

Aphasia Post Stroke

Aphasia is one of the most common side effects experienced by stroke survivors and can have major implications on the patient's life afterwards. The type of stroke or cerebrovascular accident (CVA) will largely dictate the type of aphasia experienced as well as the prognosis for recovery. In addition, each type of aphasia presents its own unique challenges and will require caregivers and therapists to make various adjustments in order to obtain optimal recovery and function for patients.



PLAY PICMONIC

Causes

Cerebrovascular Accident

[Cerebro-guy-vascular Accident](#)

Cerebrovascular accidents, or CVAs, are the main cause of aphasia symptoms and may occur either due to blood flow interruption (ischemia) within an artery within the brain or a hemorrhage within the blood vessel that leaks into key areas of the brain. The location of the CVA will largely dictate the type of aphasia and the prognosis for recovery.

Non-Fluent Aphasia

Broca's Aphasia

[Barack Obama](#)

Broca's aphasia is the most common type of aphasia seen within post-stroke patients and is caused by damage within the frontal lobe of the brain. The main impairment seen with Broca's aphasia is the significantly reduced quality of speech that is often jumbled and non-sensical. Patients will typically maintain adequate comprehension of written and verbal language as well as their writing ability; however, these patients may still demonstrate frustration due to their lack of ability to communicate.

Fluent Aphasia

Wernicke's Aphasia

[Worm-Mickey](#)

Wernicke's aphasia, also called "receptive aphasia," is caused by damage within the superior temporal gyrus of the temporal lobe of the brain. Patients with Wernicke's aphasia will often be capable of articulate speech; however, their ability to understand language, both written and verbal, will be impaired. Difficulties with writing are also common

Other Types of Aphasia

Global Aphasia

[Globe A-fish](#)

Global aphasia is caused by lesions spanning multiple areas of the brain, specifically the frontal, parietal, and temporal lobes. Patients display impairments to comprehension of language, written and verbal, and are often unable to properly verbalize. Patients with global aphasia will often

resort to using non-verbal communication, such as gestures, in order to communicate.

Conduction Aphasia

[Conduction-cable A-fish](#)

Conduction aphasia is a type of fluent aphasia resulting from damage to the supramarginal gyrus of the parietal lobe. Patients who suffer from conduction aphasia may retain the ability to read and may be able to speak fluently; however, they may pause periodically due to word-finding issues and may also show difficulty with writing.

Verbal Apraxia

[Verbal-mouth Ape-axe](#)

Verbal apraxia is commonly produced after lesions in the left frontal lobe, proximal to Broca's area, in the areas that dictate motor planning. Patients often struggle with the correct pronunciation, tone, or inflection for certain words and may sometimes have to repeat the word several times before correctly stating it. These patients normally know exactly what they want to say but, due to dysfunction with motor sequencing and planning, are unable to speak consistently and accurately. For patients with severe verbal apraxia, non-verbal communication may be indicated.

Dysarthria

[Broken-speech-bubble](#)

Dysarthria is a dysfunction of the motor neurons within the brain that aid in the production of speech. The most common cause of dysarthria is upper motor neuron lesions, with the result being speech that is slurred, labored, and inarticulate.

Diagnosis

Cerebral Angiography

[Brain Angel with Angiography](#)

Cerebral angiographies are highly invasive diagnostic procedures used to observe the arteries of the brain for obstructions or narrowing. The procedure requires a catheter to be threaded from a distal site of the body up to the brain and is combined with contrast dyes to produce X-ray images which can be used to detect the risk of CVAs.

Computed Tomography

[Cat-scanner](#)

Computed tomography (CT) is a generally non-invasive procedure that is used to identify tumors, vascular malformations, and hemorrhages within the brain. CTs are able to produce extremely precise cross-sectional images of areas of the brain and are sometimes used with contrast dyes to aid in imaging.

Magnetic Resonance Imaging (MRI)

[M-R-eyes](#)

Magnetic Resonance Imaging (MRI) is a non-invasive imaging procedure that produces detailed imaging of the inner tissues of the brain. MRIs may be used to help identify damaged parts of the brain from a recent stroke; however, they are much more costly than other forms of imaging.

Intervention

Simple Short Sentences

[Simple Short Sentence](#)

Utilization of simple, short sentences is indicated in the case of patients with non-fluent aphasia, such as Wernicke's Aphasia. For these patients, words or phrases with complex syllables may easily confuse them, especially if there is additional noise in the vicinity. In such cases, therapists should ensure that background noise is kept at a minimum to improve speech comprehension.

Visual and Tactile Cues

Eyes and Tac-tiles

Visual and tactile cues are useful in communication with patients who suffer from various different aphasias to improve communication. For aphasiac patients who can read but struggle with speech, such as those with conduction or Broca's aphasia, having the patient write down what they need to say or having the therapist use tactile cueing in conjunction with instructions can ease communication issues. Patients suffering from aphasia can sometimes become agitated when they struggle to communicate, so patience will be needed to identify the best combination of cueing.

Speech Therapy

Speech-bubble Therapeutic-massage

For patients who suffer from speech difficulties secondary to aphasia, such as those with Broca's aphasia or conduction aphasia, speech therapy is one of the primary treatment options. During speech therapy, patients will re-learn how to communicate verbally as well as identify the best mode of communication, whether that be through writing or visual and tactile cues, via a trained speech therapist.