VERBAL APRAXIA

WHAT IS VERBAL APRAXIA?

Verbal apraxia is a motor speech planning disorder. It results from stroke, brain injury, brain tumor or other neurological conditions. A person with verbal apraxia is unable to program the sequences of movement of the articulators (e.g., lips, tongue) that are needed to produce words, phrases or sentences. Verbal apraxia can be mild or severe. The inability to produce speech sounds is not a result of muscle weakness or paralysis. Verbal apraxia is a deficit in the "programming" of sequenced motor movements for speech production.

CHARACTERISTICS OF VERBAL APRAXIA

- Difficulty producing words with obvious struggle when trying to speak.
- Preserved ability to produce automatic speech tasks (e.g., reciting the days of the week, counting) and singing.
- □ Perseveration (uncontrolled repetition) of previously produced words.
- □ Clearer speech patterns may be produced when a person says a spontaneous response or familiar phrase.
- □ Increased difficulty producing multi-syllabic words.
- □ Voiced sounds are produced for similar voiceless sounds (b→ p, $g \rightarrow k$, or $d \rightarrow t$).
- □ Multi-syllabic words may be produced in a different order (e.g., el-e-phant \rightarrow "ef-e-lant").
- □ Inconsistent ability to repeat words.
- □ Writing is not affected if a person is suffering from verbal apraxia only. If limb apraxia is present, writing will also be impaired.

ASSOCIATED PROBLEMS

- **Oral Apraxia**: difficulty performing non-speech movements using the muscles of the mouth and face (e.g., sticking out tongue, puckering lips); the inability to imitate movements is not a result of muscle weakness or paralysis.
- □ *Limb Apraxia*: difficulty sequencing voluntary limb movements (e.g., decreased ability to sequence motor steps to wash face or tie shoes); the inability to sequence gross motor movements is not a result of muscle weakness.
- □ *Aphasia:* an acquired language disorder.
- Dysarthria: slurring of speech secondary to muscle weakness in the face and neck.
- Dysphagia: a swallowing disorder.
- *Hemiparesis*: a weakness in the extremities of the body, usually one sided; may affect ability to write, draw, walk and speak

COMMUNICATION STRATEGIES

- Encourage the person with apraxia to communicate using simple words and short phrases. This will decrease frustration and make speech production clearer.
- □ Allow extended time for communication. Try not to complete the person's sentences. If he/she is struggling and frustration is increasing, request verification if you think you understand the message or can make a reasonable guess.
- □ Encourage the person to reword a message if initial attempts were unsuccessful.
- □ Work only on activities suggested by the speech-language pathologist. Apraxia is a complex disorder and family members may inadvertently work on activities that are not beneficial or perhaps more frustrating to the person with apraxia.
- \Box If a message cannot be conveyed verbally, encourage the use of writing, drawing or gesturing.
- In cases of severe apraxia, a board displaying pictures, letters, words or phrases may be used as an alternative means of communicating.
- □ Encourage any vocalization, such as prolonging vowels or humming. It is sometimes easier to "sing" words rather than say them.
- Practice speech exercises provided by the speech-language pathologist when the person with apraxia is most rested. Fatigue decreases the accuracy of speech production.

IMPORTANT POINTS TO REMEMBER

- □ Apraxia is a motor planning disorder. The person does not have a loss of intelligence.
- □ Voluntary speech production is very difficult for a person with apraxia. Attempts to communicate may be frustrating.
- □ Speech production is inconsistent; therefore, excessive practice/repetition can cause more errors and increased frustration.
- Encourage the use of compensatory techniques (gesturing, drawing, writing or augmentative board/device) if a message cannot be conveyed verbally.
- Consult with the Speech-Language Pathologist with any questions.

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