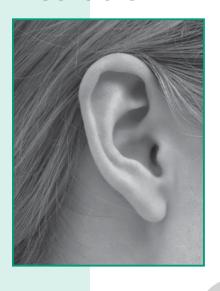
# **Patient Guide Auditory Processing Disorders**





### Introduction to APD

Some children with normal hearing sensitivity, normal speech and language abilities, and normal intellectual abilities have difficulty with the processing of auditory information. Often these children are mistakenly assumed to have hearing problems.

Yes, we hear with our ears. However, if the brain is unable to interpret what the ears hear, the information is lost or misunderstood. This is known as an Auditory Processing Disorder (APD). A formal definition of APD is a malfunction or disruption of the ability to perceive and process auditory signals within the central nervous system.

# What Symptoms are Associated with APD?

The symptoms of APD can sometimes be very subtle. The following are some common symptoms associated with APD:

- Difficulty hearing in noise
- Difficulty following oral instructions
- Poor listening skills
- Problems with short/long-term memory
- Spelling/reading/phonic deficiencies
- Difficulty keeping on task
- Often asks for directions to be repeated
- Difficulty understanding prosody and sarcasm
- Poor social skills
- Poor rhythm and music skills
- Difficulty localizing sounds

## APD vs. Attention Deficit Hyperactivity Disorder (ADHD)

APD and ADHD present with many overlapping symptoms. ADHD has been viewed as an attention disorder, and it has been characterized as a deficit in behavior regulation. APD is a processing disorder characterized by auditory performance deficits.

# How is it Determined if a Child has APD?

APD can be detected in children of at least 8 years of age using a battery of diagnostic tests. Initially, a hearing test along with the "Screening Test for Auditory Processing Disorders" (SCAN) is completed. If the SCAN is not passed and the hearing is normal, then an advanced APD test battery can be administered. Special tests are needed in order to discover the exact nature of the difficulties a child with APD is having, and to discover strengths and weaknesses in how he/she learns. The advanced test battery stresses the auditory system by requiring more complex responses in the higher auditory centers than are necessary for merely responding to simple tones or for repeating single words. These tests will indicate the presence or absence of APD

# APD vs. Language Processing Disorders

A conference was held in February 2003 for audiologists and speech pathologists to

discuss current techniques being utilized in the diagnosis and management of APD. There is a growing importance in taking a multidisciplinary approach with APD. In addition to the complete auditory processing battery of tests we offer, additional speech and language testing has been added to our APD protocol to more accurately diagnose and manage children with a variety of processing disorders.

In the realm of processing disorders, there can be an auditory processing disorder and/or a language processing disorder. An APD occurs when there is difficulty receiving the acoustic signal. A language processing disorder occurs when there is difficulty processing the incoming signal and attaching meaning to it or integrating/coordinating basic language in higher-level language processing (i.e. reading, comprehension, understanding sarcasm, writing, expressive language skills, etc.). Many children diagnosed with an APD will have difficulties processing language. However, a language processing disorder can exist in children who do not have an APD. The characteristics of both disorders can overlap, therefore our protocol is to test all children exhibiting symptoms of APD for both types of disorders. Looking at all APD and speech/language testing along with Educational and Cognitive Assessments can help decipher where the breakdown in processing may be occurring. In turn, proper intervention can then be implemented to address the specific area of deficit.

The recommended speech and language testing for these children include the following tests: The Language Processing Test, APAT (or the CTOPP), and the OWLS (or the TOLD-I). We offer this testing at the Dupont office location prior to the APD screening.

# What can be Done to Help a Child with APD?

Following the identification of APD in a child, the audiologist will counsel the child's parents and teachers on management techniques to minimize the child's difficulties caused by APD. Referrals are also provided for special education resources and aural rehabilitation (i.e. speech and language pathologist). An individual management or therapy routine can be designed for each child specific to his/her type and degree of APD.

### **Summary**

There are many children who suffer academically and seem to have the characteristics of a hearing-impaired child. Their hearing and intellectual abilities are, however, normal. An Auditory Processing Disorder may be the cause of these symptoms. Are these children "using what they hear?" Through a simple screening and diagnostic test battery, children with APD can be identified and helped.

If you know a child with the symptoms of APD, call to schedule a screening appointment. The sooner APD is diagnosed, the sooner a child can learn and benefit from new listening skills.

## A Team Approach

The APD team includes professionals with skills in audiology and speech pathology. Referrals are made to educational specialists if necessary. Our approach combines diagnostic evaluation and collaboration among various disciplines in order to maximize patient care.

Tina M. Sheehan, M.S., is the director of the APD program. Mrs. Sheehan is a licensed audiologist with clinical experience in both hospital and private-practice settings. Her interest in APD and APD management began during her graduate training at Purdue University. She gained extensive experience with children as an Educational Audiologist in Kalamazoo, Michigan prior to joining Ear, Nose, and Throat's audiology team.

### **Patient Referrals**

The APD Program is an open-referral service. This means that physicians can refer their patients for any combination of diagnostic testing, medical consult, or APD management. To schedule an appointment, or to learn more about the services we offer, please call our office at: (260) 426-8117, ext. 1238#

# **Our Office Locations**

With a variety of office and clinic locations throughout the region, we are here to meet

your needs.

### **Dupont Office**

(CT Scanner location) 10021 Dupont Circle Ct. Fort Wayne, IN 46825

### **Lutheran Medical Park**

7926 W. Jefferson Blvd. Fort Wayne, IN 46804

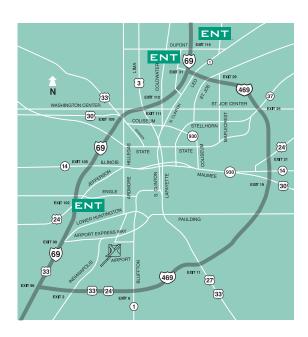
### **Parkview North Campus**

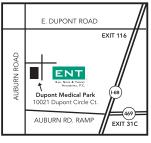
11141 Parkview Plaza Dr. Building 3, Suite 210 Fort Wayne, IN 46845

### **ENT Surgery Center**

7900 W. Jefferson, Bldg. 1, Suite 102 Fort Wayne, IN 46804

www.entfortwayne.com





# Ear Nose & Throat Associates, PC

Ear, Nose and Throat Associates, P.C., is a medical practice of board-certified physicians and surgeons specializing in otolaryngology medical care and surgery. Whether we are treating children or adults, our approach is one of care and concern for the patient. Our staff of licensed clinicians and experienced office professionals are committed to you and your health.

EAR, Nose & Throat Associates, P.C.

### **Board-certified Physicians**

William M. Culp, MD
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Thomas W. Dumas, MD
David W. Stein, MD
John H. Fallon, MD
Mohan K. Rao, MD
Cynthia L. Wellman, MD
Douglas A. Nuckols, MD
Thomas W. Herendeen, MD
Stephen J. Schreck, MD
Deepkaran K. Reddy, MD
Amy L. Lai, MD
Adam R. Kaiser, MD
Brian D. Herr, MD

#### **Clinics**

1-888-881-4368
Angola, Indiana
Auburn, Indiana
Bluffton, Indiana
Columbia City, Indiana
Decatur, Indiana
Huntington, Indiana
Kendallville, Indiana
LaGrange, Indiana
Marion, Indiana
Warsaw, Indiana
Van Wert, Ohio

#### **Nurse Practitioners:**

Valerie Stucky, RN, FNP, MSN Julie Hall, RN, FNP, MSN



Dupont Office

10021 Dupont Circle Court • Fort Wayne, IN 46825

260-426-8117