Coronary Angiography

Coronary angiography is an X-ray procedure used to examine the coronary arteries. These are the arteries that bring fresh blood carrying oxygen and nutrients to your heart muscle. The purpose of the test is to obtain vital information about the severity and position of any narrowing in the coronary arteries.

During an angiogram, a small tube called a sheath is put into a large blood vessel in the groin (upper thigh) or wrist. A catheter is then threaded to the coronary arteries. A small amount of dye is injected into the coronary arteries and an x-ray picture is taken.

Why is it done?

The angiogram will show exactly where your coronary arteries are narrowed or blocked. At these points, blood does not flow through the arteries freely and this is the cause of chest pain known as angina.

When angina is severe and an angiogram has shown significant narrowing or blockage of one or more arteries, your doctor may recommend bypass surgery (CABG) or coronary angioplasty and stenting to relieve the condition. Sometimes the angiogram may show that there are no serious problems.

Cardiac catheterisation is also used to show how the valves and muscular walls of the heart function. It may also be used to diagnose an aneurysm (a bulging of the heart wall) or a birth defect of the heart such as a hole in one of the walls between the chambers of the heart.

The technique of cardiac catheterisation can also be used for therapeutic procedures, such as angioplasty, where blockages in the coronary arteries are dilated by inflating a tiny balloon on the tip of the catheter followed by placement of a stent.

What do I need to do to prepare for the test?

You should not eat or drink anything for 8 hours before the test starts. You may need to stay in the hospital the night before the test. Otherwise, you will check in to the hospital the morning of the test. You will wear a hospital gown. You must sign a consent form before the test. Your health care provider will explain the procedure and its risks.