HEART RX
CARDIOLOGY
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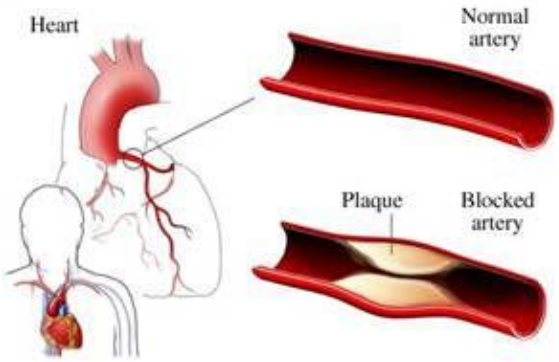
CORONARY ANGIOGRAM

This procedure is done to show the amount of disease in the blood vessels that supply the heart.

Common indications for this procedure include:

- Investigation of chest pain, breathlessness and abnormal heart rhythms.
- To further investigate abnormal screening tests.
- To assess bypass grafts or previously stented coronary arteries.



A Coronary Angiogram is performed in hospital in a Cardiac Catheter Laboratory under a local anaesthetic. Contrast (dye) is injected into the coronary arteries via a small tube known as a catheter. The patency of the artery is assessed by x-ray as the contrast passes through the artery.

BEFORE THE PROCEDURE:

Medication Instructions:

Your Cardiologist will advise you if there are to be any changes to your usual medications prior to the procedure.

If you are diabetic, you may need to withhold your diabetic tablets or Insulin the night and/ or the morning of the test, to avoid low blood sugar.

If you are on Warfarin, this should be withheld several days (usually 3 – 4 days) before the test.

Do not stop taking Aspirin or Plavix / Iscover.

Take other tablets as usual with a small amount of water.

If you are unsure of any of the above please check with your doctor.

X-rays:

Bring with you any chest x-rays from the last 6 months.

Pre-medication:

You will normally be given a mild sedative to swallow prior to the procedure to help you relax.

Fasting:

You may be asked not to have anything to eat or drink for 6 hours prior to the procedure. If your doctor has advised you to continue your usual medications, take them with water early on the morning of your procedure.

Allergies:

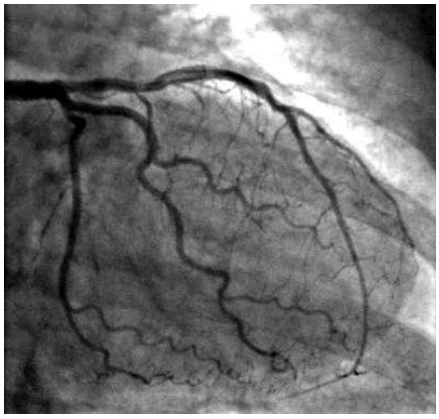
You will be asked if you are allergic to any medications that you know of. Please advise the staff if you are aware of any allergies you may have.

Please note: X-RAY DYE (CONTRAST SOLUTION) SOLUTION USED IN THE PROCEDURE CONTAINS IODINE. IF YOU HAVE AN ALLERGY TO IODINE YOU MUST INFORM YOUR DOCTOR PRIOR TO THIS PROCEDURE.

DURING THE PROCEDURE

Cardiac Catheter Laboratory:

You will be taken to a special theatre for the procedure to be performed under sterile conditions. This theatre has x-ray equipment and monitors to assist in acquiring pictures of the coronary arteries.



Monitoring:

Electrodes are attached to your arms, chest, legs and back.

Arterial puncture:

Access to the blood circulation may be from the right leg, right elbow or right wrist artery. A small amount of a local anaesthetic agent (usually 1% Lignocaine) is injected into the skin. You may briefly experience a cool or a mild stinging sensation.

A hollow needle is inserted into the artery and a small tube (6cm to 9cm in length) called a “sheath” is inserted so as to gain access to the circulatory system. You may feel a bit of pressure while the sheath in being inserted. Thereafter you should not feel any discomfort.

Insertion of Cardiac Catheters:

The catheters (long tubes approximately 2mm in diameter) are inserted into the artery by means of a flexible guide-wire and connected to a series of taps that allow ongoing blood pressure monitoring. A separate catheter is used for the right and left coronary arteries. You will not feel

any sensation of the catheters moving inside your body.

X-ray dye:

An x-ray dye is injected into the coronary arteries via the catheter. This solution reveals any blockages or narrowing of those arteries. The x-ray contrast is cleared away by the kidneys.

A third catheter called a “Pigtail” may be placed into the main pumping chamber of the heart (the left ventricle.) When the contrast is injected into this catheter you may experience a sudden warm sensation which will only last for a few seconds.

Taking the pictures:

During the test you will be asked to take deep breaths, which you will have to hold for a few seconds while the x-ray pictures are being taken. Images of the arteries are then recorded on digital x-ray which will be reviewed by your cardiologist.

Duration:

The procedure takes about 30 minutes.

AFTER THE PROCEDURE

Removal of the sheath:

After the test the attending nurse will remove the sheath and apply pressure to the puncture site. After the risk of bleeding has passed and a seal has formed over the puncture site, a bandage will be applied to apply further pressure to the site.

Recovering:

You will be taken back to the ward for observation. For leg punctures you will need to rest in bed for 2-4 hours to reduce the likelihood of groin bleeding.

Discharge:

You will be reviewed by your doctor after the procedure. They will fully discuss the findings and the implications they have on your overall cardiac care when they see you prior to discharge or at a follow up appointment. Nursing staff will advise you on follow up care at home. It is normal to have a small amount of bruising, a small lump (about the size of a pea) and/or a small amount of pain for the first week. If you have a lot of pain, a large lump or a large bruise you should have this reviewed by your GP or Cardiologist.

In order to protect your artery, avoid vigorous exercise and heavy lifting for the first week after the procedure.

Possible risks and complications:

The risks of coronary angiography depend on:

- How bad your coronary artery disease is;
- How well your heart is pumping;
- How old you are;
- How healthy your other organs are;
- If you have had a previous bypass operation;

These are some of the more serious risks that can happen but they are not the only risks.

1. Major complications: • Heart attack • Stroke or mini-stroke (TIA) • Perforation of large blood vessel or heart. • Urgent open heart surgery. • Urgent balloon angioplasty • Death	 1 in 1000 1-2 in 1000 1 in 1000 1 in 1000 1 in 1000 1 in 1000
2. Blood vessel complications: • Blood clot • Major bleeding • Pseudo-aneurysm formation: blood clot with connection to the artery lumen. • Need for surgery because of blood vessel complications.	 1 in 1000 less than 1 in 100 less than 1 in 100 less than 1 in 100
3. Allergic reaction: • Skin reaction • Severe life-threatening reaction requiring resuscitation.	 less than 1 in 20 less than 1 in 1000
4. Abnormal Heart Rhythm: • May require electrical shock treatment or temporary/ permanent pacemaker.	 less than 1 in 500
5. Deterioration in kidney function	less than 1 in 100
6. Infection	less than 1 in 1000
7. Skin injury from radiation	less than 1 in 10000