

Angiogram/Arteriogram

An angiogram, or arteriogram, is an X-ray test that uses an injection of dye (or contrast) to examine blood vessels of the organs, head, neck, arms or legs. These tests identify the area and extent of any artery blockage or narrowing. The contrast solution allows the blood vessels to be seen more clearly. The procedure usually involves only mild discomfort and takes between 1 and 2 hours to complete.

If you have any questions, please ask your physician or nurse.

Before the test

At home

If your test is scheduled to begin at or before 12 noon, follow these diet instructions:

Do not eat any solid foods after midnight the night before your test. You may drink water or black coffee with nothing added (no cream, milk or sugar) until 3 am.

Do not drink liquids after 3 am.

Needed medications may be taken with sips of water.

If your test is scheduled to begin after 12 noon, follow these diet instructions:

Do not eat any solid foods after 6 am. You may drink water or black coffee with nothing added (no cream, milk or sugar) until 9 am.

Do not drink liquids after 9 am.

Needed medications may be taken with sips of water.

At the hospital

Your physician will give you specific instructions about where and when to check in for your test.

An IV (into the vein) line will be started before the test. This will allow the care team to give you fluids and medications as needed.

The physician from the Interventional Radiology (IR) Department will explain the test and discuss the risks involved. After the physician has answered your questions, you will be asked to give your written consent for the procedure.

Before the test begins, the physician will perform a brief exam and ask you questions about your medical history. Please tell the physician about any allergies or if you have ever had an unusual reaction to iodine or contrast solution.

You will be given a hospital gown to wear. Please remove your clothing, including underwear. Remove your watch, glasses, all jewelry and hairpins. If you are receiving general anesthesia, you will be asked to remove your dentures or bridgework. Please give all valuable items to your family or leave them at home. You will also be asked to empty your bladder. The nurse will check your temperature, pulse, respiration and blood pressure and answer any questions you may have.

If you are having this test while you are a patient in the hospital

The test may not be scheduled for an exact time. You will be told as soon as the IR Department calls for you. When the patient escort arrives, you will be helped onto a cart, given a blanket to keep you warm and then taken to the IR Department.

Please go to nm.org/visitors for current visitor policies.

During the test

In the IR procedure room, you will be helped onto an X-ray table. The nurse may give you some medicine through your IV to help you relax. This medication will make you feel drowsy, but comfortable during the test.

In some cases, general anesthesia may be used. This begins with IV medicine and includes breathing anesthetic gases mixed with oxygen. You will not be aware of the test or your surroundings. A breathing tube will be placed into your windpipe to help you breathe during the test.

The physician will select the site to puncture the skin. The femoral artery in the groin is most often used. Other sites, such as the brachial artery or the radial artery in the arm, may also be used. The area around the puncture site will be shaved and cleansed with a special antiseptic that may feel cold. A local anesthetic (similar to novocaine) will be used to numb the area. When the area is numb, a puncture will be made and the physician will insert a catheter into your artery. This catheter is a long, thin, flexible tube that can be guided to a certain position. The catheter placement is not usually painful. You may feel pressure and mild discomfort at the puncture site. If needed, added injections of local anesthetic will be given.

When the catheter is in the proper position, the contrast dye will be injected into the catheter and carried through the blood vessels. As the contrast is injected, you may feel a sudden warm or hot sensation. This will only last a few seconds. Once the contrast solution is injected, a series of X-rays will be taken. You may be asked to hold your breath for a few seconds as the X-rays are taken. When all X-rays have been taken, the catheter will be removed. A closure device may be used to seal the puncture site. In some cases, firm pressure will be placed over the puncture site for at least 10 to 20 minutes to seal the puncture site. This will complete the test.

After the test

You will be asked to remain still for 1 to 6 hours. During this period, if you want to use the restroom, you must use a urinal or bedpan. The nurse will help you if needed. It is very important to keep your leg or arm straight. If the femoral artery in the groin was used, you will need to lie flat in bed. The nurse will frequently check your blood pressure, temperature and pulse, along with the puncture site and pulse in the leg or arm used in the test.

An ice pack may be placed over the site to prevent swelling and relieve discomfort.

Do not eat solid foods until you have the physician's permission. You will be asked to drink plenty of fluids. You might have the IV until the next morning so that you can receive added fluids. This will help flush out the contrast used during the test. Notify the nurse immediately if you notice any of the following symptoms.

- Pain or swelling at the puncture site.
- Bleeding or bruising at the puncture site.
- Numbness, tingling, pain or any change in normal sensation in your arm or leg.
- Difficulty moving your fingers, hands, feet or legs.
- Coolness or discoloration of your hand or foot.
- Changes in vision.
- Difficulty speaking or slurred speech.

Your physician will discuss the results of the test with you. If you have any questions or concerns, please ask your physician or nurse.

Additional instructions

Diet

Unless instructed otherwise, you may resume your regular diet when you leave the hospital. You should drink at least 6 glasses of water (8 ounces each) over the next 24 hours. Water helps to clear the dye used during the procedure from your body. Do not drink alcohol for 24 hours.

Activity

Do not drive for 24 hours after the procedure. For the next 3 days, do not do physical exercise or lift anything heavier than 10 pounds. Consult your physician before resuming strenuous physical activity. You may shower 24 hours after the test, but do not let water directly hit the puncture site. Do not scrub the area. Do not take a tub bath for 7 days. You may resume all other daily activities 24 hours after the test. This includes normal social activities.

Wound site/bleeding

A small bruise may be present. If you notice any bleeding from the puncture site, please do the following:

- **Immediately lie flat.**
- **Apply firm pressure over the site for 15 minutes. You may use a clean cloth or tissue to apply pressure. If possible, have another person apply pressure.**
- **After 15 minutes, slowly remove pressure. The wound should be dry and flat without bleeding. Cover the wound with an adhesive bandage.**
- **Call your physician right away.**

The following signs could indicate that the puncture of the artery has reopened and that there is active bleeding from the artery:

- Sudden increase in swelling of the area around the puncture site
- Blood streaming from the site that will not stop

If the bleeding and/or swelling continues as you keep applying pressure, it is considered a medical emergency!

- **Continue to apply firm pressure over the puncture site**
- **Call 911**

Notify your physician if the following occurs:

- Drainage or oozing from the puncture site
- Swelling at the puncture site
- Increasing size of the bruise with discoloration extending past the initial puncture site
- Numbness or tingling in your arm or leg
- Difficulty moving your fingers, toes, feet or legs
- Discoloration and/or coolness of your hand or foot