

## Right and Left Heart Catheterizations

A right heart catheterization is a diagnostic test for your heart. It checks how well the right side of your heart functions, measures the pressure of your heart, and identifies changes in blood flow through your lungs. A thin flexible tube called a “Swan Ganz catheter” is usually inserted through a vein in the groin or neck for this test.

A left heart catheterization is another type of diagnostic test for your heart. It checks the condition of your arteries and checks for blockages. Contrast dye is injected to see the location of the blockage. An x-ray machine shows and records the images. A thin flexible tube called a catheter is usually inserted through a blood vessel in the arm, wrist or groin for this test.

This procedure takes about 1 to 2 hours to complete. The preparation and recovery time will add several more hours to your appointment time which may take up to 6 hours total.

Heart catheterization is used to:

- Identify the condition of the heart chambers or coronary arteries using special x-rays called angiograms
- Record the pressures in the blood vessels, lungs and chambers of the heart
- Measure the blood flow and oxygen levels in different parts of the heart
- Take a biopsy of the heart muscle by collecting a small tissue sample using an instrument passed through the catheter

### Preparation

Before the procedure, you may need to have additional lab tests done so your care team can review the test results. If you are female, a pregnancy test may be ordered. Not having these results may delay your procedure and care.

If you are receiving chemotherapy or have just completed chemotherapy, or if you are on an anticoagulant therapy, your blood tests **must** be done within 24 hours of testing.



- Tell your doctor or nurse if you are taking any blood thinning medicines such as Coumadin<sup>®</sup>, Heparin<sup>®</sup>, Eliquis<sup>™</sup>, Pradaxa<sup>™</sup>, Savaysa<sup>™</sup>, Xarelto<sup>®</sup>, Plavix<sup>®</sup> or aspirin. You may need to stop taking these medicines before the test.
- **Do not** take insulin or other diabetic medicines the morning of the procedure.
- **Do not** eat or drink anything after midnight before the procedure.
- You **must** have a responsible adult drive you home after the procedure.
- You may need to stay overnight in the hospital, so plan accordingly.
- You may take prescribed medicines as instructed by your doctor with small sips of water.
- Make sure to bring a list of all your medicines.
- Tell your care team if you have any allergies.

## Precautions

Tell your care team if you:

- Are diabetic or taking metformin (Glucophage®)
- Are or could be pregnant
- Are allergic to contrast media (iodine dye) or have food allergies to shellfish
- Have a respiratory problems or sleep apnea
- Have any conditions such as diabetes or kidney disease (extra steps may be needed)
- Have had a barium test within 5 days before the test
- Weigh more than 300 pounds
- Are taking blood thinners

## Directions to Clinic

You may valet park in front of the Main Building, Entrance 2. Click on the hyperlink below for more information about Parking at MD Anderson:

<https://www.mdanderson.org/patients-family/becoming-our-patient/getting-to-md-anderson/parking.html>

After parking your vehicle, enter the building and find Elevator F. Go up to the 3rd Floor. You should see a sign directing you to the Cardiac Cath Lab check-in G3.3604. This is where you will register for the procedure. When it is time for your procedure you will be taken to the Cardiac Cath Lab which is also on the 3<sup>rd</sup> Floor.

## The Day of Procedure

1. Check your MyChart account for the exact time and location for your procedure and be sure to arrive on time.
2. Bring any outside cardiac catheterization films (x-rays) with you.
3. Plan to spend most of the day at the hospital. Your doctor will let you know if you will be admitted to the hospital after the procedure.
4. You will sign in with the receptionist. You will then be taken into a room to prepare for the procedure.
5. The procedure may take approximately 1 to 2 hours.
6. A nurse will start an IV line in your arm or hand. You will receive fluids and medicines to help you relax and control any pain you may have during the procedure. You will most likely be awake during the procedure.
7. The staff may clean and shave the appropriate area for your procedure. This may include the groin, wrist or arm area.
8. You will next be taken to the Cardiac Cath Lab procedure area.

## Procedure

1. You will receive IV sedative medicine to make you feel relaxed, but you will be awake. You will also be given local anesthetic to numb the area where the catheter will be inserted.

2. Your doctor will insert the catheter into your groin, arm or neck. The catheter will be passed through the blood vessels toward your heart. Special x-rays are used to guide the catheter. You will not feel the catheter as it passes through your blood vessels.
3. Your doctor will guide the tip of the catheter to exact positions in the heart and blood vessels. The catheter is attached to a device that measures blood flow and blood pressure in different places in the heart and blood vessels.
4. If images of the heart chambers, valves, or coronary arteries are needed, a contrast (dye) is injected through the catheter. X-rays are taken while the contrast moves through your artery. X-rays are taken so fast that they form a movie that shows how the contrast is moving through the artery. This is called an angiography.



**Tell your care team if you have:**

- Any symptoms of an allergic reaction (itching, tightness in the throat, or shortness of breath)
  - Nausea
  - Chest discomfort
5. At the end of the procedure, a care team member will remove the catheter and put pressure on the catheter insertion site to control any bleeding. The doctor may also use a special closure device so that you can move around after the procedure is completed.

## **Follow-Up Care**



If you are an outpatient and a closure device was not used, manual pressure will be applied for 10 to 20 minutes to form a clot at the site to prevent bleeding. You will lie on your back, keeping your head flat and your leg straight for 2 to 6 hours. A nurse will be with you and monitor your recovery.

### **Cardiac Catheter Lab**

Main Building, Floor 3, Elevator F  
Monday through Friday 7 a.m. to 4 p.m.  
713-792-0974

### **MD Anderson Acute Cancer Care Center**

Main Building, Floor 1  
24 hours a day, every day