CARDIAC CATHETERIZATION

Cardiac catheterization (cath) refers to a procedure that involves passing a catheter, a thin flexible tube, through an artery in your arm or groin and into your heart.

Reasons for Cardiac Catheterization

This procedure is performed to diagnose or treat disease of the heart muscle, valves, or coronary (heart) arteries. Your physician has ordered this procedure to see how well your heart works, to help identify potential problems and this procedure also enables your physician to do procedures to open blocked arteries.

By performing a catheterization, your physician may:

- Find and open blocked or narrowed arteries
- Find and open a narrow or blocked valve in your heart
- Perform a percutaneous coronary intervention (PCI) such as coronary angioplasty with stenting
- Check for coronary artery disease (CAD) before performing major surgery
- Drain fluid from the lining that surrounds your heart
- Look for defects in the valves or chambers of your heart
- Evaluate the ability of the pumping chambers to contract

Risks

Cardiac catheterizations are typically very safe. A small number of people may experience some minor problems. Some patients develop a bruise where the catheter is inserted. Some patients may experience stomach upset, itching, or hives from the contrast dye used to help the arteries show up on x-rays.

Preparation

- Our scheduler will provide you with instructions about what to eat and drink within the 24 hours prior to the test. Please follow any instructions the scheduler provides to you.
- Advise your doctor about any medications you are taking including over-the-counter medicines, herbs, and vitamins. Your doctor may instruct you to stop certain medications.
- Let us know if you have any allergies, especially iodine, shellfish, latex, or rubber products, medicine like penicillin, or x-ray dye.
- Please bring your hearing aid and glasses if you wear them regularly.

What happens during a cardiac catheterization

- The nurse will put an IV (intravenous) line into a vein in your arm. They will give you medicine to help you relax, but you will be awake and able to follow instructions.
- The nurse will shave the area where the doctor will be working which is usually in the groin area.

- A local anesthetic is typically given to numb the needle puncture site.
- The doctor will make a needle puncture through your skin and into a large blood vessel. A straw sized tube called a sheath will be inserted into the vessel. The doctor will then guide a catheter into your vessel through the sheath. You may feel some pressure in your groin, but you shouldn't feel any pain.
- A variety of instruments may be placed on the tip of the catheter. These instruments can measure the pressure of blood in the chambers of the heart and in blood vessels connected to the heart, view the interior of blood vessels, take blood samples from different parts of the heart, view the interior of blood vessels, take blood samples from different parts of the heart, or may be used to remove a tissue sample from inside the heart.
- When dye is used it can be seen on x-tray and the procedure is called angioigraphy.
- A valvuloplasty is when a catheter is used to widen a narrowed heart valve opening.
- The doctor will remove the catheters and the sheath. Sometimes a special closure device is used.
- The procedure will take about an hour.

Following the Cardiac Catheterization

- Pressure will be applied to the site to stop bleeding.
- You will need to keep your leg straight and will need to stay in the bed.
- During recovery, the heartbeat and other vital signs (pulse and blood pressure) will be checked.
- You should report any chest pain, swelling, pain or bleeding at the puncture site.
- You'll be given written instructions on what to do once you are at home. Follow these instructions as directed.
- Make sure you have your follow up visit scheduled.
- Most people may return to normal activity the following day after the procedure.
- A small bruise at the puncture site is normal.
- Watch for bleeding, if this occurs lie flat and press firmly on top of it for a few minutes, then recheck to see if the bleeding has stopped.