

Auditory Processing Disorders: Problems in Processing Sounds to the Brain

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DESCRIPTION

Hearing impairment known as Auditory Processing Disorder (APD) occurs when the brain has trouble processing sounds. This may have an impact on how well a person understands speech and other environmental sounds. For eg: what colour is the cow, for instance, can be heard as what colour is the couch? APD symptoms typically manifest in youth, despite the fact that it can affect anyone at any age [1]. A youngster may appear to hear "normally" while they are actually having trouble accurately processing and utilizing sounds. Hearing subtle sound variations in words might be difficult for those with auditory processing disorders. Central auditory processing disorder, or APD, is not hearing loss or a learning disability. It implies that the brain doesn't hear sounds in the typical sense. There is no difficulty comprehending the meaning [2].

Symptoms

While APD frequently begins in childhood, some people experience it as adults. APD symptoms include:

- Difficulty understanding speech, especially in noisy environments or when more than one person is speaking.
- Repetitive demands for people to speak again.
- Misunderstanding what's been said.
- Difficulty determining the source of sounds.
- Difficulty differentiating between similar sounds.
- Difficulty focusing or paying attention.
- Difficulty understanding or following complex instructions or quick speaking.
- Trouble with learning or listening music.

Those who have APD may appear to have hearing issues as a result of these symptoms. Testing frequently reveals that their hearing is okay, despite the fact that the issue is with how sounds are processed. People with APD frequently struggle with learning tasks, particularly ones that are verbally given, because they have issues processing and interpreting sounds [3].

Causes

The reasons of APD are unknown, although one of the following is thought to be the case.

Developmental: Delays in the maturation of the central auditory pathway's growth.

Acquired: Through brain injury, risk factors for symptoms that manifest as APD include low birth weight, maternal diabetes, exposure to heavy metals, and ear infections [4].

Tests

A doctor can do a hearing test to see whether child's issues are brought on by hearing loss, but only an audiologist, a hearing specialist, can make the diagnosis of APD. The audiologist will conduct a number of complex hearing tests during which child will listen to various sounds and answer. They could, for instance, press a button or repeat them. In order to assess how child's brain responds to sound, the doctor may also affix painless electrodes to child's ears and head [5]. APD is typically not diagnosed in children until age 7, as younger children's reactions to listening tests may not be reliable.

Treatment

The abnormality in auditory processing is regarded as a permanent ailment. Treatment for APD includes treatments and modifications in the job, at home, and in the education in order to rearrange and enhance how the brain interprets sound. Activities to enhance listening and concentration are frequently part of treatment. We refer to this as auditory training [6]. Schoolchildren with APD may be encouraged to wear a wireless earpiece that connects to a small microphone worn by their teacher in order to eliminate background noise.

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