

Cerebral Angiogram

How to prepare and what to expect

This handout explains a cerebral angiogram, how to prepare, what to expect during the procedure, and self-care at home.

What is a Cerebral Angiogram?

A cerebral angiogram is a procedure that provides a detailed view of the blood vessels in the brain. This is a *diagnostic* test that uses *contrast* (X-ray dye) and X-ray images to help your doctor see how blood flows through your brain.

Your doctor requested this procedure because it gives much more detailed information than *magnetic resonance imaging* (MRI) or *computed tomography* (CT) scans.



During your cerebral angiogram, your doctors will view X-ray images of your blood vessels on a monitor.

Day Before Your Procedure

A nurse will call you to review your instructions. The nurse will:

- Ask if you have allergies to any medicines, contrast, or shellfish
- Remind you **not to eat or drink anything starting at least 2 hours before you arrive for your procedure.**

Procedure Day

At Home

- Up until **8 hours** before you arrive at the hospital, eat a healthy, balanced diet.
- Up until **6 hours** before you arrive at the hospital, you can eat a light meal. Avoid heavy foods, such as those with a large amount of fat.

- Up until **2 hours** before you arrive at the hospital, we encourage you to drink clear liquids such as water, plain tea or coffee (no milk or creamer), clear broth, Gatorade, soda, apple juice, or Boost Breeze liquid supplement.
 - **If you have diabetes:** Drink clear liquids such as water, plain tea or coffee (no milk or creamer), clear broth, and diet soda. Avoid juice, regular soda, and sports drinks, since these can raise your blood sugar levels.
- **Starting 2 hours** before you arrive at the hospital, do not eat or drink anything, unless your doctor or nurse has told you otherwise.

At the Hospital

- Check in at the Ambulatory Procedure Area on the 8th floor of the Maleng Building.
- A nurse will greet you and help prepare you for your procedure:
 - You will put on a hospital gown.
 - Your *vital signs* (pulse rate, temperature, and blood pressure) will be measured.
 - An *intravenous* (IV) line will be inserted into your arm vein.
 - Blood will be drawn using the IV.

The nurse will also review your health history and discharge instructions.

- Our transport service will take you on a stretcher to a holding area. The Angiography nurse will greet you and place patches called *electrodes* on your chest to monitor your heart.
- The Neurosurgery Team will review the consent form with you.
- A *sedative* (medicine that helps you relax) will be given through the IV in your arm.
- You will be taken into the Neurovascular Operating Room for the procedure.

During the Procedure

- You will be awake but very relaxed during the procedure. This allows you to follow simple instructions given by the Neurosurgeon or Radiologist.
- You will lie flat on an exam table.

- Depending on what your doctor recommends, either your right wrist or groin area will be cleaned and covered with a sterile fabric.
 - The wrist is called the *transradial* approach and the groin is called the *femoral artery* approach.
- The Neurosurgery Team will inject a numbing medicine (*local anesthetic*) into the skin to lessen any discomfort.



An angiogram image of blood vessels in the brain.

A small plastic catheter will be inserted into your *radial artery* (blood vessel in your wrist) or *femoral artery* (blood vessel in your thigh). The catheter will be guided up to the several arteries that feed your brain and head. A series of X-ray images will be taken while the catheter is being moved.

- Contrast will be injected through the catheter into each artery. A series of X-rays will be taken while the contrast circulates through the blood vessels in your brain. Contrast helps the details of your brain show up better on the images.
- You may feel a flushing sensation, heat, or lightheadedness, or even see flashing lights when the contrast is injected. These feelings are common and are not harmful.
- The catheter will then be removed. The nurse or doctor will apply pressure for 15 minutes at the wrist or groin puncture site.
- The procedure will last about 1 hour.

After Your Procedure

- After your procedure is done, you will be taken back to the Ambulatory Procedure Area. Your friends and family can join you there while you are monitored.
- For wrist procedures, a snug wristband will be placed around your right wrist for 2 hours then removed.
- For groin procedures, you must lie flat for 2 hours. You will be tilted upward to allow you to eat and drink.
- During this time, your nurses will:
 - Watch you closely
 - Tilt your bed so you can eat and drink
 - Help you use a bed pan if you need to urinate
 - Help you change position if you are not comfortable

- Check your vital signs and your level of awareness
- Check your procedure site every hour
- After 2 hours, your nurses will help you get up and walk.
- You must have a responsible adult with you when you are ready to leave. You cannot drive yourself home after this procedure.
- Your doctor will give you the test results at your follow-up clinic visit and talk with you about your care plan.

At Home

Your health is important to us. A nurse will call you the day after your procedure to ask how you are doing and answer your questions.

For Your Safety

Medicine you were given for the procedure can affect your judgment.

For 24 hours after your procedure:

- Do not drink alcohol.
- Do not drive or use machinery.
- Do not sign legal papers, make important decisions, or be responsible for the care of another person.

Self-care

- Do not submerge in a bath or pool for the first 72 hours after your procedure.
- You may shower any time after the procedure. After 24 hours, you may remove the dressing and take a shower.
- For mild to moderate pain, you may take non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin) or naproxen (Aleve, Naprosyn). Follow dose instructions on the bottle.
- Walk often to speed your recovery. It is OK to walk up and down stairs.

For 3 Days After Your Procedure

- Do not take baths or allow the puncture site to be submerged in water.

- After a wrist procedure, do not lift anything that weighs more than 10 pounds with your right hand.
- After a groin procedure do not do any deep knee bends or lift anything that weighs more than 10 pounds (a gallon of milk weighs almost 9 pounds).
- Do not do strenuous exercise (anything that increases your heart rate or makes you breathe hard).

When to Call for Help

It is normal to have some bruising and tenderness in your wrist and forearm or groin area. This should go away after a few days.

But, call 911 right away if you:

- Begin to bleed at your incision site – apply ongoing pressure while you wait for help to arrive
- Develop a large lump at your groin area
- Develop pain, numbness, or weakness of your right hand
- Have any signs of a stroke, such as:
 - Weakness or loss of feeling
 - Having a hard time talking, walking, or seeing
 - A severe headache that starts suddenly

Questions?

Your questions are important. Call your healthcare provider if you have questions or concerns.

Weekdays from 8 a.m. to 4 p.m., call 206.744.9300 and press 2 to talk with a clinic nurse.