

Society for Vascular Nursing Patient Education: ARTERIOGRAM

What is an Arteriogram?

An arteriogram (angiogram) is a test that uses a special x-ray (fluoroscopy) to look at arteries or blood vessels in your body. An arteriogram is done to check for arteries that have become narrowed, blocked, or to check for weakening of blood vessel. A specially trained doctor performs the arteriogram. The test is done by injecting x-ray contrast through a catheter put into an artery in your groin or arm. The catheter is advanced to the affected artery. Then a series of x-rays are taken. The x-ray contrast allows the doctor to see a "road map" of your arteries.

What to expect prior to the Arteriogram:

- Tell your healthcare provider if you have any medication, drug allergies, if you're allergic to x-ray contrast, iodine or shellfish.
- Blood tests may be done to check your blood count and kidney function.
- Remind your healthcare provider if you have kidney disease. They may want to start a medicine to protect the kidneys from being injured from the x-ray contrast.
- You will be asked to drink more liquids the day before and after the procedure to flush the x-ray contrast out of your kidneys.
- EATING: Do not eat or drink after midnight the day of the test.
- MEDICINES: Take your medicines as ordered by your healthcare provider. Bring your medicines or a list of them with you the day of the test. Include any over-the-counter or herbal supplements. It is very important to report any medications that thin your blood or medications you are taking for diabetes.
- You cannot drive after the test. Someone will need to drive you home. You must stay with someone overnight, or have someone stay with you.
- Your healthcare provider will explain the test to you, will answer your questions, and will ask you to sign a written consent.

Why is an Arteriogram necessary?

Your doctor will want you to have an arteriogram done if you have signs and symptoms of narrowed, weakened or blocked arteries that may require a procedure to improve the blood flow.

This test will help your healthcare provider see exactly where the artery may be blocked, how severe the blockage is, and what is causing the blockage in order to plan the best treatment for you.

What to expect during the Arteriogram:

- The arteriogram is often an outpatient test that can take about 1 - 1 ½ hours. You may be given fluids through your vein (intravenous fluids) before the procedure.
- Electrodes may be placed on your chest to monitor your heart rate and a blood pressure cuff will be placed on your arm to monitor your blood pressure. A small probe will be put on your finger to watch your oxygen level.
- Intravenous fluids (IV) will be started and you will receive medicine to help you relax.
- If needed you will be given oxygen through a small tube called nasal prong, that is placed in your nose.
- To clean the area used for the test your healthcare provider will clip the hairs from your groin or arm.
- To make sure you do not feel pain during the test, the healthcare provider will inject a numbing medicine in the cleaned area.
- A small thin tube called a catheter will be inserted into area cleaned for the test. The doctor will move the catheter up to the affected artery.
- X-ray contrast will be injected to take pictures of the artery. Injection of x-ray contrast may cause you to feel warm, and your face may appear warm. You may have a metallic taste in your mouth. These feelings are normal and should last only a minute.

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Angioplasty / Stenting: When an angioplasty is done, a catheter with a balloon on it is placed into the narrowed area in the artery and inflated. As the balloon expands, it enlarges the inside of the artery. After the balloon is deflated, an x-ray is taken to see if the artery is open. Sometimes the blockage needs the help of a wire mesh tube called a stent to keep the artery open. The stent is pre-attached to the balloon, and when the balloon is inflated, the stent holds the artery open and is left in the artery permanently. The balloon is then deflated and removed.

Thrombolysis / Clot Busting Medicine: Sometimes a blood clot is blocking the blood flow to an extremity. Medicine called a thrombolytic (“clot buster”) is sometimes given directly through the catheter at the time of the arteriogram in an attempt to dissolve or break up the clot and improve blood flow to that extremity.

What to expect after the Arteriogram

- The catheter in your artery will be removed, and either direct pressure will be applied to the injection site until the bleeding stops or a closure device may be used to close the needle hole.
- You will have a dressing over the puncture site.
- If the artery in your groin was used, you may be asked to stay in bed for several hours afterwards. Your doctor may ask that you to keep the leg or arm used for the test straight for a while.
- Your temperature, blood pressure, oxygen and heart rate will be monitored
- Your pulses where the catheter was inserted will be checked.
- You will drink liquids, walk and urinate before you are allowed to go home after the test.

Call your healthcare provider if any of the following occur: • Bleeding, oozing, drainage, increased swelling or bruising at the puncture site or in the area • Numbness, tingling, pain in your hand/arm, or changes in the skin color of your leg or arm that was used for the arteriogram needle stick • Temperature of 100 degrees Fahrenheit or greater • Difficulty in breathing or a change in the way you breathe • Pressure, tightness or pain in your chest • Unusual weakness or faintness

When You Return Home

Do Not

- For the first 72 hours after procedure, avoid strenuous activity including: lifting or moving heavy objects more than 10 pounds, avoid vigorous exercise (jogging, skating, biking, aerobics), avoid straining to move your bowels, avoid sexual activity.
- Shower until the day after your procedure. You may remove the bandage from the injection site at that time and wash the site gently with mild soap and water. Pat dry. Check the site for any signs of bleeding, swelling, bruising or drainage. If you see these changes, call your healthcare provider.
- Drive until after your healthcare provider say you can.

Pain Management

- The puncture site may be tender for 24-48 hours. If you have pain near the puncture site, take a non-aspirin pain reliever such as acetaminophen (Tylenol) in the recommended dose for discomfort.
- Resume taking all previously ordered medicines unless told otherwise by your healthcare provider.

Return to work – you may miss a few days of work after this test. Discuss this with your healthcare provider.

DO NOT SMOKE! Ask friends and family not to smoke around you.

If bleeding or swelling occurs at the puncture site, sit or lie down and apply firm pressure over the puncture site until the bleeding stops. Call your healthcare provider right away or go to the nearest Emergency Room if this occurs.