

Cardiac Catheterization

What is cardiac catheterization?

Cardiac catheterization, also known as a coronary angiogram, is a procedure in which a long, hollow tube (catheter) is placed in an artery or vein and guided toward the heart. This catheter will be positioned at the opening of the heart arteries. A “dye” will then be injected through this catheter and the cardiologist will be able to take images of the heart arteries and “see” if there are any narrowed areas. These images will also allow the doctor evaluate the pumping ability of the heart.

Why do I need a cardiac catheterization?

Your doctor has more than likely already performed an echocardiogram, EKG, stress test, and blood work. Much information can be gained from these tests but they do not provide the whole picture. The catheterization will allow the cardiologist to determine if there is blockage within the heart arteries and the degree to which they are blocked.

Do I need to do anything before the procedure?

Before your procedure, you will be asked a series of questions about your medical history, allergies, medications, etc. You will also be told what time to report for your procedure and if you should take your medications beforehand. You may be asked not to eat or drink anything for several hours before the procedure.

As with any diagnostic testing, you will be asked to sign an informed consent form prior to the procedure. The test will be explained and you will have an opportunity to ask any questions that you might have.

Blood work, a chest x-ray, and an EKG may be requested before you report for your procedure.

What can I expect when I arrive?

When you arrive on the day of the procedure, the nursing staff will have you change into a hospital gown, start an IV, and ask you many questions. They will take your pulse, blood pressure, and temperature. You may be given some medication to help you relax. When your scheduled procedure time arrives, a transportation member will take you to the catheterization laboratory by stretcher.

What will happen during the procedure?

Once you have been transported to the catheterization laboratory, you will be moved to a long, flat table. The catheterization laboratory is a very busy atmosphere. The staff will be placing electrodes on your chest so that your heart can be monitored. They will also place a blood pressure cuff on your arm and a small device on your finger to read your oxygen levels. The site where your cardiologist has chosen to perform the procedure – either your arm or groin – will be

shaven and scrubbed with an antiseptic solution. You will then be draped in sterile towels and sheets.

The cardiologist will use a local anesthetic to numb the area where the catheter will be inserted. If the groin is the place of insertion, a small puncture will be made; if the arm is to be used, a small incision will be made to expose the blood vessel. A sheath will be placed in the blood vessel. From this sheath, a guidewire will be guided towards the heart with x-ray guidance. The catheter is advanced over this guidewire to either the right or left heart artery. You will not feel the catheter. The cardiologist will inject a “dye” into the heart arteries and capture the images on CD. The camera will be moving around you in order to look at the heart from different angles. If you experience any discomfort at all, tell the doctor immediately. When the dye is injected into the pumping chambers of the heart, you may experience a warm sensation from your nose to your toes. This will last about 30 seconds and then go away.

When the test is complete (15-30 minutes), the catheter will be removed – as will the sheath – and pressure will be held in the groin area with a “c-clamp” device. This clamp will be tight initially but the staff will gradually loosen it. It will remain on for about 30-45 minutes.

And after the procedure?

You will be returned to your room for a period of 4-6 hours of bedrest. If the procedure was done through your groin, you will be asked to keep that leg straight. The head of the bed may be flat or slightly elevated – depending on the preference of the cardiologist. The nursing staff will try to make you as comfortable as you can be. Please do not hesitate to ask for help.

The nurses will be checking your blood pressure, pulse and the catheterization site on a regular basis. You will be allowed to eat and encouraged to drink lots of fluid to help flush the dye from your system.

Because you will not be allowed out of bed for 4-6 hours, you will need to use the bedpan or urinal. If you are unable to use these, a catheter may be inserted to help drain the bladder.

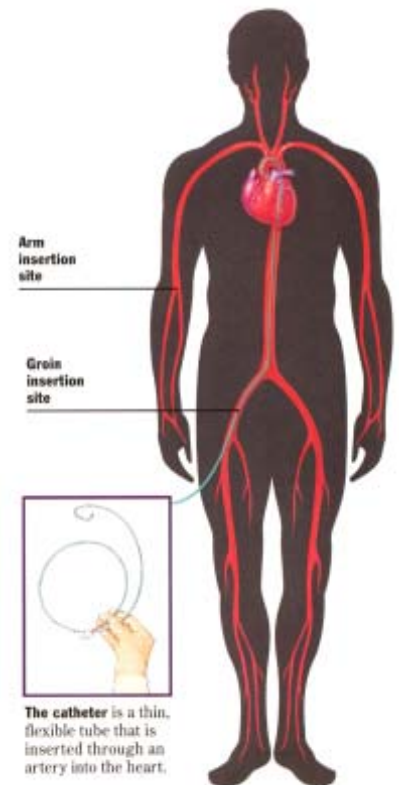
What are the risks of a catheterization?

Cardiac catheterization is a relatively safe procedure. As with any invasive procedure, however, there is a small risk associated.

The cardiologist and the catheterization team are trained to handle any problems that should arise in the laboratory.

When will I know the results?

Some of the cardiologists will give you preliminary results while you are still in the catheterization laboratory. Because you have been given medication to calm you, however, you



might not remember exactly what is said. That being the case, the cardiologist will talk to you and your family prior to your discharge from the hospital. He/she will explain the results and offer treatment options if any are necessary.

Your cardiologist will also contact your primary care physician with the results of your test.

What if my cardiologist says I have blockage?

Depending on the location and severity of the blockage, the cardiologist may recommend one of several things: medication, intervention, or bypass surgery.

Medication does not remove blockage but it does allow the heart to work more efficiently. Your doctor will explain what medications you will be placed on and what they will do for your heart.

Interventions (“balloon procedure” or angioplasty, stenting, “roto-router” or atherectomy, or rotoblation) can help to open the artery and allow blood to flow more freely throughout the blood vessel. The cardiologist will decide what intervention is best for you depending upon the results of your catheterization.

Coronary artery bypass surgery (CABG) may be recommended if there is a high degree of blockage in two or more of the heart arteries. It may also be recommended if one main blood vessel has a significant blockage.

Whatever the case, the cardiologist will review his/her recommendations with you and your family. Arrangements will be made to schedule either the intervention or bypass surgery if you and your family agree.

What happens when I go home?

A family member or friend may take you home after your period of bedrest is complete. The cardiologist will leave instructions with the nursing staff as to the time you may be discharged and the medications you will be taking.

At home, you should continue to rest for the remainder of the evening. You may go up and down stairs but limit your trips. On the day following the procedure, you should continue to limit your activities. It is not recommended that you do anything that would require that you push, pull, or strain. You may run errands if you wish. Refer to your discharge sheet for information about when you may resume your normal activities.

A member of the catheterization staff or cardiology office will call you on the day following the procedure. They will ask you about the catheterization site and if you have been experiencing any problems. **If you are having problems, please do not wait for their call! Call your cardiologist or get to the nearest emergency room.**

