

# **FOR PATIENT AND FAMILY**







# Arriving at UF Health Shands Comprehensive Stroke Center

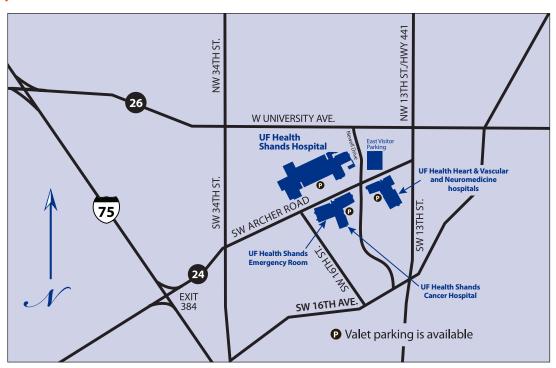
Information about stroke for patients and families

### Where will my family member be admitted?

Some patients who are treated for stroke will first be evaluated in the UF Health Shands Emergency Room which is located at the UF Health Shands Cancer Hospital. Valet parking for the emergency room is available in front of the emergency room entrance. On some occasions, patients may be transported from one emergency room to another for IV t-PA and/or endovascular evaluation.

Patients who are hospitalized at UF Health Neuromedicine Hospital will be admitted to the neurointensive care unit on the 4th floor. Valet parking is available in the front circle of the hospital and a parking garage is available adjacent to the hospital. A covered walkway from the garage leads into the lobby of the building.

Call 352.265.0111, and ask the operator for your family member's room number, directions and other patient information. For additional help, look for Welcome Centers at the main entrances of the hospital.



Where Can I Stay in Gainesville?

Many local hotels and motels offer discounted rates for UF Health patients and their families. The UF Health Shands Hospital Department of Patient and Family Resources maintains a list of area hotels and motels for your convenience. **Please call 352.265.0224 for a copy.** 





# Tissue Plasminogen Activator (Alteplase – Activase®)

What you should know

### What is Alteplase – Activase®?

Alteplase – Activase® is a medication that dissolves blood clots. It is called a thrombolytic agent or more commonly referred to as the "clot buster." It is an intravenous or IV medication usually given through a catheter inserted into a vein in the arm.

# What type of stroke is IV Alteplase – Activase® used for?

It was approved by the FDA in 1996 to treat ischemic type strokes. About 8 out of 10 brain attacks/strokes are ischemic. These types of strokes are most often caused by blood clots that block the flow of blood to the brain, causing tissue death. Alteplase – Activase® is given to help dissolve the clot quickly and restore the blood flow to the brain tissue.

The other common type of brain attack is called a hemorrhagic stroke. This brain attack/stroke is due to bleeding from a blood vessel into the brain. Alteplase – Activase® is not used with this type of brain attack because it could increase the amount of bleeding and possibly cause more damage to the brain.

A CT scan or MRI of the head is done to confirm there is no bleeding in the brain before Alteplase – Activase® is given.

## When is Alteplase – Activase® used?

Alteplase – Activase® has been approved to treat brain attacks in the first three hours following the onset of symptoms. If given promptly, 1 in 3 patients who receive Alteplase – Activase® resolve their symptoms or have major improvement in their stroke symptoms.

#### What are the risks of Alteplase – Activase®?

Bleeding (hemorrhage), in the brain or in other parts of the body, is the most common risk that can occur. In 6 out of 100 patients, bleeding may occur in the brain and cause further injury. For 1 of these 6 patients it may cause death or long-term, serious disability. Advanced age and more severe stroke symptoms are associated with an increased risk of bleeding.

# Should everyone receive Alteplase – Activase® therapy?

Unfortunately the answer is no. Persons who cannot be treated within four hours and thirty minutes of their first symptom, patients with certain medical conditions, and patients with certain types of strokes will not qualify for this treatment.

# Inform your physician if you have had any of the following:

- Recent heart attack
- Serious head trauma within the last three months
- Bleeding from the stomach or urinary tract within the last 21 days
- Major surgery within previous 14 days
- Bleeding disorders
- Use of blood thinners, such as warfarin
- Uncontrolled high blood pressure

Adapted from OS St Francis Medical Center, Form No 966-0041

AHA Guidelines for the Early Management of Patients with Ischemic Stroke, 2005

Early Treatment Confirmed as Key to Stroke Recovery The Lancet, March 2004;363:768-774.

Saver, J. Hemorrhage After Thrombolytic Therapy for Stroke Stroke. 2007;38:2279-2283

Demaerschalk, B. Thrombolytic Therapy for Acute Ischemic Stroke, The Likelihood of Begin Helped Versus Harmed.

ETC> Stroke. 2007;38:2215-2216





# **Information About Stroke for Patients and Families**

#### What is a stroke?

A stroke occurs when a blood clot or torn blood vessel stops blood from reaching the brain. As a result, the part of the body controlled by the damaged area of the brain cannot work properly.

The effects of a stroke can be mild to severe and temporary or permanent. A stroke can affect vision, speech, behavior, the ability to think and the ability to move parts of the body. It can cause death.

The effects of a stroke depend on three factors: the specific area of the brain that is damaged, how much of the brain is affected and how fast blood flow is restored to the affected area.

#### What is an Ischemic Stroke?

**Ischemic** [ih-skee-mik] stroke occurs when a blood vessel that supplies blood to the brain is blocked by a blood clot. This can happen in two ways:

- A clot can form in an artery that is already very narrow. The clot is called a **thrombus** [throm-buhs] and may completely block the artery causing a **thrombotic** [throm-bot-ik] stroke.
- A clot can break off from somewhere else in the body and travel to the brain where it blocks an artery. This kind of clot is called an embolism [em-buh-liz-uhm], causing an embolic [em-bol-ik] stroke.

Ischemic strokes can also be caused by clogged arteries.

- Fat, cholesterol and other substances collect on the wall of the arteries, forming a sticky substance called plaque. Over time, the plaque builds up making it hard for blood to flow properly. This can cause the blood to clot.
- This condition is called **atherosclerosis** [ath-uh-roh-skluh-roh-sis].

Ischemic strokes can also be caused by blood clots that form in the heart.

- These clots travel through the blood and can get stuck in the arteries of the brain.
- This is known as a **cerebral** [suh-ree-bruhl] embolism.

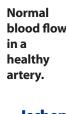
Certain drugs and medical conditions can make your blood more likely to clot and raise your risk for ischemic stroke.

A cause of ischemic stroke in people under age 40 is a **dissection** [dih-sek-shuhn]. This is when the lining of the artery tears.

## What is a Hemorrhagic Stroke?

**Hemorrhagic** [hem-uh-raj-ik] stroke is caused by sudden bleeding in or around the brain. A blood vessel bleeding inside the brain is called a cerebral hemorrhage [hem-er-ij]. Bleeding in the spaces around the brain is called a **subarachnoid** [suhb-uh-rak-noid] hemorrhage.

Sudden bleeding may be caused by the bursting of a blood vessel that has stretched and thinned. This is called an aneurysm [an-yuh-riz-uhm].





#### **Ischemic Stroke**

A blood clot blocking an artery.



Restricted blood flow in a diseased artery.



#### **Hemorrhagic Stroke**

A burst blood vessel disrupting blood flow.







#### What is a Hemorrhagic Stroke? continued

- The most common cause of bleeding inside the brain is high blood pressure.
- > Some people have defects in the blood vessels of the brain that makes this kind of stroke more likely.
- Other causes of hemorrhagic stroke include: smoking, inflamed blood vessels, which may develop from syphilis, tuberculosis or other infections, blood-clotting disorders, head or neck injuries, and cerebral amyloid [am-uh-loid] angiopathy [an-jee-op-a-thee].

### **How is Stroke Diagnosed?**

Diagnosis of a stroke is based on the patient's medical history, physical exam and diagnostic studies.

If stroke is suspected, the doctor may order an MRI or computed **tomography** [tuh-mog-ruh-fee] scan, often called a CT, to determine whether the stroke was caused by a clot or from bleeding inside the brain.

If artery disease or narrowing of one of the large arteries in the neck (the carotid arteries) is suspected, the following additional tests may be done:

- Ultrasound study of the arteries in the head and neck.
- Magnetic resonance angiography [an–jee-og-ruh-fee], often called an MRA, scan to evaluate the flow of blood through the blood vessels.
- **Angiogram**, which is a special type of X-ray picture that shows specific arteries.
- If evidence shows that the stroke is caused by a clot that formed in the heart, the doctor may order a chest X-ray, an **EKG** a simple test that traces the electrical activity of the heart, an echocardiograph [ek-oh-kahr-dee-uh-graf] a painless test that allows doctors to see if your heart is functioning normally, or another heart imaging test.
- Other laboratory tests may be done to see if other conditions are present, check the person's overall health and see if the patient's blood clots too easily.

#### **How is Stroke Treated?**

Fast medical treatment may prevent life-threatening complications, more widespread brain damage and is critical to ensure the best recovery.

If emergency treatment is obtained within the first few hours after symptoms begin, some people with a stroke caused by a blood clot may be able to receive a medication to dissolve the clot, helping to increase the chance of a full recovery.

Treatment for stroke may include medication or surgery, and is based on the type of stroke and the seriousness of the symptoms.

The goals of treatment are: to prevent life-threatening complications caused by the stroke, to prevent future strokes, to reduce disability, to prevent long-term complications, and to help the patient get back as much normal function as possible through rehabilitation.

## **What Happens After a Stroke?**

A physical therapist may help the patient regain muscle strength, balance, or the ability to walk.

A speech therapist may evaluate how well the patient can eat, drink and speak.

If an arm or leg is paralyzed an occupational therapist may help the patient re-learn how to dress him/herself, bathe, cook and perform other tasks.

## Where Can I Stay in Gainesville?

The UF Health Shands Hospital Department of Patient and Family Resources maintains a list of area hotels and motels for your convenience. Please call 352.265.0224 for a copy.

