# CARDIAC CATHETERIZATION / CARDIAC ANGIOGRAPHY / CARDIAC ANGIOPLASTY / CARDIAC STENTING

#### What is it?

A cardiac catheterization is a procedure used to detect certain heart conditions. During this procedure, a long, thin, flexible tube is inserted into the blood vessel either in your arm or in the groin and passed through to the neck. This catheter allows the doctors access to perform procedures on the heart.

In a typical coronary angiography, a contrast dye is allowed to flow through the blood vessels to make the arteries visible via x-ray images. This procedure helps detect coronary heart disease, a condition in which plaque builds up inside your coronary arteries, causing narrowing and blockage of arteries.

Depending on the extent of blockage or disease, you may or may not need to undergo angioplasty or stenting. These procedures are performed in the hospital setting. An angiogram is typically an outpatient procedure while angioplasties and stents require a hospital stay of at least 1 night.

### Who needs it?

A diagnostic cardiac angiogram is usually recommended if:

- You have complaints of chest pain, a typical symptom of coronary heart disease.
- The doctor wants to evaluate you for heart defects.
- The doctor wants to determine the efficacy of heart valves.
- There is heart damage after a heart attack.
- An EKG or stress test suggests disease.

## What to expect before, during, and after?

Before Prior to the scheduled procedure, you will be asked to come by the office to speak to us regarding how to best prepare. The doctor will explain the procedure to you in detail and will review your most recent EKG and labwork to see if any other precautionary steps are needed. You may also need to make certain changes to your diet or medication regimen. Direct instructions will be provided by our office. Since these procedures are performed in a hospital, it is best to make arrangements for a ride both to and from the hospital.

During



During the cardiac catheterization, you will be asked to lie on your back on an exam table. At times, some medication may be given to you to make you sleepy. Your doctor will numb an area on your arm or groin. A small hole is made in the blood vessel using a needle; a thin, flexible guidewire is then passed through the hole via a tube (sheath). The catheter is passed through the sheath and slid over the guidewire into the coronary arteries. X-ray movie clips are taken as

the catheter moves into the heart. When the catheter reaches the right spot, the guidewire will be removed.

A special type of dye is used in the bloodstream to make the heart arteries visible. Coronary angiogram is the process during which x-ray images are taken.

Coronary angioplasty and stenting is a form of treatment for the blocked arteries in the heart.

When the procedure is complete, the catheter and sheath will be removed and slight pressure will be placed on the wound to prevent further bleeding.

After

After the procedure, you will be moved to a recovery area where you will rest for a few hours or overnight depending on whether or not an angioplasty was performed. You will be asked to limit your movements to avoid bleeding from your arm or groin area where the catheter was inserted.

Your blood pressure, heart rate, and bleeding will be checked regularly and you will be allowed to go home once you are determined to be stable.

# Are there any risks I should be aware of?

Cardiac catheterizations are very common and rarely carry any serious adverse events.

Some complications include:

- Bleeding, infection, or pain at the catheter site.
- Damage to blood vessels
- An allergic reaction to the dye.

Less common complications include:

- Development of an arrhythmia or irregular heartbeat.
- Kidney damage due to the dye used during angiograms.
- Blood clots.
- Low blood pressure.
- Buildup of blood or fluids around the heart.

As with all other procedures, complications may sometimes be fatal, though this is rare with a cardiac catheterization.