

Your Angiogram: What to Expect



If your cardiologist is concerned about your heart, you might be referred for an **angiogram** — a diagnostic procedure that provides detailed x-ray pictures of your heart and its blood vessels. As with any procedure, knowing what the test can tell you and your doctor as well as what to expect before, during, and after the test can help minimize stress. Your doctor may also refer to an angiogram as *cardiac catheterization*, *heart cath*, or as just *cath*. Your doctor may use these terms interchangeably.

Read on to find out what you can expect when you need an angiogram.

What Will an Angiogram Reveal About My Heart Health?

An angiogram identifies blockages in the blood vessels that carry blood to your heart muscle. These blockages can cause chest discomfort (**angina**), shortness of breath, and other worrisome symptoms. They may also indicate that you have **heart disease**, which could lead to a **heart attack**.

An angiogram will show your interventional cardiologist whether blood flow to your heart is — or is not — being restricted by blockages. And if blood flow is restricted, the angiogram will help your doctors see exactly which arteries are narrowed or blocked, where the blockages are located, and how severe the blockages are. With this information,

your interventional cardiologist will be able to recommend the best treatment options for you.

What Should I Expect Before, During, and After the Procedure?

Before the Angiogram

Your cardiologist will provide instructions on how to prepare for your angiogram. You may be asked to stop taking certain **medications**, and you will be asked not to eat or drink anything for several hours before the procedure. When you arrive you will completely undress and change into a hospital gown. Next, you will be given an IV for fluids and medications. Just prior to and during the procedure, you will receive medications to help you relax.

During the Angiogram

Your angiogram will be performed by an interventional cardiologist. The procedure will be performed in a hospital's **catheterization laboratory**, or "cath lab." An angiogram typically takes from 45 minutes to one hour. You will lie on a table, awake but mildly sedated.

A local anesthetic will be applied to numb an area on your upper leg or on your arm or wrist. This initial needle prick will probably be the only pain you will feel throughout the

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procedure. Your interventional cardiologist will then insert a **catheter** (a thin, flexible tube) into an artery in the numbed area and thread it through the arteries to your heart.

A small amount of dye will be injected through the catheter into your heart arteries. X-rays will be used to look at your heart. The contrast dye will outline your arteries and show if there are any blockages. The x-ray camera also records a movie of your heart's pumping chamber and arteries. While most people do not feel the dye injection, some feel minor discomfort in their chest, lightheadedness, or nausea.

After the Angiogram

If your angiogram shows "clean arteries" or only minor blockages, your doctor may recommend lifestyle changes and/or medications. Or, if the angiogram shows serious blockages, your interventional cardiologist may immediately perform **balloon angioplasty and stenting** to open the blockage and restore blood flow to your heart, or you may be referred to a heart surgeon for a **bypass operation**.

Care in the Hospital

When the procedure is complete, the catheter is removed and the doctor may use a device to seal the artery puncture site. Otherwise, the doctor or nurse applies pressure to the puncture site and holds it for about 20 minutes. If the catheter was inserted in your leg, you may need to lie still for two to six hours after the catheter is removed.

Care at Home

After you return to your home, you may notice a **bruise** in the area where the doctor inserted the catheter. It is not necessary to report bruising to your doctor, even if the area is large. Usually, it clears up over a period of one to three weeks.

You should call the doctor or nurse practitioner if you have:

- **Bleeding, drainage, or painful swelling** at the catheter insertion site
- Swelling or weakness and/or numbness in the leg or arm in which the catheter was inserted
- Fever
- Chest pain, pressure or tightness that does not go away
- **Difficulty speaking, smiling** or **weakness** of the arm and leq

Is Having an Angiogram Safe?

Angiograms are generally safe, with complications occurring less than 1 percent of the time. However, there are risks with any test. Bleeding, infection, and irregular heartbeat can occur. More serious complications, such as heart attack, stroke, and death can occur, but they are uncommon. If you are allergic to iodine or x-ray dye, notify your physician or nurse practitioner so that medication to avoid an allergic reaction can be prescribed. Be sure your doctor knows all the medications you are taking. Generally, you should continue your medications, but you doctor may ask you to hold a blood thinner, diuretic, or other medication.

Questions to Ask Your Doctor About Angiograms

- What **information** do you hope to gain from the angiogram?
- What **risks** can I expect from undergoing an angiogram?
- What do I need to do to **prepare** for the procedure?
- Where will the catheter be inserted (e.g., artery in the upper leg or the wrist)?
- Under what circumstances might an angiogram result in immediate angioplasty and stenting or a referral for bypass surgery?
- Will I have **limitations after the procedure**? Will I need to have someone who can **drive me home**?

What Should I Do If I Have Other Questions?

Ask them. It is normal to have questions about a diagnostic procedure. Before the procedure, you should feel comfortable that you understand why you were referred for the procedure and what information it will provide you and your doctor. You will also want to understand what to expect before, during, and after the procedure—and what to do if you have any concerns during your recovery.

For more information about heart health, cardiovascular disease, tests, and treatment options, visit: www.SecondsCount.org.