



Childhood Apraxia of Speech

Does My Child Have Apraxia of Speech?

Apraxia is a disruption in a child's ability to program and move the muscles involved in speaking. Children with apraxia know what sounds and words they want to make, but they have difficulty getting the muscles involved in breathing, producing voice, and forming speech sounds to work for them. Apraxia has also been called *developmental verbal apraxia* (DVA) or *childhood apraxia of speech* (CAS), and in its less severe form it can be referred to as *dyspraxia*. Children who have apraxia are typically born with it, but it can also occur as a result of a brain injury.

Apraxia is not due to weakness or paralysis of the muscles involved in speaking. Rather, children with apraxia can't get their brain to program those muscles properly to produce speech. Other oral motor skills such as eating, blowing and smiling are not affected, since they don't involve speech.

Apraxia can range in severity from mild to severe. Children who have milder apraxia may just exhibit some sloppy movement of their jaw, lips and tongue when they are trying to make speech sounds and say words. Other children with very severe apraxia may barely be able to speak at all. When this is the case, their speech-language pathologist (SLP) may recommend AAC, which is an alternate or augmentative communication system or device, to help them communicate more effectively (see the ACC section of the portal for more information). Parents should note that just because your child is using AAC, it does not mean that he will never learn to speak. On the contrary, use of an AAC system provides your children with a way to communicate when they are struggling, and it often enhances their ability to learn to speak later on.

Children with apraxia do not outgrow it, but with speech therapy and early intervention, many children will learn to make all speech sounds correctly. Others may learn to make most, but not all speech sounds correctly, even with intensive speech therapy. Every child with apraxia who receives treatment will, however, improve. Progress may be slow and speech therapy may need to occur for several years throughout your child's school career, but they will improve. Only a speech-language pathologist (SLP) can diagnose and treat apraxia, and it is always best to take your child to see an SLP before they start school if you have any concerns about their speech.



Signs & Symptoms of Childhood Apraxia of Speech

Children with apraxia may:

- Be slow to learn to talk;
- Communicate mostly with gestures instead of with words;
- Say shorter words more clearly than longer words;
- Put stress on the wrong syllable in a word;
- Distort or change sounds, or say the same word differently on different occasions;
- Have difficulty with other fine motor skills (such as drawing, writing, coloring, etc.);
- Have delayed language skills;
- Demonstrate frustration with their speech difficulty;
- Develop difficulties learning to read, spell and write.

Intervention for Childhood Apraxia of Speech

Children who have apraxia require an assessment and long-term speech therapy with a registered speech-language pathologist (SLP). Your child's intervention will be guided by the SLP, but home support is needed for new motor patterns to be successfully learned. Following are some principles of intervention that your child's SLP will be considering when determining how best to support your child:

Face to face instruction:

The child with apraxia must closely and carefully watch the SLP's mouth in order to learn how to make the oral movements required for particular speech sounds. It is often easiest to have the child sit on the table, facing the SLP, so he can easily see exactly what she is modeling.

Simultaneous productions:

Children with apraxia will benefit from making the mouth movements they see the SLP making at the same time that she is modeling them. They will be working hard in therapy to focus on the sound and the feel of the sound movements and sequences.

Tactile cues:



The SLP may touch your child's face in order to demonstrate how to move his lips, jaw or tongue. For example, if a student has trouble making the "oo" vowel, the SLP may round his lips with her fingers to help move them into the proper position.

Repeat, repeat, repeat:

Repeated practice is necessary in order for children with apraxia to master sequences of sound movements. In the beginning stages of therapy, especially if your child's apraxia is very severe, the therapist may work on just one syllable or word over and over again until your child begins to match his own productions to the ones that are being modeled.

Syllables, words and phrases:

Intervention for children with apraxia typically focuses on syllable and whole word practice right away, instead of on individual speech sounds. Students need to learn how to sequence their oral motor movements to produce syllables and words and then learn how to combine known sets of words into phrases. They will be working on small sets of words over and over again until mastery is achieved. Children involved in other types of speech therapy typically work on large numbers of words, phrases or sentences during each session, while students with apraxia do much more paced learning with very small sets of target syllables, words and phrases.

Functional word sets:

Intervention for apraxia also begins with very functional sets of words and phrases. Students may learn names of important people in their lives as well as words and phrases that have high impact for them (e.g. "more", "no", "mommy", "daddy", "hi", "bye", "go", etc.).

Vowel practice:

Vowels rarely need to be practiced in speech therapy for students who do not have apraxia, but children with apraxia often demonstrate vowel distortions. Lots of practice on lip, tongue and jaw positioning with tactile cuing for vowel production is often needed for children with apraxia.



Additional information on apraxia is available from the American Speech and Hearing Association (asha.org), Speech-Language & Audiology Canada (sac-oac.ca) and Apraxia Kids (apraxia-kids.org). The following link from the Mayo Clinic also has information on childhood apraxia of speech for parents: [**Mayo Clinic - Childhood Apraxia of Speech**](#)

Helpful Websites

- [ASHA - Childhood Apraxia of Speech](#)
- [Apraxia Kids](#)
- [Apraxia Kids - The Importance of Parent Involvement in Speech Therapy](#)
- [Mayo Clinic - Childhood Apraxia of Speech](#)