

# WEBWORDS 16

## Auditory processing disorders in children

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The mushrooming scientific knowledge base that now underpins the identification and management of auditory processing disorders (APD) in children has brought with it a flurry of web activity. In a climate of increasing certainty among speech and hearing professionals that APD<sup>1</sup> is a valid diagnostic entity<sup>2</sup> (Jerger & Musiek, 2000), extensive information for consumers<sup>3</sup> has been developed, and chat<sup>4</sup> and listservs for professional<sup>5</sup> and general<sup>6</sup> discussion have blossomed. As well, several comprehensive overviews<sup>7</sup> are available, explaining why definitions have been refined in recent years, and why the “c” for “central” in the older, more familiar term, CAPD, is gradually disappearing.

### Complex disorders

Contemporary research reveals the complexity of auditory processing disorders in children (Ferre, 2001). Affected children may have problems in understanding the speech signal when background noise is present, in understanding degraded speech, in comprehending verbal instructions, or in identifying and discriminating between speech sounds.

### Differential diagnosis

An APD diagnosis may reflect “central” issues where cortical functioning of the brainstem, hemispheres or corpus callosum is compromised. Alternatively, difficulties may be occurring at the level of more peripheral structures such as the cochlea mechanism and the auditory nerve. Or there may be a mix of the two, possibly complicated by specific language impairment<sup>8</sup>, language processing difficulties, pragmatic issues, attention difficulties<sup>9</sup>, ADHD<sup>10</sup> and problems with auditory memory. The role of the audiologist is to rule out auditory neuropathy<sup>11</sup> and to accurately identify the nature of the auditory processing breakdown and the level at which it is taking place.

### Cross-disciplinary collaboration

Many audiologists<sup>12</sup> will say that the results of in-depth language assessments by speech-language pathologists<sup>13</sup> provide vital clues in pinpointing why these individuals with normal hearing sensitivity find it so difficult to make sense of auditory information. Fifty or more APD articles and documents available on the ASHA website<sup>14</sup>, enter the search criterion CAPD in the search box, and click “go”) attest to the extensive collaborative research that is occurring between audiologists, speech-language pathologists and educators.

### APD and school

The functional implications of APD in the classroom<sup>15</sup> and other school<sup>16</sup> situations, and for language learning and literacy are far-reaching (Pulaski & Moskow, 1996), and Webwords 15 highlights some of these literacy links<sup>17</sup>.

### References

- Ferre, J. M. (2001). Complex, not complicated: Understanding children’s auditory processing disorders. *IDA Northern California Branch*, (pp. 4–6).
- Jerger, J., & Musiek, F. (2000). Report of the Consensus Conference on the Diagnosis of Auditory Processing Disorders in School-Aged Children. *Journal of the American Academy of Audiology*, 11, 467–474.
- Pulaski, M. & Moskow, S. (1996). *Central auditory processing difficulties (CAPD): The effects on reading, writing, listening and speaking with elementary and middle school children*. Paper presented at the 43rd Annual Conference of the Southeastern Regional Association of Teacher Educators. Charleston, SC.

### Links

- 1 <http://www.acenta.com/audiology.auditoryprocessing.asp>
- 2 <http://www.audiology.org/professional/jaaa/11-9a.php>
- 3 <http://www.nidcd.nih.gov/health/voice/auditory.asp>
- 4 <http://slpchatarchives.homestead.com/May12002.html>
- 5 <http://maelstrom.stjohns.edu/archives/capd.html>
- 6 <http://groups.yahoo.com/group/AuditoryProcessing/>
- 7 <http://schwablearning.org/articles.asp?r=373&g=1>
- 8 <http://merrill.ku.edu/IntheKnow/sciencearticles/SLIfacts.html>
- 9 <http://www.cliftonhearing.com/capd/evaluation/article/001.htm>
- 10 <http://www.addiss.co.uk/language disorders.htm>
- 11 <http://www.medschool.lsumc.edu/otor/audn-qa.html>
- 12 <http://professional.asha.org/careers/audiology.cfm>
- 13 <http://professional.asha.org/careers/slp.cfm>
- 14 <http://professional.asha.org/>
- 15 <http://ericec.org/digests/e634.html>
- 16 [http://professional.asha.org/continuing\\_ed/profdev/APDinfo.cfm](http://professional.asha.org/continuing_ed/profdev/APDinfo.cfm)
- 17 [http://members.tripod.com/Caroline\\_Bowen/webwords15.htm](http://members.tripod.com/Caroline_Bowen/webwords15.htm)

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