difficulty time staying focused because they can’t understand what is being said around them or they are bothered by sounds in the environment that most individuals can block out. APD can also be misdiagnosed as simply a language delay/ disorder or a reading-spelling delay or disorder. Unfortunately, APD can also be diagnosed as the "child is lazy”, or "non-compliant”, “rude” etc.

The extreme forms of APD (hyperacoustics and hypoacoustics) are obvious early, but from my experience, the milder deficits are overlooked. Children who have had significant educational difficulties often have a more general diagnosis of a "learning disorder” or “attention deficit” and APD was not even considered. Currently, it is suspected that APD affects about 10% of children, which is quite significant. Boys are twice as likely to have APD as girls.

**Evaluation**
Auditory Processing is best diagnosed by a team of professionals: the audiologist will test to make sure hearing is normal and will administer sound tests to determine the type and degree of severity of APD. The speech-language pathologist will administer language based tests to determine the child’s strengths and weaknesses in receptive/expressive language and will often test phonics, reading and spelling. The educational psychologist may also test phonics, reading and spelling and will also look at auditory versus visual memory along with the child’s learning strengths and weaknesses. In some cases an occupational therapist will test how the APD affects the child’s sensory processing system.

**Therapy**
There are sound-based intervention programs now available that provide the largest boost to actually changing “how” the brain processes sounds; these are programs using filtered music; computer sound based programs that exercise processing skills through intensive, adaptive games; and traditional auditory based therapy provided by a speech-language pathologist.

**Helping a Child with APD**
If a parent or caregiver is at all concerned that their child might have APD, they should seek professional advice. If the child is over the age of three, they can contact the speech-language pathologist in their local public school or contact a speech-language pathologist or audiologist who specializes in APD in private practice. Parents or caregivers should also provide an auditory enriched environment for the child.

**Child Care Provider Comments**
My son, Julian, does not always respond to his name. That is how I started to suspect something was wrong. I never heard of ADP. He got tested for hearing and he tested fine. But if it got too loud, he would just go in the other room. That’s when I knew something was wrong, the tuning in and out. We started with one hour of speech therapy a week, and one hour of occupational therapy a week. Now we do 16 hours a week of therapy. He started social skills group therapy where he plays with other kids who have special needs. He has another thing called ABA which is a behavior-based therapy. The frustrating part is that he doesn’t get to be a kid, he is always in therapy. That is punishing to my other kids, because I can’t take them to the mall or to the park. They don’t have APD. I used to go on play dates and go the gym, but now it’s like therapy from the moment he wakes up.

Most of the children I teach have Audio Processing Disorder. I watch for how they react when I’m doing instruction. If they are missing information or not retaining the information that is a clue and I will watch it further. It also takes a lot more repetition for them. The instruction needs to be at a slower pace. The room needs to be quieter, and more organization is required in order for them to focus. Periphery noise needs to be kept at a minimum. A lot of noise and certain pitches tend to agitate them. It could be different from day to day as well. One day it may not bother them but another day it does. It just depends on what other issues the child is dealing with; it could be as simple as not enough sleep or food. Their sensory input can get overloaded.

My nephew, Jeremy is five years old. A couple years ago before he was diagnosed, I just thought he was a difficult child. He didn’t like to come to our house. Over time I realized that it was best for him to spend time with me alone. When he’s out of his own environment, it’s better for him to be alone with someone. He can’t handle too much external stimulation. He had a lot of temper tantrums. If you would ask him to do something, he just wouldn’t do it. His mood would escalate and he would run in the house. I would ask him not to run and tell him he was going to hurt himself. He would respond saying, “What are you talking about, I’m not going to hurt myself?” It would always end in a big tantrum. A lot of the time he would ask, “What do you mean?” I then started to think he might be brilliant because he would inquire about everything. What we finally realized is that he doesn’t hear things the way most other children do.