## WHY DO ANGELS HAVE TROUBLE SPEAKING? by Robin Alvares

Most individuals with AS experience a great deal of difficulty learning to use speech to communicate. This causes a great deal of frustration for our angels and for those who want to communicate with them including families, friends and teachers.

Some researchers and speech-language therapists have described individuals with AS as having apraxia of speech (apraxia). Apraxia occurs when an individual has difficulty coordinating the articulators (tongue, lips, soft palate, vocal folds, jaw, etc) for speech, yet they are able to coordinate the articulators for life-sustaining functions, such as eating, coughing, breathing and drinking. The muscles in the oral area are often intact; however, the signals from the brain that tell the muscles how to move in a coordinating fashion are disrupted.

Apraxia occurs in adults who have had strokes on the left side of the brain when the damage occurs to an area in and around the motor control centers of frontal lobe of the cerebral cortex (gray matter). These individuals may have difficulty formulating words on their own, but may easily say rote phrases very clearly. For example, if someone holds up two fingers and asks someone with Apraxia what number they are holding up, the individual with apraxia may have trouble getting the word out, even though they know what they want to say. However, if the individual is asked to count, which is an automatic (rote) speech task, they may have no difficulty saying the word, "two".

Some speech-language pathology researchers and therapists have identified a similar disability in children called Developmental Apraxia of Speech (DAS). However, the diagnosis of DAS is somewhat controversial and there is considerable disagreement among speech-language professionals as to the speech characteristics of DAS.

Like adults with apraxia, children with DAS have multiple speech errors and are very difficult to understand yet they generally have normal speech comprehension. They may have a lot of difficulty imitating speech sounds and movements. Like adults with apraxia, there is no damage to the speech muscles and functions such as eating and swallowing. Unlike adults with apraxia, children with DAS show no obvious brain damage. To further complicate matters, there are many children who have multiple articulation errors who probably do not have DAS.

The picture is less clear for individuals with AS. Most individuals with AS have comprehension skills which exceed expressive skills, and many families have reported that their family members with AS may say a word clearly one day and then never use the word again. Some of these behaviors are similar to DAS, and while there is no doubt that individuals with AS have difficulty coordinating the articulators for speech, there are other oral problems which are not seen in apraxia, such as feeding and swallowing problems. About all that is currently known about individuals with AS is that there is a significant problem with oral motor function that does not seem to occur in individuals with other types of disabilities.

It is hard to say which therapy techniques will work for individuals with AS. Families and speech pathologists frequently ask if they should work on speech or some other methods of communication (sing, communication boards, etc.) Effective treatments are as varied as are individuals with AS. A few families have reported increased speech when oral awareness and oral stimulation activities are used. Other individuals have been more successful with manual sign or communication boards. Families and speech pathologists should experiment and observe to determine how their family member best communicates.

What may be the answer for one individual with AS may not be the answer for another individual (in other words - try everything!)

There are several resources that families and Speech-language Pathologists may want to consult for further information on oral stimulation techniques:

DuBard, Etoile (year unknown), Teaching Language-Deficient Children (This is the McGinnis Method). Cambridge, MA: Educators Publishing Services (thanks for the reference, Jake!)

Hall, PK, Jordan, LS & Robin, DA (1993). Developmental Apraxia of Speech. Austin, TX: Pro-Ed. Langley, MB & Lombardino LJ (Eds.) (1991).

Neurodevelopmental Strategies for Managing Communication Disorders in Children with Severe Motor Dysfunction. Austin, TX: Pro-Ed.

Morris, SE & Klein, MD (1987). Pre-Feeding Skills. Tucson, AZ: Therapy Skill Builders.