



# COMMUNICATION CONSIDERATIONS A-Z™

## ***Auditory Neuropathy***

### **What is auditory neuropathy?**

Auditory neuropathy (also called auditory dys-synchrony) is a relatively “new” hearing processing disorder. Essentially, auditory neuropathy is the name of a condition where the individual seems to have sporadic bouts of hearing and not hearing. In general terms, the understanding of speech is often worse than the pure tone audiogram (i.e., hearing loss) would suggest. These patients may have significant difficulty hearing in noisy background situations. Tremendous variability in the affects of the disorder may be seen among patients. The course and the prognosis of the condition are unpredictable. Although there are specific well-defined tests to identify those children with this disorder, the diagnosis and treatment is still open to question.

### **What issues are at the forefront of auditory neuropathy?**

Auditory neuropathy is a relatively rare disorder at this time, but it may turn out to be more prevalent as we evaluate more children. There is no known organic site of lesion in the auditory system and it has been suggested that there may be more than one cause. The disorder may be found in children with normal hearing who have difficulties with auditory processing and in children with all degrees and types of hearing losses. There is limited research available, although there has been reported success in some patients using hearing aids and cochlear implants.

### **What should every parent or professional know about auditory neuropathy?**

There is a difficult diagnosis to understand. Debate and controversy exists

among professionals as to the most effective treatment and management of these patients with auditory neuropathy. As a recently discovered auditory disorder, the current lack of scientific research into the causes and treatments for auditory neuropathy makes it difficult to find objective informative or practical information about this disorder. At this time, the team approach utilizing professionals from various disciplines in their specialty therapy roles may be the best approach in terms of treatment.

### **Where else can I find information about auditory neuropathy?**

National Institute on Deafness and other Communication Disorders: “Auditory Neuropathy” at <http://www.nidcd.nih.gov/health/hearing/neuropathy.asp>

Developing a Treatment Program for Children with Auditory Neuropathy by Arlene Stredler-Brown, Colorado Hearing Impaired Program (CHIP):

[http://www.csdb.org/Early%20Education/resources/docs/aud\\_neuropathy.pdf](http://www.csdb.org/Early%20Education/resources/docs/aud_neuropathy.pdf)

### **Author**

Jerry Northern, PhD, is a Professor Emeritus from the University of Colorado School of Medicine where he spent 26 years as a clinical audiologist and Head of the Audiology Department. Dr. Northern holds degrees from Colorado College (B.A.), Gallaudet University (M.S.), the University of Denver (M.A.) and earned his Ph.D. at the University of Colorado. He is a native of Denver, CO where he was raised by his deaf grandparents and grew up using American Sign Language as a second language. He is a Founder and past-president of the American Academy of Audiology and served as editor of “Audiology Today” magazine for more than 15 years. He is the author or editor of 12 textbooks dealing with various aspects of hearing and hearing disorders and management of patients with hearing losses. He currently serves on the Marion Downs Center Foundation Board of Directors.

---

*Communication Considerations A to Z™ is a series from Hands & Voices that's designed to help families and the professionals working with them access information and further resources to assist them in raising and educating children who are deaf or hard of hearing. We've recruited some of the best in the business to share their insights on the many diverse considerations that play into communication modes & methods, and so many other variables that are part of informed decision making. We hope you find the time to read them all!*