Aphasia: An Overview of this Common but Misunderstood Language Disorder

Aphasia is one of the most significant and common conditions caused by stroke or brain injury. **Over 2 million people in the United States are currently affected by aphasia**, but few outside the clinical world know what it is. In fact, given its prevalence, most people have encountered someone with aphasia but just don’t know it by name.

It’s important to increase public education about this language disorder and to recognize the many people who are living with or caring for, people with aphasia.

To that end, we’ve written this overview of aphasia: what it is, what causes it, who it affects, types of aphasia, and ways it can be treated.

What is aphasia?

Aphasia is the loss or impairment of the ability to use or comprehend words, usually resulting from brain injury (including stroke). It is strictly related to language, including speaking, listening, writing, and/or reading. **It does not affect intelligence.** Just because someone has aphasia does not mean that they are any less intelligent than before.
How does aphasia impact daily life?

Aphasia affects an individual’s daily life in many ways – just think of what you’re doing right now – you’re reading this blog post or listening to someone read it to you. If your language is affected, you might not be able to read this blog, a newspaper, or even signs on the street. You might not understand your friend on the phone when they call you. You might be in a meeting and just cannot come up with any of the words you need.

Aphasia presents on a spectrum – it can be somewhat mild (for example, constantly feeling like “the word is on the tip of my tongue”), or it can be very severe (for example, feeling like being in a place where you don’t speak the language).

Aphasia affects different systems – e.g., it does not always affect comprehension and it does not always affect reading or writing – it can be very isolated in terms of what language systems it impacts. Everyone is different; depending on what part of the brain was injured.

Who is impacted by aphasia?

Over 2 million people in the United States are currently affected by aphasia according to the National Aphasia Association. Nearly 180,000 Americans acquire the disorder each year. Aphasia affects people of all ages, races, nationalities and genders. More than 800,000 people/year have a stroke in the United States, and an estimated 1.7 million experience brain injury, both of which are common causes of Aphasia. The condition is more prevalent than Parkinson’s, ALS, cerebral palsy, and muscular dystrophy.

What causes aphasia?

Anything that damages the language centers of the brain can cause aphasia, including:

- Stroke: occurs when a clot blocks a blood vessel in the brain, which prevents blood supply to any areas of the brain supplied by that vessel.
- Brain injury: any event where the brain is hit and damaged by trauma, or damaged by disease, such as brain tumors or encephalitis.
- Hemorrhage: when a blood vessel ruptures in the brain. Blood is “poisonous” to the brain, so if any parts of the brain are exposed to blood during a hemorrhage, those parts of the brain will be damaged.
Broca’s Aphasia, Anomic Aphasia, Wernicke’s Aphasia – What are these different types of aphasia?

Different components of language may be damaged more or less in each individual with aphasia, resulting in different manifestations of speech and language difficulties. There are many different types of aphasia. Below are brief summaries of common aphasia types:

- **Global Aphasia:** When a brain injury affects extensive portions of the front and back regions of the left hemisphere, the result may be global aphasia. People with global aphasia may have difficulty understanding words and sentences, forming words and sentences, and may get out only a few words.
- **Broca’s Aphasia:** A type of nonfluent aphasia, these individuals typically present with damage that affects the brain’s frontal lobe. This aphasia can be called a “nonfluent” or “expressive” aphasia because they may understand and know what they want to say, but speak in short phrases produced with much effort. They may also omit grammatical words such as “is,” “and” and “the.” This is called “agrammatism”. Why “Broca’s Aphasia”? French physician, Pierre Paul Broca, specialized in the study of language in the 1860’s. He treated an individual who presented with symptoms of speech loss, yet maintained his intellect. Broca named this new disorder, aphémie - the ‘loss of articulated speech’.
- **Wernicke’s Aphasia:** A type of fluent aphasia, these individuals typically present with damage that affects the brain’s left temporal lobe. This aphasia can be called “fluent” or “receptive” aphasia because although people with this aphasia can produce many words (are “fluent”), and use grammatically correct sentences, what they say may not make sense, or their speech may include non-existent or non-relevant words. They also may not be fully aware that what they’re saying doesn’t make sense. Why “Wernicke’s Aphasia”? It’s named after 19th-century German neurologist Karl Wernicke, who first related this disorder to damage in the left posterior temporal area of the brain.
- **Anomic Aphasia:** This is the mildest aphasia type – people with Anomic Aphasia have relatively preserved speech and comprehension, but difficulty in finding words. Interestingly, low-frequency words are typically more difficult for these people to retrieve and produce than frequently used words.
- **Primary Progressive Aphasia (PPA):** A type of frontotemporal degeneration in which symptoms begin gradually, sometimes even before age 65, and worsen over time. People with PPA can lose the ability to speak and write, and eventually to understand written or spoken language. Speech therapy can be provided throughout the course of the disease, with the goal being to maximize communication ability for as long as possible.

This comprehensive chart shows the varieties of aphasia and how each type impacts fluency & comprehension.
How can aphasia be treated?

Many treatment options are available, often through speech-language pathologists (SLPs) in rehab centers, skilled nursing facilities, clinics, or at home. These treatments seek to help people with aphasia reclaim their lives, and to return to work when possible. Treatment can be some or all of these activities:

• Working one-on-one with a SLP on language and daily living skills. For example, sessions may focus on conversation or on reading the newspaper and summarizing the main messages to a clinician or family member.
• Working on a customizable app like Constant Therapy to target specific skill areas both in the clinic and at home. For example, Constant Therapy’s Word Retrieval & Speaking categories have many individual tasks that help the brain to find words more easily again.
• A weekly book club or video conference to practice conversation skills and understand spoken language.
• Participating in research studies to help scientists discover the most effective ways to create individualized treatment programs for aphasia.

The most important thing to know is that, because of neuroplasticity, there is no end to recovery. The myth that individuals only have one year to recover after a stroke and after that there is no more improvement, has been proven by science to be false. Patients can continue to improve, with the right therapy, for the rest of their lives.

Where can I find additional resources?

Additional resources for learning more about aphasia can be found at:

• The American Speech-Language-Hearing Association
• The National Aphasia Association
• The Aphasia Resource Center at Boston University

Constant Therapy is an award-winning, customizable cognitive and speech therapy app, created for survivors of stroke, brain injury, aphasia, and other neurogenic disorders. Patients can use Constant Therapy in-clinic with a clinician, or at home for additional practice. Download Constant Therapy now.