Childhood Apraxia of Speech (CAS)

Childhood apraxia of speech (CAS) is a motor speech disorder. It is a specific type of speech sound disorder in which children are difficult to understand due to motor planning difficulties. Being a motor speech disorder, the child with CAS has difficulty planning the motor movements needed to produce intelligible speech. "The child knows what he or she wants to say, but his/her brain has difficulty coordinating the muscle movements necessary to say those words," (American Speech-Language-Hearing Association). The cause of developmental CAS is unknown; it is a neurologically based disorder. CAS affects a very small percentage of children, about 1-2 in every 1,000 (Shriberg et al., 1997).

Some signs and symptoms for a very young child who may have CAS include: not cooing or babbling as an infant; first words are late, may be missing sounds; problems combining sounds or long pauses between sounds; simplifies productions of words; and may have problems eating.

The severity of the disorder varies for each child. Some children show many of the signs and symptoms of CAS and are either nonverbal or highly unintelligible. These children are likely to benefit from long-term intensive speech therapy. Other children show some or few signs and symptoms of CAS and after a short period of intensive speech therapy transition to traditional phonological therapy to help correct residual speech sound errors. All children diagnosed with CAS are likely to demonstrate accompanying speech and language delays including difficulties with preliteracy skills.

Because CAS is a developmental disorder, it is not something that can be "cured"; however, children can make significant progress with intensive intervention.

Treatment for children with CAS is likely to be intensive, as it includes frequent, short sessions consisting of drill activities. This means that the speech therapist would select a list of target words (between five and seven) for the client to practice and would then have the child say each target word multiple times throughout the therapy sessions.

Jackson was diagnosed with CAS at age 4 and has been receiving intensive speech therapy for 2 years. When Jackson began attending the Charles E. and Geneva S. Scott Communication Disorders Clinic at ASU at age 3, he was using few single words and only some phrases, and his speech was highly unintelligible. Jackson has participated in the Preschool Language Classroom four days a week and 30 minute individual therapy sessions four days a week for two years. He is now speaking in longer sentences and his speech is easier to understand. He has made great progress and we are happy to watch him as he continues to grow!

Find out more or learn how to help at: