## Stroke Caregiving Series

# **Speech & Language Problems**



Speech and language impairments are a common result of stroke. Not being able to communicate can lead to isolation and depression in the stroke survivor. In turn, as a family member or caregiver, you may feel frustrated or helpless. But working together to recover and compensate for communication difficulties can make a big difference.

After a stroke, while they are still in the hospital, patients will usually meet with a speech language pathologist who will evaluate their communication to determine what type of speech and language impairments exist. The therapist will also help to design specific strategies to assist with communication. Let's review some different types of communication disorders that can result from a stroke.

### **Aphasia**

Aphasia is a type of language disorder that usually results from a stroke to the left side of the brain. Aphasia affects all of the ways we use language. Putting thoughts into words and forming sentences is called *verbal expression*. Understanding spoken words is called *auditory comprehension*. Understanding written words is *reading comprehension*. And putting thoughts into writing is *written expression*. There are two general types of aphasia: **non-fluent aphasia** and **fluent aphasia**.

When stroke survivors have **non-fluent aphasia**, they usually speak in halting speech with frequent pauses to locate the right word. For example, someone with non-fluent aphasia might say, "Mother... washing sink," when they mean, "Mother is washing the dishes in the sink." Or they might say, "Boy reaching ...cookie," when they are trying to say, "The boy is reaching for the cookie."

You might notice they also make many grammatical errors and have difficulty finding words. They may also say the same word over and over again.

Even though people with non-fluent aphasia have difficulty speaking, they may still be able to understand spoken words with little or no difficulty. They may be able to follow short directions such as, "Please pass me the salt" or answer yes/no questions such as, "Would you like to go for a walk?"

If your loved one is having trouble finding the right words to use, verbal expression strategies may include these techniques:

- Substitute a description of the item. For example: "Could you pass me that thing you write with?".
- Use gestures. For example, gesturing as if a person is writing, for the word "pen".
- Think of the initial sound for the word.
- If unable to come up with a needed word, try to think of other words that mean the same.
- Keep statements short and simple.
- Use phrases such as, "Let me think about it" or "Let me get back with you on this", allowing time to organize their response and locate the words they're looking for.

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In contrast, someone with **fluent aphasia** will exhibit easily flowing, effortless and rapid speech. They will speak longer, commonly exceeding five or six words between pauses. However, many times the words they are saying don't mean anything and they may even use some non-words. Nouns are often replaced by vague terms such as "this," "that," "things" or "those".

Stroke survivors with fluent aphasia cannot understand as much of what they hear as it may seem based on how well they speak. This is because in fluent aphasia, auditory comprehension, or understanding, is much more impaired than verbal expression. For this reason, they will not hear that they are making mistakes in their own speech and make no effort to correct themselves.

The most common type of fluent aphasia is Wernicke's aphasia. It is characterized by fluid and effortless conversational speech that is empty of meaning. Patients with this type of aphasia use nonsensical words or phrases and have a hard time understanding even simple sentences that you say to them.

## **Helpful Communication Hints**

The environment plays a big role in communicating with a person who has aphasia. You will want to minimize distractions, reduce background noise, and try to limit conversation partners to only one person at a time. Good eye contact is also beneficial. For example, in a restaurant, you may want to request a table in the corner where there is less noise or fewer distractions.

You can help someone with difficulty speaking by trying the following:

- Give choices of responses, rather than open-ended questions.
- Allow increased time to respond.
- Encourage them to use gestures.
- Provide carrier phrases, like: "For breakfast I want a\_\_\_\_".
- Repeat what you understood.



Also, your loved one can prepare for communication ahead of time, making an outline and rehearsing it. For example, in planning a doctor's office visit, they may want to prepare an outline of what to communicate with the doctor and practice ahead of time.

One strategy to help someone to better understand what is said may include training the patient to ask someone to repeat or simplify their message if they didn't understand the speaker. Face-to-face communication is best because non-verbal communication, such as gestures and facial expression, can help in understanding and delivering the message. Face-to-face communication also ensures that the stroke survivor is paying full attention to the conversation.



### Other Language Impairments

**Dysarthria** is a motor speech disorder resulting from weakness, slowness, or inability to coordinate muscles used during speaking. Stroke survivors who suffer dysarthria will have no difficulty understanding spoken conversations and will be able to put their thoughts into words with ease. However, their speech may sound slurred much like person who has had too much alcohol to drink. A person can have dysarthria as their only speech disorder, or they may have dysarthria along with aphasia.

Ways that a person with dysarthria may improve his ability to be understood include:

- Sitting or standing up straight to support a deep breath for speech
- · Talking louder
- Speaking slowly
- Over-articulating each sound

**Apraxia** is a speech disorder that frequently occurs along with non-fluent aphasia. A person with apraxia is unable to plan and start purposeful speech movement. This is not because of muscle weakness or slowness, but rather from difficulty planning the movements of the mouth and tongue. The muscles are strong enough and able to produce the needed sounds but the signal from the brain just gets interrupted on its way to the speech muscles, making it difficult to start and continue speaking.

For stroke survivors with Apraxia, keep messages short and simple, or add tapping or melody and rhythm to attempted phrases.

## More Help

Some stroke survivors with more significant or long-term communication impairments may use AAC devices, which stands for Augmentative and Alternative Communication. This simply means using tools other than spoken words to make their thoughts and needs known. These may be as simple as picture, word or phrase communication books or boards, or as complex as an electronic device, such as a computer, tablet or smartphone designed and built

specifically for that individual with specific information built into the device to aid in communicating the message.

A speech language pathologist can help you locate and access these electronic devices, as well as help to program it, and train you and your loved one on using it.

Keep in mind that speech and language problems following stroke can improve even over long periods of time. Talk to your speech language pathologist or your physician if you have any questions.



For more stroke information, visit houstonmethodist.org/stroke or call 832.667.5867.

