

ABOUT MY STROKE

Talk with your health care team to learn where in the brain your stroke happened and mark it on the image below.

You can learn how stroke in different areas of the brain may affect the survivor at strokeconnection.org/about-our-brains.

Frontal Lobe

controls personality, reasoning, parts of speech, and muscle movement

01

02

Parietal Lobe

controls speech and sensation (touch and pressure)

03

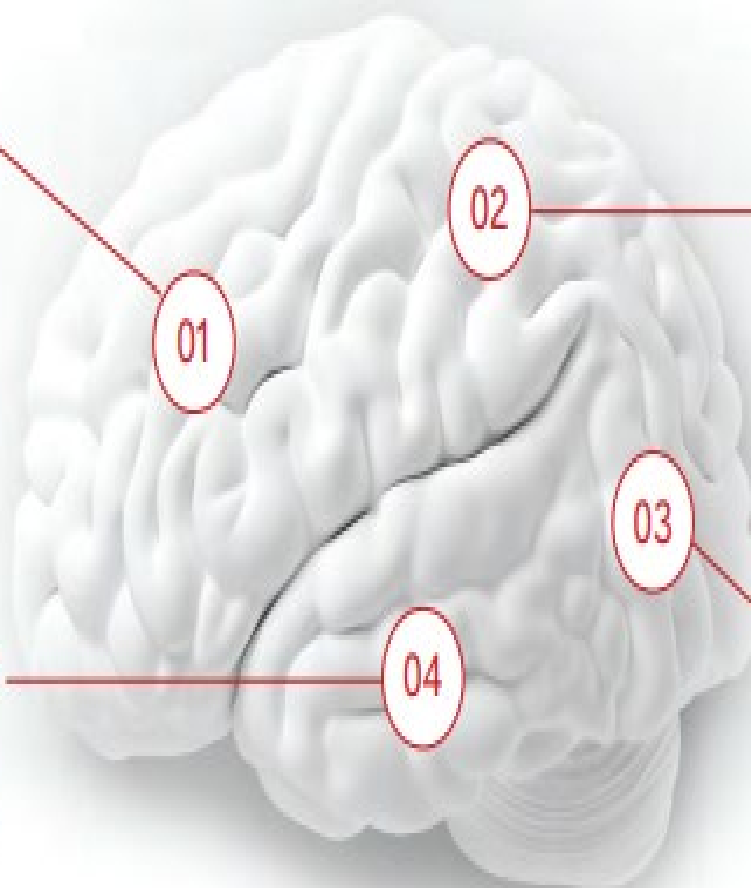
Temporal Lobe

controls hearing, speech, and short-term memory

04

Occipital Lobe

controls vision




DIAGNOSIS AND EARLY TREATMENT


When someone has symptoms of a stroke or a TIA, a doctor will gather information and make a diagnosis. They will review the events that have occurred and will:


- Take a medical history
- Do a physical and neurological examination
- Have certain laboratory (blood) tests done
- Order a CT and/or MRI scan of the patient's brain
- Study the results of other diagnostic tests that might be needed

Diagnostic tests examine how the brain looks, works and gets its blood supply. They can identify the injured brain area. Most of them are safe and painless.

Diagnostic tests you may have fall into three categories.

 **Imaging tests** give a picture of the brain like X-rays (CT scan or MRI).

 **Electrical tests** record the electrical impulses of the brain.

 **Blood flow tests** show any problem that may cause changes in blood flow to the brain.



EARLY TREATMENT

Early treatment of ischemic stroke

Ischemic stroke happens when a blood clot blocks a vessel supplying blood to the brain. It's the most common type, accounting for 87% of all strokes. The treatment goal is to dissolve or remove the clot.

To *dissolve* a clot, a medicine called alteplase (tPA) is given through an IV (intravenous line). It works by dissolving the clot so blood can flow again. Alteplase can save lives and reduce the long-term effects of stroke. It needs to be given within three hours of the start of stroke symptoms (up to 4.5 hours for some eligible patients).

To *remove* a clot involves a procedure called mechanical thrombectomy. Doctors use a wire-cage device called a stent retriever to remove a large blood clot. They thread a catheter through an artery in the groin up to the blocked artery in the brain. The stent opens and grabs the clot, allowing doctors to remove the stent with the trapped clot. Special suction tubes may also be used to remove the clot.

This procedure must be done within up to six to 24 hours of stroke symptom onset and after the patient has received alteplase, if eligible. Patients must meet certain criteria to be eligible for this procedure.

Early treatment of hemorrhagic stroke

Hemorrhagic stroke happens when a blood vessel bursts (ruptures) and bleeds within or around the brain.

Blood vessels can become weak due to a ballooning of part of the vessel (aneurysm). Other times there may be a tangle of blood vessels within the brain that didn't form normally, making them weak (arteriovenous malformation or AVM). When high blood pressure isn't controlled, it puts strain on weakened blood vessels that can lead to the ruptures that cause stroke. The treatment goal is to stop the bleeding.

For some patients, a small tube (catheter) with a camera is threaded through a major artery in an arm or leg and guided to the area of the bleed in the brain. The camera gives the surgeon a detailed view of the area to help fix the problem. Once the catheter is guided to the source of the bleeding, it leaves a mechanism, such as a coil, to prevent further rupture. This type of procedure is less invasive than standard surgical treatment.

Sometimes surgery is required to secure a blood vessel at the base of the aneurysm.

COMMON PHYSICAL CHANGES AFTER A STROKE

Physical changes that follow a stroke are the result of injury to the brain and may include one or more effects.

Weakness or paralysis on one side of the body

If the stroke occurs on the brain's right side, the left side of the body and face will be affected. It's the opposite for a stroke that occurs on the left side of the brain.

Fatigue

After a stroke, it's common to feel tired at some point. This is known as fatigue. Fatigue often starts to lessen a few months after the stroke. But for some people, tiredness may continue for years. If you're experiencing post-stroke fatigue, talk to your health care team about ways to reduce it.

Spasticity

When you try to move a limb, the muscles contract (shorten or flex). This creates stiffness and tightness, which is referred to as "spasticity." Spasticity also causes the tendons and soft tissue around the muscle

to become tight or stiff. This makes stretching the muscle much more difficult. If not treated, the muscle can freeze into an abnormal and often painful position. If you have spasticity, talk to your doctor about the best treatments for you. Physical therapy and medications can help.

Seizures

Seizures are brain malfunctions that alter a person's awareness. A seizure may last only a few seconds or minutes. It may trigger involuntary body movements, strange sensations or blackouts. Studies vary greatly about how often seizures happen after stroke. Seizures are painless. But they can be upsetting and disorienting. Often, seizures can be treated with medications. If you think you may have had a seizure, let your health care team know.