

# Chapter 3: Emergency Department

## Tip

Call 911 right away if you have symptoms of stroke.

Treatment started within the first few hours is important to prevent brain injury.

Treatment begins in the Emergency Department. The Emergency Department may use a “stroke code.” This code calls a specialized stroke team to your bedside. This process helps you quickly get care.

Members of your stroke team will determine if you are having a stroke by reviewing your:

- health history
- symptoms
- physical exam
- test results.

They may talk with members of your care circle about treatment options.

## Tests

### Tip

Members of your stroke team will talk with you if you need other tests.

### Blood tests

- You will have a blood test. This helps your stroke care team identify your available treatment options.

### Imaging tests

- **CT (computed tomography) scan**  
You will have a CT scan. This scan uses X-ray and a computer to get an in-depth look at your brain. The result is an image that provides a clear and detailed picture.

A CT scan will be done to rule out hemorrhage (bleeding) as the type of stroke.

The scan usually takes less than 5 minutes.

- **CT angiography (CTA)**  
This painless test uses CT technology to get a 3-D view of your blood vessels. Like a CT scan, a CTA uses X-ray and a computer. It provides an in-depth look at your blood vessels. You will have an intravenous (IV) contrast injection to help see your blood vessels better.

A CTA may be done to identify your possible treatment options.

The scan usually takes less than 5 minutes.

### **MRI (magnetic resonance imaging)**

This is a painless way to look inside your body without using X-rays. MRI does not use radiation.

MRI uses a magnetic field to make three-dimensional (3-D) images of your brain. These images show the injured area of your brain.

The scan usually takes 45 to 90 minutes.

### **Heart test**

#### **Electrocardiogram (EKG)**

This is a painless heart rhythm test done at the bedside.

An EKG may be done to find the cause of your stroke and identify treatment options.

The scan usually takes less than 5 minutes.

## **Treatment**

Your treatment will depend on your type of stroke. There are several types of treatment.

### **Ischemic stroke treatment**

Your stroke care team may start treatment to dissolve or remove a blood clot.

### **Medicine**

#### **Thrombolytic (tenecteplase or alteplase)**

This medicine is used to treat strokes caused by blood clots. It works by quickly dissolving the clot and allowing blood to flow through the artery.

You can only get this medicine in the hospital. You will receive it through an intravenous (IV) line in your hand or arm. This medicine should be given as soon as possible after the start of stroke symptoms.

This medicine may cause bleeding (including bleeding into the brain). Your health care provider will determine if a thrombolytic medicine is right for you.

## Procedure

### **Mechanical thrombectomy (intra-arterial treatment)**

This procedure is done to open a large artery that is blocked.

A long, narrow tube (catheter) is inserted through a large artery in your groin and guided to the blood clot. The goal is to remove the clot and restore blood flow.

### **Hemorrhagic stroke treatment**

Your stroke care team will start treatment to stop the bleeding in your brain. Your treatment may also help reduce pressure on your brain.

## Medicine

### **Blood pressure medicine**

High blood pressure may lead to more bleeding in your brain. You may receive medicine through an intravenous (IV) line to quickly manage your blood pressure.

## Transfusion

### **Transfusion**

If you are taking anticoagulant medicine (known as blood thinners), your blood will not clot as quickly. During a stroke, this medicine may lead to more bleeding in your brain.

To control your blood clotting, you may need a blood transfusion. This may help your blood clot quicker and lead to less bleeding in your brain. You will receive a blood product that is compatible with your blood type.

