Carotid Angiogram

How to prepare for your procedure

What is a carotid angiogram?

An angiogram is an X-ray picture of the inside of your blood vessels. A carotid angiogram is a study of the inside of your carotid arteries.

The carotid artery is the large artery that supplies the brain with oxygen-rich blood. The carotid artery carries blood from the heart to the head via the neck.

If a person has a blockage in the carotid artery, such as a carotid stenosis (narrowing of the carotid artery) or atherosclerosis (plaque buildup that causes a narrowing of the artery), symptoms may include dizziness, confusion, or stroke.

If a narrowing is found during the carotid angiogram, an angioplasty (stretching of the artery with a tiny balloon inside the vessel) can be done or a stent (mesh-metal tube) can be placed to hold the artery open.

How to prepare for your procedure

- Tell your health care provider if you have had any kidney problems or reactions to iodine-containing items such as contrast agent. If so, your primary health care provider will prescribe medicine for you to take before the procedure.

- Eat a light meal the night before, but do not eat or drink after midnight. If you have a late afternoon appointment, you may have clear liquids for breakfast (such as apple juice, Jell-O, or clear broth), but nothing after that.

- If you are a diabetic, you will need to consult your primary care provider about what to eat and how you should control your diabetes medicines.
What should I expect when I get to the hospital?

- Check in at the front desk in Imaging Services.
- After you check in, you will change into a hospital gown. You will be given a bag for your belongings.
- You will be taken to a special area where:
  - A nurse will ask you questions about your health history.
  - An IV (intravenous line) will be started to give you fluid and medicine during the procedure.
  - The radiology doctor will explain the procedure and obtain your consent. You will be able to ask any questions you have at this time.

How does the procedure work?

The nurse will stay with you during the procedure to watch your blood pressure, heart rate, breathing rate, and your comfort level.

A radiology technologist will clean your skin with a special soap and may shave some hair in the areas where the doctor will be working. The nurse may place a tube in your bladder to drain urine.

Angiography involves placing a long, slim tube (called a catheter) into a blood vessel in the groin. Even though it seems like a long way from the groin area to the neck, the groin site is the safest place to enter an artery.

To prevent you from feeling pain during catheter placement, you will be given a numbing drug at the groin site. You will also be given a drug through your IV to help you relax and feel as comfortable as possible.

The catheter will be placed and guided to the problem blood vessel. Contrast agent is then sent into your blood vessel. You may feel a warm or hot flush spreading all over your body when the contrast goes in. You may also feel like you have to urinate or have a bowel movement. These feelings are normal and should only last a few seconds.

X-rays are taken of your head and neck while the contrast moves through your blood vessel. The X-rays show where an artery might be blocked, narrowed, leaking, or enlarged.

If an intervention can repair the area, with angioplasty or a stent, that procedure will be done at this point. During the procedure, it is normal to feel pressure or slight pain at the site of the plasty or stenting.
If an intervention is done, X-rays will be taken again to show the change in the blood flow.

If the doctors are happy with the change, the catheter is removed and pressure will be given at the puncture site for 20 to 30 minutes, depending on how long it takes your blood to clot.

An angiogram takes about 1½ hours if it is done on an outpatient basis. If an intervention is needed to fix a problem, it will take more time. People waiting for you should expect the procedure to take 2 to 4 hours. This includes time to prepare you, do the procedure, and apply pressure at the puncture site.

It is a good idea to plan for an overnight stay. Some patients are admitted to the hospital overnight for observation.

What are possible risks of an angiogram?

You may have:

- An allergic reaction to the contrast, which may cause hives, a drop in blood pressure, swelling of the skin, or loss of consciousness.
- Minor discomfort if the local anesthetic does not completely numb the area and/or an allergic reaction to the drug used in the local anesthetic.
- A kidney problem that is made worse by the contrast.
- A clot that forms around the catheter insertion site or at the catheter tip that blocks your blood vessel.
- An injury to the groin artery from placement of the catheter, causing bleeding or a blockage of blood flow to the leg.
- Surgery to correct damage caused by the procedure.
- An infection from the puncture site.

What should I expect after my procedure?

You will be watched closely for a short time in the Imaging Services department.

Most patients then go to a short-stay unit in the hospital, unless your referring doctor has made other plans. Your family member or driver may go with you to this area.

Patients are usually monitored for 4 to 6 hours and must remain flat in bed during most of this time to reduce any bleeding from the groin site. Plan to stay for this length of time.
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. UWMC Radiology staff are also available to help at any time.

Imaging Services:
206-598-6200

You should be able to eat, drink, and take your normal medicines. If an intervention was needed, you may need to stay overnight.

Before you leave, a nurse will give you a written plan to follow at home. Make sure you know when to come back for a follow-up visit.

What warning signs or symptoms should I watch for?

Call your provider right away if:

- Your leg or foot becomes cold or numb.
- The puncture site begins to bleed, swell, or becomes more painful.
- You have slurred speech, balance problems, or trouble using your arm.
- You develop a rash.

How and when will I get my results?

Check with your referring doctor about when to expect your results. Your referring doctor will be given your results on the same day that you have your angiogram.