





TESTS AND PROCEDURES

Cardiac Catheterization

A cardiac catheterization (cath) is an X-ray examination of the heart and its arteries. It looks at how well the heart works. The test helps find artery blockages or narrowing. The results can help your physician decide if you need more treatment.

If you have any questions or concerns, please call the Cath Lab at 312.926.CATH (2284).

During the procedure, the physician puts a thin catheter (tube) into an artery and slowly passes it into your heart. They inject dye (contrast) and then take X-rays. The contrast lets the physician see the blood vessels. You will feel little or no pain. The test lasts 1 to 2 hours.

This brochure will explain what to expect before, during and after a cardiac cath.

Before the procedure

The Cardiac Catheterization Lab (Cath Lab) nurse will call you about 1 week before the procedure. The nurse will answer your questions, review the pre-cath guidelines and review your current medications with you. Please tell the nurse about:

- Your allergies
- Unusual reactions to iodine or X-ray contrast in the past
- Blood-thinner medication you may take
- Diabetes medication you may take
- NSAID (nonsteroidal anti-inflammatory pain medication such as ibuprofen) medication you may take

Night before the procedure

The night before the procedure, do not eat or drink anything after midnight.

Day of the procedure

The day of your procedure, take only the medication the nurse has told you to take. Take your medication with small sips of water. On the morning of your procedure, do not take any oral (by mouth) diabetes medication.

Arrival

Please check in on the 8th floor of Galter Pavilion at 675 North St. Clair Street. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. Check in at the Reception Desk on the 8th floor. For a discounted rate, please bring your parking ticket with you. You can validate your ticket at the Customer Services Desk on the 1st, 2nd and 8th floors of Feinberg and Galter pavilions.

For their own safety, children under the age of 16 may not be in the testing area. They may stay in the waiting room with a responsible adult.

What to expect

The care team will take you to your pre- and post-procedure care room. After you change into a hospital gown, the nurse will review your health history and take your blood pressure, pulse and temperature. You also will have blood tests. The care team will put an IV (into the vein) line into your arm or hand. They will use the IV for fluids and medications as needed during the procedure. The care team will clean and shave your groin and wrist area.

The physician will discuss the procedure with you. After the physician has answered your questions, they will ask you to sign consent forms for the test.

You may wear your glasses, dentures (or bridgework) and hairpieces. The care team will ask you to empty your bladder just before going into the procedure room.

During the procedure

Once you come into the Cath Lab, the care team will help you onto a firm X-ray table. The room will have a camera and several TV monitors. You will get medication to relax you through your IV line. You may feel drowsy, but usually you will be awake and comfortable during the test.

The physician uses the radial artery in your wrist most often for the test. They may sometimes use the femoral artery in the groin area or a vein on the side of your neck. The care team will clean the area around the puncture site with a special soap that may feel cold. The physician will inject anesthetic (numbing medication) into the area. They will put a needle into the artery and guide the catheter into position. This is not usually painful. You may feel pressure and mild discomfort at the puncture site. If needed, you may get more numbing medication. Then they will inject contrast dye into the catheter. The dye travels through your blood vessels. They will take a series of X-rays over your chest.

The physician will check the X-rays. If a blockage is found, the physician will treat it during the procedure in most cases. This may include an angioplasty and often a stent placement. In an angioplasty, the physician puts a small catheter with a balloon tip into the narrow artery. They slowly inflate the balloon to open up the artery. At this time, they may also put a small metal coil (stent) in the narrow artery to keep it open. If you have an angioplasty or stent placement, you may need to stay in the hospital overnight.

After the procedure

After you get back to your room, you will need to lie flat in bed for at least 2 hours. You will need to stay in bed longer after an angioplasty. This lets the artery seal. If the physician used the radial artery in your wrist, you will have a pressure bandage on your wrist.

Once your bed rest is over, the nurse will help you sit up and walk. After the physician discusses your test results and checks your puncture site, you may be discharged.

If you have an angioplasty or had a stent placed there may be more follow-up care.

At home

It's important to know how to take care of yourself at home as you recover from your cardiac cath. Carefully follow these guidelines.

Fluids

Drink at least 6 glasses of water (8 ounces each) over the next 24 hours unless your care team tells you otherwise. Water helps to clear the dye used during the procedure from your body.

Activity

You may have bleeding or swelling while the wound is healing. This is due to the stress or strain to the puncture site or surrounding muscles. Carefully follow these guidelines:

- Limit your activity on the day you are discharged.
- Do not drive for 24 hours.
- Do not shower until the next day.
- Do not take tub baths for 1 week.
- Climb stairs (as needed) with a slow, steady pace for the first 2 days.
- Avoid sexual activity for 1 week.

You may go back to doing your usual activities the day after discharge. This includes social activities. Do not do strenuous physical exercise for 1 week (such as tennis, running, swimming, golfing, weightlifting and bicycling).

If the puncture site was in your groin:

■ Do not lift anything heavier than 10 pounds (about a gallon of milk) for 1 week.

If the puncture site was in your wrist:

- Do not bend your wrist for 24 hours.
- Do not soak the puncture site for 3 days (in a bathtub or sink).
- Do not lift more than 3 to 5 pounds with your affected arm for 1 week.

If the puncture was in your neck:

■ Do not lift more than 10 pounds for 3 days.

Medications

Please review the medications listed on your After Visit Summary that your discharging nurse gave you. Depending on the results of your procedure, your physician may prescribe new medications. Please make sure you understand which medications you should be taking after the procedure and how often to take them. If you usually take blood-thinning medication, your physician will tell you when you can start taking it again.

Wound care and healing

There will be a bandage over the wound site. The day after the procedure you may remove the bandage with soap and water. Do not put on a new bandage.

Keep the site clean and dry. Do not use any lotions, ointments or powders at the wound site for 1 week.

The wound should be soft and dry while it is healing. There may be a bruise (black and blue mark) or a marble-sized lump.

Warning signs and symptoms

Wound changes

Please contact your physician or the Cath Lab physician if you have any of these symptoms:

- Redness, swelling or color changes around the wound or the limb
- Drainage from the wound
- A lump at the wound site that gets bigger or is larger than the size of a marble
- Pain at the puncture site that makes it hard to move
- Numbness, tingling or coolness in the area around the wound and the limb
- For a groin wound: bruising spreading into the thigh, over the buttock or into the groin
- For a wrist wound: arm or hand numbness, coldness, tingling, swelling or pain

Chest pain and other symptoms

Please notify your physician **right away** if you have:

- Chest discomfort or pain (angina) that spreads to your neck, jaw or arm
- New symptoms or a change in your angina pattern
- Nausea or heavy sweating
- Shortness of breath with exertion
- An irregular heartbeat
- Lightheadedness or dizziness that makes you lie down
- A fainting spell
- Calf tenderness or pain
- Swelling of your foot or ankle

Call 911 or go to the nearest emergency department if you have:

- Chest discomfort or pain lasting longer than 10 minutes that does not go away after you take 1 nitroglycerin tablet under the tongue
- Frequent, recurring episodes of chest discomfort or pain

If you have any questions about this information, talk to your physician, nurse or the Cath Lab at 312.926.CATH (2284), extension 3.

Bleeding from the artery

This can happen when the artery (blood vessel) used during the procedure has reopened. Although rare, it is an emergency. **You need medical attention right away.**

- If the puncture is in your groin, lie flat right away and apply firm pressure to stop the bleeding.
- If the puncture is in your wrist, press firmly on the site with your thumb while supporting your wrist or elbow with your other fingers.

Call 911 or go to the nearest emergency department if you have:

- Swelling around the wound that quickly increases or is pulsating.
- A lot of blood or a jet of blood pumping out of the puncture site.

These symptoms may happen suddenly.

Follow-up appointments

Cath Lab contact

If you have any questions or concerns, please call the Cardiac Cath Lab.

- During regular business hours (8 am to 5 pm, Monday through Friday), call 312.926.2284 (312.926.CATH), extension 3 (TTY: 711).
- After hours and on the weekends, call 312.926.2284 and ask for the Cardiac Cath Lab physician on call.