Central Auditory Processing Disorder (CAPD) in Children

Auditory Processing can be understood as the link between the ears and the brain. Both children and adults can be affected by difficulties understanding what is heard, despite normal hearing and normal intelligence. This difficulty impacts the ability of the child or adult to function in everyday life. (OSLA, 2017)

In its very broadest sense, APD (or CAPD) refers to how the central nervous system (CNS) uses auditory information. (Teri James Bellis, 2017).

An auditory processing disorder (APD) is a disruption of sound along the pathway from the ear to the brain, which interferes with understanding. The ears do not work alone to decipher incoming information- the brain has its own part to play. For example, the ability of the child or adult to understand the language, the information (cognitive ability), to pay attention, and to remember what was said are all aspects of the brain's ability, and are very important when considering auditory processing deficits. (OSLA, 2017)

Signs of an Auditory Processing Disorder

- Appears to have hearing loss despite normal hearing
- Difficulty hearing in noise
- Difficulty following oral instructions
- School performance poorer than expected
- Easily distracted by noise
- Mishearing or misunderstanding
- Frequent requests for repetition
- Short attention span for listening
- Poor reading or spelling abilities
- Poor musical ability
- Disruptive behaviours
- History of multiple ear infections (OSLA, 2017)

In order to diagnose CAPD a series of tests are administered in a sound-treated room. These tests require listeners to attend to a variety of signals and to respond to them via repetition, pushing a button, or in some other way. Other tests that measure the auditory system's physiologic responses to sound may also be administered. Most of the tests of APD require that a child be at least 7 or 8 years of age because the variability in brain function is so marked in younger children that test interpretation may not be possible. (Teri James Bellis, 2017)

Treatment of APD generally focuses on three primary areas: changing the learning or communication environment, recruiting higher-order skills to help compensate for the disorder, and remediation of the auditory deficit itself. (Teri James Bellis, 2017)

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