

Neuroradiology

This pamphlet's purpose is to provide basic information to help you understand the acute stroke, interventional thrombolysis procedure.

The physicians and physician assistants in the Division of Diagnostic and Interventional Neuroradiology at the University of Rochester Medical Center / Strong Memorial Hospital will answer any questions you may have before they perform your procedure.

If you do have any questions or concerns, please ask during your pre-procedure interview or call us ahead of time at 585-273-1563.

Radiologists:

- ◆ P-L Westesson, MD, PhD, DDS,
Director, Diagnostic & Interventional
Neuroradiology
- ◆ Jeevak Almast, MD,
Attending Neuroradiologist
- ◆ John Deveikis, MD,
Attending Neuroradiologist
- ◆ Sven Ekholm, MD, PhD,
Attending Neuroradiologist
- ◆ Henry Wang, MD, PhD,
Attending Neuroradiologist

Physician Assistants:

- ◆ Stephen D'Ambrosio, MPAS, RPAC,
Physician Assistant
- ◆ Iris Young, RPA-C, Physician Assistant

Directions to Strong Memorial Hospital

From the East:

NYS Thruway (I-90) to Exit 46; I-390 North to Exit 16 (W. Henrietta Rd); right on W. Henrietta Rd (Rte 15); proceed approximately two miles to Elmwood Avenue; make a left on to Elmwood Ave; the hospital will be on your left hand side; parking garage will be on the left.

From the West:

NYS Thruway (I-90) to Exit 47; I-490 East to I-390 South to Exit 16A (E. River Rd.); right on East River Rd. and right on Kendrick Rd; bear left onto Lattimore Rd; one block to Crittenden Rd.; take right on Crittenden, parking garage will be on the left.

From the South:

I-390 North to Exit 16 (W. Henrietta Rd.); right on W. Henrietta Rd (Rte. 15); proceed two miles and make a left on Elmwood Avenue; parking garage will be on the left.

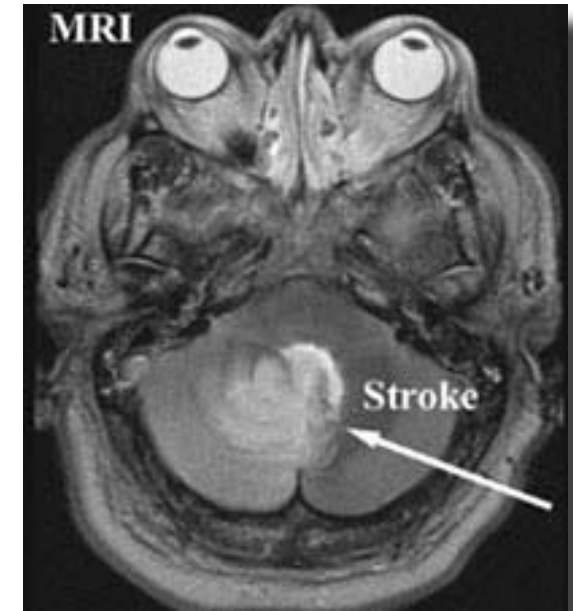
From Parking Garage to the Patient Information Desk (Main Lobby) to the Imaging Sciences Department (Ground Floor)

Take the garage elevators to the 1st floor. Follow the signs to the main lobby. Go through the main lobby passing the information desk. Follow the Red (R) ceiling tags to the red elevators. Take the red elevators to the ground floor. Exiting towards the red corridor turn right and follow the black ceiling tiles marked (x) to the Imaging Sciences/Radiology reception area (G-3300).

NEURORADIOLOGY

University Imaging at Strong Memorial Hospital
601 Elmwood Avenue
Rochester, NY 14642-8648
Telephone: 585-273-1563

Acute Stroke, Interventional Thrombolysis



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Frequently Asked Questions Regarding a Stroke

Q. What is a Stroke?

A. A stroke occurs when a part of the brain is deprived of blood supply. The brain cells need this blood supply constantly to survive. There are two types of stroke—one is due to ischemia when there is a blockage of the artery and the other is hemorrhagic stroke in which there is bleeding into the brain.

Ischemic stroke accounts for more than 80% of all strokes. If the immediate impairment resolves it is called a transient ischemic attack (TIA). TIA should be taken seriously as a stroke because they are indications that the patient is at risk for a permanent stroke.

One cause of stroke and TIA is carotid artery disease. When there is substantial plaque build up in the carotid artery this can block the blood supply to the brain. In other cases, blood clots may form in the heart & travel to the brain arteries.

Hemorrhagic strokes are less frequent. They result from a ruptured blood vessel or an aneurysm.

Q. What is the treatment for an ischemic stroke?

A. Treatment is of course dependent on the type of stroke. Most important is how quickly the patient arrives to the emergency department. The three principle interventional radiology treatments are:

- ◆ Prevent more blockage from occurring
- ◆ Dissolve the blood clots in the artery
- ◆ Open narrowed arteries.

Q. What are the risk factors for stroke?

A. The risk factors for stroke are high blood pressure, heart disease, atherosclerosis, a history of stroke or TIA, smoking, family history of stroke or TIA, diabetes, hyperhomocysteinemia.

Q. What is the treatment to open clotted blood vessels?

A. It is sometimes possible to dissolve the blood clot in the artery in the brain by putting medication right into the clot. This must be done within the first six hours after a stroke. The earlier the treatment can be instituted the better is the effect. This is done by an interventional neuro-radiologist who threads a thin tube (catheter) into the blood vessel in the brain starting in the groin. Another possible treatment is to use small catheters to break-up and remove blood clot from the blood vessel. These newer treatments are less proven than intravenous TPA, but initial results are promising. These treatments do have an approximately 10% risk of complications that worsen the neurological condition of the patient.

Q. How is a stroke diagnosed?

A. CT is the prime diagnostic method performed in the emergency room. CT angiography, MRI and MRI angiography are other techniques that can help diagnosis stroke as well as ultrasound. CT generates detailed images of the brain and can confirm the diagnosis of stroke and can tell whether the stroke was caused by hemorrhage into the brain or blockage of the artery.

Magnetic resonance imaging (MRI) can be used to create images of the brain and can also be used to create images of a blood vessel—so called MR angiogram (MRA)

Ultrasound uses a technique that is called Doppler ultrasound and creates images using the sound waves from the blood vessels. Ultrasound can be used to determine if there is stenosis of the blood vessels in the neck. By these techniques the doctors can pinpoint the area of the stroke in the brain as well as the area of the blockage of the vessels.

Stroke is a medical emergency and should be treated immediately. **Call 911 immediately** if you have these symptoms:

- Sudden onset of numbness or weakness in the face, arm, and/or leg, especially when it is confined to one side of the body.
- Sudden confusion, difficulty speaking or understanding speech.
- Problems seeing including double vision, blurry vision, or partial blindness in one or both eyes.
- Sudden onset dizziness, trouble walking, loss of balance or coordination.

