Intermountain® Healthcare

Peripheral Angiogram

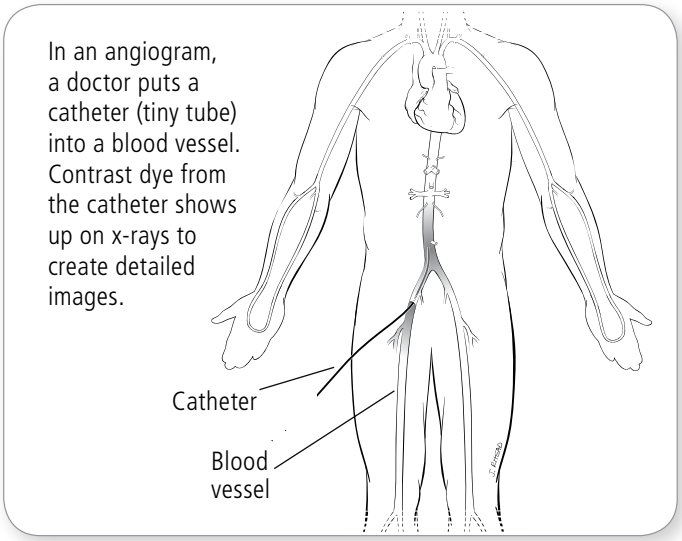
What is a peripheral angiogram?

An **angiogram** is a test used to diagnose problems with your arteries and veins. You may be familiar with a coronary angiogram, a test that focuses on the blood vessels feeding the heart. In a **peripheral angiogram**, a doctor checks for problems in the blood vessels in other areas of your body. An angiogram uses real-time image guidance (**fluoroscopy**) and provides detailed information to help in planning the best treatment.

How long does it take? An angiogram usually takes about 1 to 2 hours. You'll also need to stay 4 to 8 hours afterward for observation in a special recovery area.

How do I prepare?

- **Avoid food and drink the night before.** Do NOT eat solid foods or drink liquids after midnight on the night before the exam. (If you do, your procedure might be cancelled and rescheduled.)
- **Arrange for a ride.** Ask someone to drive you to and from the hospital.
- **Tell your doctor about your allergies.** Your doctor especially needs to know if you have asthma, if you're allergic to any medications or dyes, or if you've ever had a bad reaction to contrast dye.
- **Talk to your doctor about your medications.** Tell your doctor about the medications you take, and follow your doctor's directions. You may be prescribed medication to take a few days before your procedure. If you take metformin (Glucophage), you'll need to stop taking it the day of the procedure and wait to restart it until at least 2 days after. You'll need blood tests before starting it again. Monitor your blood glucose during this time, and call your doctor if it's higher than 300 mg/dL.
- **Arrive one and a half hours before your scheduled procedure time.**



In an angiogram, a doctor puts a catheter (tiny tube) into a blood vessel. Contrast dye from the catheter shows up on x-rays to create detailed images.

What happens in the procedure?

The procedure takes an hour or two. You'll be relaxed but awake, because you might be asked to hold your breath, breathe deeply, or cough. Here is what will happen:

- **Before the procedure starts:** A nurse will place an IV line to give you sedation (medication that makes you feel comfortable). You will be connected to a heart monitor and a blood pressure monitor. A healthcare provider will clean the skin and clip the hair in the area where the catheter will be inserted — often the groin, but sometimes in the arm or neck.
- **Local anesthetic:** The doctor will inject numbing medication in the area. This usually feels like a pinprick with some burning, and only lasts a few seconds.
- **Placing the catheter:** The doctor will insert a **sheath** (short plastic sleeve) into a blood vessel. You'll feel some pressure at first. A **catheter** (a narrow tube) will be put into the sheath and guided to the right area.
- **Angiogram:** A clear liquid called **contrast dye** will be injected through the catheter. For a few seconds, you'll feel a warm sensation. The contrast dye shows up on x-rays to create detailed images of your artery or vein as the blood flows through it.

- **Removing the catheter:** The catheter will be withdrawn and the sheath will be removed. A healthcare provider may put pressure on the insertion site to prevent bleeding.

What happens afterward?

- You'll be moved to a recovery unit. You may need to lie flat for up to 4 to 8 hours.
- In the first few hours, you may want to drink plenty of fluids to flush the contrast dye out of your body.
- In case you have temporary numbness or weakness in your leg, special steps will be taken to make sure you're safe when you first get up. If you need to urinate and your leg is numb, it may not be safe to walk to the bathroom. You will use a urinal or bedpan instead.

When you get home

- **The first 48 hours:** Watch for swelling or bleeding. The site will be bruised, but this should go away in a week or so. Avoid bending or squatting. Avoid intense activity such as climbing stairs, running, or lifting anything over 20 pounds. Take short walks (5 to 10 minutes) four or five times a day. Avoid constipation.
- **Care for the puncture site:** Avoid hot baths, hot tubs, or swimming pools for the first 5 days or until the wound is closed. Showers are okay after 24 hours, but don't let the spray hit the site. If the site is sealed with a special closure device, ask your doctor for directions.
- **Returning to work:** When you go back to work depends on your physical condition and the nature of your job. Check with your doctor.
- **Getting the results:** A **radiologist**, a doctor who has special training in reading the results of angiograms and other imaging tests, will analyze the images and send a report to your doctor. You'll get the results in a follow-up appointment.

When should I call the doctor?

Contact your doctor if:

- The arm or leg where the catheter was inserted feels cold or numb.
- There is bleeding or severe pain at the insertion site, or if bruising, redness, or swelling gets worse.
- You have a fever over 100° F.

Talking with your doctor about this procedure

The table below lists the most common potential benefits, risks, and alternatives for the angiogram procedure. There may be other benefits or risks in your unique medical situation. Talking with your doctor is the most important part of learning about these risks and benefits. If you have questions, be sure to ask.

Potential benefits	Risks and potential complications	Alternatives
An angiogram: • Provides your doctor with detailed information about your blood vessels. • Helps your doctor diagnose a problem and plan treatment.	While **angiograms are safe,** they have the following risks and potential complications: • Numbness or weakness for a few hours below where the catheter was inserted (rare). • Bleeding or infection where the catheter was inserted (rare). • Allergic reaction to the contrast dye (very rare). • Reduced kidney function (or kidney failure in rare cases) — tell your doctor if you have kidney disease or diabetes. • Blood vessel injury that might require repair, a blood clot, stroke, or death in extremely rare cases. • Exposure to x-ray energy, which can slightly increase your lifetime cancer risk. See the Intermountain brochure *Your Guide to Radiation* to learn more.	Alternatives to an angiogram include: • CT scan of your blood vessels • MRI test of your blood vessels

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