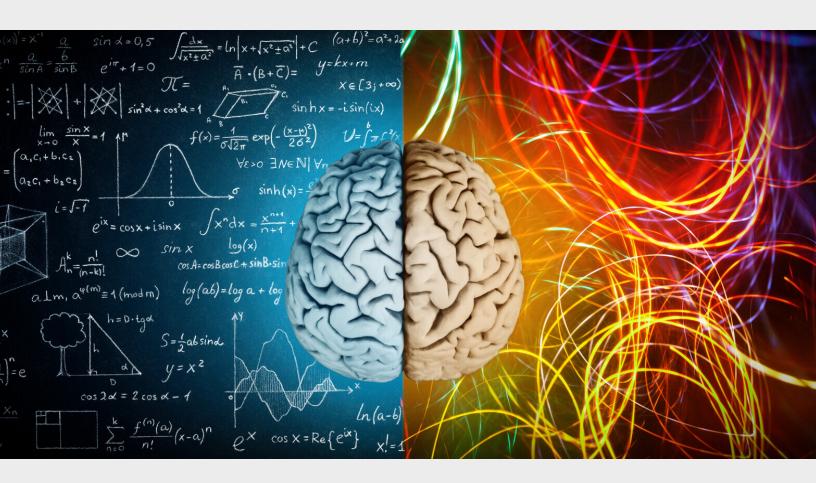
# RIGHTING THE MIND Navigating the Challenges of Right Hemisphere Stroke



#### A Guide for Families

"Take the first step, and your mind will mobilize all its focus to your aid. But the first essential is that you begin. Once the battle is started, all that is with and without you will come to your assistance."
- Robert Collier

Welcome!

You either downloaded or were given this guide because you know of or have a loved one who had a right brain (hemisphere) stroke.



My name is Genevieve Richardson, and I'm a speech pathologist. In the summer of 1990, between my sophomore and junior years of college, I fell in love with the field of speech pathology and the thought of helping people.

Although I work daily with stroke survivors who have had left-side brain strokes that results in aphasia, apraxia, dysarthria, or cognitive-linguistic impairments, I recognize that families with stroke survivors who have damage to the *right side of the brain* need tangible, direct, and comprehensive information about what they are experiencing.

I created this guide to fill a need for a comprehensive, bird's eye view of the changes and challenges many families face when their loved one has a right hemisphere stroke, to provide hope, and information. Above all, please know that you are not alone.

For more information about what we do at LIFE Speech Pathology, please check out our website, **DoLIFESpeechPathology**.com.

You will find a variety of **resources**, many of which correspond to an episode from the **Listen for LIFE podcast.** The resources are relevant for families caring for any stroke survivor, regardless of the hemisphere of the brain impacted, as well as general information.

LIFE Speech Pathology + LIFE Aphasia Academy® are here for you. Please reach if we can be of service.

Wishing you a fabulous day,

Genevieve

Book A Consultation Call



## Understanding the Brain

A right hemisphere stroke is a serious and lifealtering condition affecting thousands of people yearly. Understanding the causes, symptoms, and effects of right hemisphere stroke is crucial for patients and caregivers, as it can help them better manage the challenges of this condition. This book will explore the causes, symptoms, and effects of right hemisphere strokes and the rehabilitation and recovery process. We will also cover the emotional and practical challenges that can arise for the person who has had the stroke and their loved ones.

The left and right hemispheres are specialized for different functions. The functions are not mutually exclusive, but the left hemisphere is principally responsible for language, speech, logic, and reasoning. Conversely, the right brain plays an important role in emotion and perception. Both hemispheres control the movement and sensation of the opposite side of the body.

#### A Right Hemisphere Stroke

A right hemisphere stroke occurs when blood flow to the right side of the brain is interrupted, resulting in damage to the tissue in that area. This type of stroke can have a wide range of effects on the body, depending on the location and severity of the damage. Possible symptoms include paralysis or weakness on the left side of the body, trouble speaking or understanding speech, vision problems in one or both eyes, changes with spatial awareness or perception, impaired attention and concentration, memory problems, and difficulty understanding non-literal language

Living with right brain damage poses day-to-day challenges which may include impairment in spatial awareness, decision-making, memory, and one's ability to self-care. Stroke survivors may also suffer from emotional changes and trouble understanding nonliteral languages like sarcasm, irony, and idioms. Caregivers may feel frustrated or resentful with these changes, but by understanding them, they can learn how to best support their loved one.

# Cognitive-Linguistic Impairments

The brain's right hemisphere is involved in processing nonverbal cues, such as facial expressions and body language, and understanding sarcasm, jokes, and idiomatic expressions. As such, a right hemisphere stroke may lead to the following challenges:





- Nonverbal communication: Damage to the right hemisphere can make it hard for individuals to understand the emotions and intentions of others.
- **Empathy:** Damage to this area of the brain can also make it difficult for individuals to understand and respond appropriately to the emotions and needs of others.
- Theory of mind: Refers to the ability to understand that other people have their own beliefs, desires, and intentions that may be different from one's own. Damage to the right hemisphere can make it challenging for individuals to understand the perspectives of others and predict their behavior.
- Aprosodia: Aprosodia, also known as affective prosody, is a condition in which an individual has difficulty recognizing or expressing emotions in speech. This can make it challenging for them to understand the emotional content of speech and may lead to difficulty interpreting the tone and context of conversations.
- Perseverative behavior: Individuals with right hemisphere stroke may also display perseverative behavior, which means they may repeat the same action or question repeatedly, making it challenging for others to interact with them.
- **Social cues:** Individuals with right hemisphere stroke may also have difficulty understanding and interpreting social signals such as sarcasm, irony, or humor.

#### **Spatial Abilities**

Another aspect to consider is the impact of right hemisphere stroke on spatial abilities. The right hemisphere is responsible for spatial processing, including the perception of spatial relationships, spatial memory, and navigation. In stroke victims, some of the most common deficits include:

- **Neglect:** This is a condition in which individuals ignore or fail to attend to one side of their vision, often the left side. This can make it difficult for them to orient themselves in space, and they may need help with tasks requiring attention to the left side.
- Visual-spatial disorientation: This can make it difficult for individuals to understand and navigate their environment and may lead to confusion about where objects are located in relation to other objects.
- **Spatial perception:** This can make it difficult for individuals to perceive and understand the spatial relationships between objects, including their sizes and orientations.
- **Spatial memory:** This can make it challenging for individuals to remember the layout of places and may make tasks that require remembering the location of objects difficult.
- **Spatial reasoning:** This can make it difficult for individuals to understand and solve problems that require spatial reasoning, such as puzzles or mazes.



#### Attention

Attention is a complex cognitive function that can be affected by various factors. It is comprised of several levels of attention, each with distinct characteristics and functions.

- **Sustained Attention** refers to the ability to focus on a task for an extended period.
- Selective Attention is focusing selectively on specific stimuli while ignoring others.
   For example, in a crowded room, it allows an individual to focus on a conversation.
- **Divided Attention** is dividing attention between multiple tasks or stimuli simultaneously.
- Alternating Attention is the ability to switch attention between different tasks or stimuli.
- **Automatic Attention** is performing a task without conscious effort or attention.



#### Memory

A right hemisphere stroke can impact memory in several ways:

- **Difficulty with verbal memory:** The left hemisphere is responsible for processing and storing verbal information, such as words and language. Damage to the right hemisphere can make it difficult for individuals to encode, store and retrieve verbal information.
- **Difficulty with visual-spatial memory:** The right hemisphere is responsible for processing and storing visual-spatial information, such as images, scenes, and maps. Damage to the right hemisphere can make it difficult for individuals to encode, store, and retrieve visual-spatial information, leading to difficulty with visual-spatial memory tasks.
- **Difficulty with memory for faces:** The right hemisphere is also thought to play a role in the ability to recognize and remember faces. Damage to the right hemisphere can make it difficult for individuals to recognize and remember faces.
- Difficulty with memory for events: The right hemisphere is also thought to play a role in the ability to remember events and the context in which they occurred.
   Damage to the right hemisphere may lead to difficulty with memory for events tasks.

#### **Executive Function**

Executive function refers to a set of cognitive abilities responsible for planning, organizing, initiating, and monitoring complex tasks and behavior. A right hemisphere stroke can impact inhibitory control, mental flexibility, planning and organization, and one's ability to self-monitor. It can also diminish one's working memory, which is the ability to hold information in your mind for a short period of time and use it to guide behavior.



# Rehabilitation and Recovery

The recovery process from a right hemisphere stroke can be unpredictable and depends on several factors. While the best-case scenario is not always possible, early diagnosis and treatment, access to specialized medical facilities and rehabilitation centers, adequate financial resources, access to therapy, strong family support, a good understanding of the condition, and compliance with therapy can all help to improve the chances of recovery.

#### Other Factors

Spontaneous recovery refers to the improvement in function occurring naturally in the days, weeks, and months following a stroke without needing specific rehabilitation interventions. To maximize spontaneous recovery, it is important to provide the individual with a stimulating and supportive environment and to address any medical or physical issues that may prevent progress.

**Neuroplasticity** is the ability of the brain to reorganize and form new neural connections in response to changes in the environment or injury. The brain's ability to adapt can allow other brain areas to take over the functions previously controlled by the areas damaged by a stroke.



#### The Rehabilitation Team

Following a right hemisphere stroke, specialists play an important part in the recovery process. Besides developing a personalized treatment plan, they can also offer education and support.

A **physical therapist** specializes in assessing, diagnosing, treating, and managing physical impairments, disabilities, and pain. They can use exercises and techniques to improve mobility, balance, and the ability to independently complete day-to-day tasks.

An **occupational therapist** focuses on helping the patient to regain the ability to perform daily living activities, such as dressing, eating, grooming, and toileting. They can help one improve fine motor skills, visual perception, and cognitive abilities.



**Speech pathologists** will work with patients to help them regain the ability to speak, understand speech, and communicate effectively. They may include exercises to improve speech, language, and cognitive abilities such as attention, memory, problem solving, executive functioning, and reasoning skills.

A case manager or discharge planner will assess the individual and ensure that they receive the appropriate care and services at the right time. After discharge, the case manager may coordinate with the patient's family, providers, and agencies to ensure they receive the services they need.

A **physiatrist** is a medical doctor who specializes in the evaluation, diagnosis, treatment, and management of physical impairments and disabilities. They can prescribe medication, conduct a comprehensive medical evaluation, and coordinate care with the therapists and case manager.



# Coping with the Impact of a Right Hemisphere Stroke

A right hemisphere stroke can have a significant emotional and psychological impact on the patient and the patient's family and caregivers. The physical limitations and changes in cognitive abilities can be difficult to accept. They can lead to feelings of frustration, anger, and depression. Caregivers may also experience feelings of stress, guilt, and burnout.

**Depression and anxiety** are also common emotional and psychological problems following a stroke. They can occur due to the physical and cognitive changes caused by the stroke and the emotional and social changes that often accompany it. These conditions are diagnosed by healthcare providers and may be treated with therapy, medication, and/or lifestyle changes.

#### **Coping Strategies**

For patients and caregivers alike, joining a support group can be a great way to connect with others who understand what you're going through. Relaxation techniques such as deep breathing, meditation, and yoga can also help reduce stress and improve emotional well-being.



Additionally, keeping a journal may help patients process emotions and gain insight into the recovery process. They may also benefit from engaging in hobbies and activities.

Caregivers should engage in self-care. They should make sure to tend to their own physical and emotional well-being. Additionally, it can be helpful for caregivers to take a break and have someone else take care of the patient for a short period of time. This is called respite care.

# Supporting the Caregiver

When caring for a person with a right hemisphere stroke, there are several key components. The caregiver should understand the symptoms and effects, the recovery process, and available assistive technologies. Additionally, they should be prepared to provide emotional and psychological support, help with daily living activities, and keep the person safe.

### Advocating for your Loved One with Physicians

Being a caregiver can be overwhelming and exhausting. One component of being a caregiver is facilitating and interacting with various medical providers.



To be the best advocate, it's best to understand how a physician will evaluate a patient and how you can provide additional information that can assist in providing the whole picture of recovery and management and allows you to advocate for your loved one so they can receive the care they need. A physician would be concerned with several body systems when caring for a stroke survivor, including their neurological, cardiovascular, respiratory, musculoskeletal, gastrointestinal, renal, integumentary, cognitive, behavioral, and social well-being.

Caregivers should encourage follow-up visits and communicate clearly with physicians. They should assist the physician by keeping an up-to-date list of medications, supplements, over-the-counter pain medications, dosages taken, and symptoms noted at home. While that can be challenging, here are some methods that can help:



- Personal Health Record (PHR): A PHR is a record of a person's health information that can be accessed and managed by the individual. There are several online tools and apps that allow patients to create and manage their PHR, which can help keep track of medical data and medications across multiple physicians.
- EHR (Electronic Health Record)
  system: Many healthcare providers use EHR
  systems to store and share patient
  information between physicians in real time.
  In addition, most physician offices offer a
  patient portal where you can download and
  save labs, prescriptions, and sometimes
  summary notes of treatment.

Caregivers can also assist physicians by acting as their eyes and ears about the day-to-day functioning of a person living with a right hemisphere stroke. It can be helpful to provide caregivers with concise information. A caregiver should list their concerns, the evidence that supports them, and then any additional information like safety, sleep, pain, driving, medication, and compliance with doctor's orders.

# Troubleshooting Symptoms

A spouse whose loved one has had a right hemisphere stroke may need to understand that their loved one may have difficulty understanding sarcasm and other non-literal languages.

Therefore, it is important to be clear and direct when communicating. It's also important to give them time to process and respond.

The caregiver may also have concerns over their loved one driving. In this situation, they can gather evidence of driving concerns and talk with their loved one. Doctors and state driving assessments can assess the stroke survivor's driving and recommend the next steps, but if someone is unwilling to stop driving or pose a danger, the caregiver should contact their local state's Department of Motor Vehicles. It's important to remember that this is a sensitive issue, and it's important to approach it in a way that is supportive and non-confrontational. Ultimately, the loved one's and others' safety on the road should be the top priority.

# Long-term Challenges and Solutions

Possible long-term effects include persistent weakness or paralysis on the left side of the body, persistent speech or language difficulties, vision problems, cognitive impairment, and emotional and psychological difficulties.





A person living with a right hemisphere stroke may also be reluctant to participate in therapy. Caregivers may be able to help by listening and understanding the patient's concerns, emphasizing the benefits of therapy, providing information and resources, encouraging a trial period, and involving other members of the patient's support system. Caregivers can also offer to attend therapy together, look into alternative forms of rehabilitation, and encourage their loved one to speak with a doctor. However, if they choose not to seek care, it's important to respect the stroke survivor's autonomy and support them in the way they feel the most comfortable.

To adapt, individuals with a right hemisphere stroke can compensate for any physical limitations by using adaptive equipment or making modifications to the home to accommodate their abilities. Such technologies include voice-activated devices, adaptive computer software, specialized telephone devices, and mobility aids. Seeking out additional therapy or finding new hobbies can also improve their quality of life.

Solutions should be cognizant of culture's influence on the rehabilitation process. Culture and beliefs may influence a patient and their family's attitude towards disability, willingness to seek treatment, healthcare access, involvement with one another, and treatment preferences. Additionally, patients may feel more comfortable working with healthcare providers who speak their native language.

#### Conclusion

A positive mindset can play a crucial role in stroke rehabilitation, as it can help individuals stay motivated, engaged, and optimistic throughout the recovery process. It helps to set realistic goals, keep an open mind, build a support network, and stay positive, informed, and active.

Remember, recovery is different for everyone, and it's important to work closely with healthcare professionals to ensure the best outcome. Right hemisphere stroke is a complex condition that can significantly impact the lives of both patients and caregivers. It is important to follow up with healthcare providers, and by caregivers and stroke survivors taking an active role and maintaining a healthy lifestyle, they can reduce the risk of another stroke and maximize recovery.



#### Resources

Here is a list of resources where people can get more information about right hemisphere stroke and find support:

- The National Stroke Association
- The American Stroke Association
- The Brain Aneurysm Foundation
- The National Institute of Neurological Disorders and Stroke
- Stroke Center
- Stroke Association
- Mayo Clinic
- Listen for LIFE Podcast
- Look up "Local Stroke Support Groups" for your area

