

# Victorian Heart Centre

## CORONARY ANGIOGRAPHY A guide for patients



A ngiography is an X-ray examination of the coronary arteries to see if they have become narrowed by fatty deposits called plaque. Plaque can decrease blood flow through a coronary artery, causing recurrent chest pain known as angina.

An angiogram can also show how well the heart is functioning as a pump. Your cardiologist uses this information to plan treatment to relieve your symptoms.

Treatment can include balloon angioplasty, stent placement, or coronary artery bypass graft surgery. These treatments are explained in the patient education leaflets called "Coronary angioplasty", "Stent placement in a coronary artery" and "Coronary artery bypass graft surgery", available from your cardiac nurse or doctor.

#### The Procedure

Angiography is performed in the Cardiac Catheter Lab by a cardiologist and a specialised team of nurses and technicians. The cardiologist inserts a catheter into the femoral artery in the groin. Occasionally, the catheter is inserted into the brachial artery on the inside of the elbow.

Under X-ray imaging, the catheter is guided to the heart. A dye is injected through the catheter and into the coronary arteries as X-ray images are taken. As shown in the illustration, any narrowings in the coronary arteries are readily seen on a screen.

Coronary angiography usually takes about 20 to 30 minutes.

LOCAL ANAESTHESIA: A local anaesthetic is injected into the groin where the catheter will be inserted into the femoral artery. Before the procedure, you may be given a sedative to help you relax.

PAIN AND DISCOMFORT DURING ANGIOGRAPHY: When the catheter moves inside an artery, it does not cause pain. When the dye is injected, some people occasionally experience nausea or chest discomfort for a short time. Others experience a hot, flushing sensation. Rarely, there may be an allergic reaction to the dye.

**EMERGENCY ANGIOPLASTY:** Angioplasty can be performed at the time of the angiogram to open an artery blocked by a blood clot that has caused a heart attack. One or more stents may be placed.

### Recovery

A fter the procedure, you are moved to the Cardiac Unit. For several hours, a nurse will check your blood pressure, heart rate, groin puncture site, and general well-being.

A cardiac monitor may be used to check and record your heart rhythm. You must remain in bed and keep the affected leg straight for about four hours to prevent bleeding from the arterial puncture site.

You can have a drink and a small bite to eat when you feel able. In some cases, an overnight stay may be recommended.

## Possible Complications

As with all procedures, coronary angiography does have risks, despite the highest standards of practice.

Most people do not have complications. If a complication occurs, it is usually temporary. However, some complications may have permanent effects or may even be life threatening.

#### Specific risks of angiography

• Rarely, the femoral artery may bleed profusely, requiring urgent treatment. If this occurs after discharge from hospital, lie down and apply pressure to the site. Call an ambulance on 000.

• The groin puncture site may rarely become infected, requiring treatment with antibiotics. If the area becomes red and inflamed, see your doctor.

• Uncommonly, bruising and swelling around the groin wound may be extensive. This may take some weeks to resolve.

• Discomfort during the early phase of healing may require a painkiller.

• Some people are allergic to the dye, and an alternative dye must be used; tell your cardiologist if you have ever had an allergic reaction to any type of dye used in medical tests.



Coronary artery

CORONARY ANGIOGRAM



• If the femoral artery has been treated with a special plug, you may feel a pea-sized lump at the site in your groin for up to two months. You may be given a card to keep on you at all times, advising that you have had this procedure and that the femoral artery should not be punctured again for 90 days.

#### TALK TO YOUR DOCTOR OR NURSE

This leaflet is intended to provide you with information and is not a substitute for professional advice. It does not contain all of the known facts about coronary angiography. There may be other side effects that are not listed in this leaflet.

If you are not certain about the benefits, risks and limitations of treatment, be sure to ask your doctor or nurse. It is important that you have enough information about the benefits and risks so you can make an informed decision about this procedure.

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