Right and Left Heart Catheterizations

A heart catheterization is a diagnostic test that checks how well the right side of your heart functions, evaluates the pressures of your heart, identifies changes in the blood flow through your lungs, and records X-rays of the heart's arteries. The thin flexible tube is called a catheter and is usually inserted through a blood vessel in the arm, groin or neck. This procedure takes approximately 1 to 2 hours to complete.

Heart catheterization is used to

- Identify the outlining of the heart chambers or coronary arteries using specialized X-rays called angiograms
- Record the pressures in the blood vessels, lungs and chambers of the heart
- Measure the blood flow and oxygen content in different parts of the heart
- Biopsy the heart muscle by taking a small tissue sample using an instrument passed through the catheter

Preparation

Before the procedure, you will have blood tests called Prothrombin Time (PT), Complete Blood Count (CBC) and creatinine levels. If you are female, a pregnancy test may be ordered. You should have these tests before the procedure in order for your results to be reviewed by your health care team. Not having these results may mean a delay in your testing.

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 medications like Coumadin®, Heparin®, Plavix® or aspirin. You may have to stop taking these medications before the test.**
- **Do not take insulin or other diabetic medications the morning of the procedure.**
- **Do not eat or drink anything after 12 midnight before the procedure.**

You may take prescriptions medications as directed with small sips of water. Make sure to bring a list of all your medications. Tell your health care team if you have any allergies.

Precautions

Tell your nurse or doctor if you:

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- Are diabetic or taking Glucophage®
- Are or could be pregnant
- Are allergic to contrast media (iodine dye) or have food allergies to shellfish
- Have respiratory problems or sleep apnea
- Have had a barium test within 5 days before this test
- Weigh more than 300 pounds

Directions to Clinic

You may valet park in front of the Main Building, entrance 2. The fee is $15.00 per day. Garage 10 and Garage 2 are self park locations for $12.00 per day.
After parking your vehicle, enter the building and find elevator F. Go up to floor 5. This area is called G5. This is where you will report to surgery check in. When it is time for your procedure you will be taken to the Cardiac Cath Lab on Floor 3.

Day of Procedure

1. Bring any outside films (X-rays) with you, if you have not already given them to your doctor.

2. Plan to spend most of the day here at the hospital. Your doctor will tell you if you will be admitted to the hospital after the procedure.

3. Report to the surgery check in desk on Floor 5 of the Main Building, near elevator F. You will sign in with the receptionist.

4. The procedure will take between 1 to 2 hours.

5. A nurse will start an IV (intravenous) line in your arm or hand. You will receive fluids and medications to relax you and to control any pain you may have during the procedure. You will most likely be awake during the procedure.

6. The pre-procedure area staff will clean and shave the appropriate area for your procedure. This may include the groin, wrist or arm area.

What happens during the procedure?

1. You will be given a sedative which will make you feel relaxed, but you will stay awake. You will also be given a 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 follow the position of 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 its 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.

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4. If pictures of the heart chambers, valves, or coronary arteries are needed, a special kind of liquid (called contrast) is injected through the catheter. X-rays are taken while the contrast moves through your artery. Sometimes the X-rays are taken so fast they form a movie that shows how the contrast is moving through the artery. This is called an angiography.

5. At the end of the procedure you doctor will remove the catheter and put pressure on the area where the catheter was inserted (the puncture site) to control any bleeding. The doctor may use a special device to help you move around better 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. After the manual pressure was applied you will be required to lie on your back, keep your head flat and keep your leg straight for 4-6 hours. A PACU nurse will be with you and monitor your recovery.

Cardiac Catheter Lab
Monday through Friday 8 a.m. to 5 p.m.
Floor 3, Elevator F
713-792-6858

MD Anderson Emergency Center
After 5 p.m. and on weekends.
Floor 1, Main Building
713-892-3722

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