



**St Vincent's**

*Continuing the Mission of  
the Sisters of Charity*

May 2010

Mission

Our health service is based on and driven by our quest for:  
Compassion — Justice — Human Dignity — Excellence — Unity



*Coronary angiogram booklet*

Information for patients

## *Welcome to the Cardiology and Coronary Care Unit at St Vincent's*

This booklet has been developed to help you understand the procedure of your coronary angiogram. It's important that you and your family read this booklet. If you have any further questions after reading this booklet, the nurse looking after you will be happy to assist.

This booklet will cover the following topics:

1. Basic structure of the heart and its arteries
2. What is an angiogram?
3. What to expect on the day of your procedure
4. How YOU can prevent further coronary artery disease
5. What to do if you get further chest pain
6. Discharge instructions and contact information

## *Basic structure of the heart and its arteries*

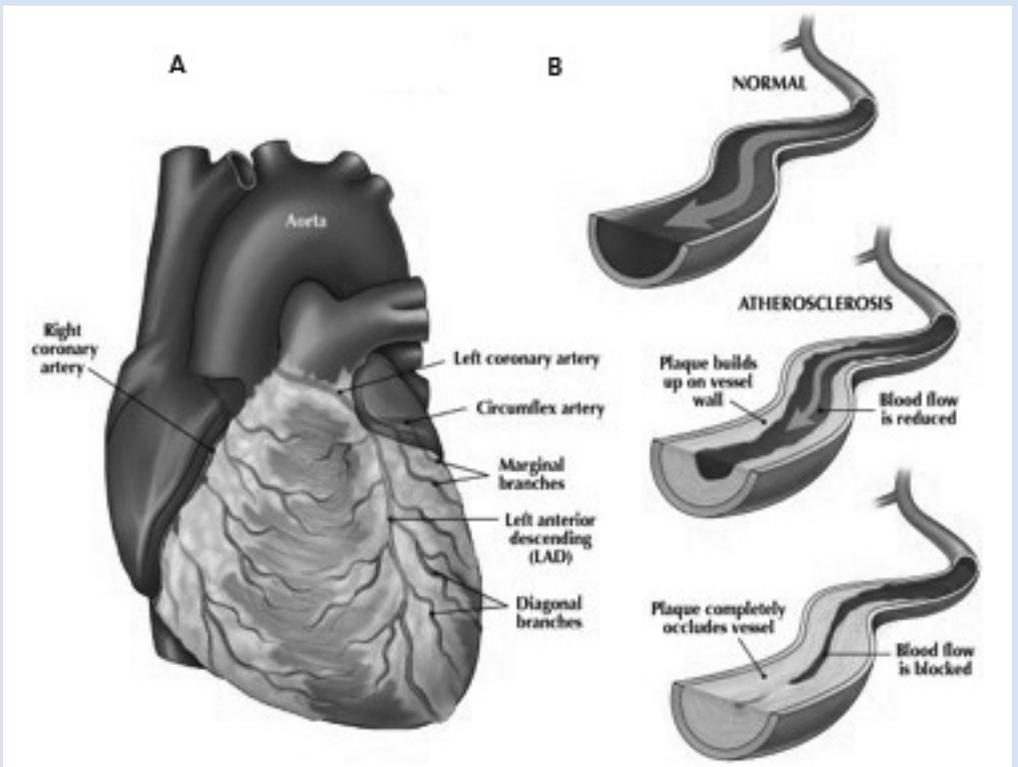
The heart is a specialised muscle that acts as a pump. It is made up of four chambers. Your heart is approximately the size of your clenched fist. For such a small muscle it has a big job, transporting blood, oxygen and nutrients to every cell in your body.

The heart pumps blood at a rate of 4–5 litres a minute for women and 5–6 litres a minute for men. Because of its constant pumping, it's important that your heart receives ample blood flow, oxygen and nutrients.

The heart gets its blood supply from special arteries surrounding the heart called **coronary arteries**. These arteries are very small. Because they are so small they can become narrowed or blocked over time.

If a narrowing occurs, the heart does not receive enough blood and as a result you may experience chest pain,

*Your heart*



*A. The arteries are very small and wrap around the outside of the heart*

*B. Inside a normal, partially narrowed and fully blocked coronary artery*

tightness, heaviness or breathing difficulties (this will vary greatly from person to person). This is commonly known as angina.

If the artery becomes blocked, a heart attack occurs. In both of these situations it is important that the narrowing or blockage is identified.

### ***What is an angiogram?***

A coronary angiogram is a diagnostic procedure in which coronary arteries can be viewed. There are several arteries that supply the heart with blood. By performing a coronary angiogram, we can take a closer look to see which one/s are narrow or blocked and causing the problem.

An angiogram involves inserting a sheath (narrow tube) into the body via the artery in the groin. A catheter is then inserted through the sheath, allowing dye to be injected into the coronary arteries. A specially-designed external x-ray machine takes pictures of the movement of the dye through the arteries.

The information gained allows the cardiologist to accurately pinpoint if a coronary artery has narrowed and the percentage of the narrowing.

### ***What to expect on the day of your coronary angiogram***

#### **Before your angiogram**

Prior to coming to hospital, a letter will be sent to you with important instructions to follow on the morning of the procedure. If you have any questions about following the instructions, please call the number supplied on the letter.

Once you are at the hospital, a staff member will take your name and other details. A doctor will come and 'admit' you by asking about your medical history, medications and any allergies you may have. Please have all of the appropriate information with you.

An intravenous (IV) drip will be inserted into your arm prior to the procedure. This allows us to give you fluids and medications as required. You will also be given two tablets

to help you relax and to prevent any reactions to the angiogram dye.

You will be awake during the procedure. Please tell staff if you would prefer to be less alert. Your doctor may be able to prescribe a medication to help you relax further.

### **Please note**

Angiograms are usually performed in the morning. We are unable to give you an accurate time for when your procedure will take place due to the different nature of each case. Occasionally, due to circumstances beyond our control, procedures may need to be delayed or cancelled. A cancellation is often the result of a medical emergency which requires priority treatment.

### **After the procedure**

You are likely to feel a little drowsy after the procedure and will be taken to a recovery room to rest. After a short while, the sheath in your leg will be removed by a doctor and pressure will be applied to the entry site for 20 minutes to prevent any bleeding.

It is important to keep the right leg still and your head flat on the pillow while the sheath is being removed from the groin and immediately after.

This will help to prevent bleeding and bruising occurring at the entry site. Your nurse will inform you when you are able to sit up and walk around.

You can expect to be discharged from hospital on the same day as your procedure.

You will need a relative or friend to pick you up from hospital and to remain with you until the following day. This is very important. If you start to bleed from your leg, you will require their assistance (see discharge instructions). Furthermore, you will have received sedation (a medication to make you feel relaxed and sleepy) during the procedure which will take time to wear off.

If you have not organised someone to pick you up and stay with you, your procedure will be cancelled.

A nurse will contact the person collecting you to notify them of the discharge time.

If you need to stay in hospital overnight you will be taken up to ward 4 West and discharged the next day at approximately 10am. You will need to arrange your own transport home.

### ***What happens now?***

The information gained during the coronary angiogram forms the basis for further treatment. Your cardiologist will offer you the most appropriate method to help you manage your angina.

There are three possible treatment regimes:

#### **Medication**

Your current medications may be altered or you may be prescribed new ones. The cardiologist may want to use medication to lower your blood pressure, increase the amount of blood flow through the arteries, slow the heart rate or relieve the pain of angina.

In some cases, medication is all that is required.

#### **Coronary angioplasty**

If narrowing of the arteries is found to be your primary problem, another procedure similar to the angiogram may be recommended.

A special balloon and stent will be used to open the narrowed artery, increasing blood flow and helping to reduce angina.

#### **Coronary artery bypass graft surgery**

If several arteries are blocked, bypass surgery may be recommended.

Bypass surgery involves removing healthy arteries or veins from your arms, legs or chest and grafting them onto your heart. The grafted arteries or veins will provide a new path, allowing blood to bypass the blocked arteries and flow to the heart muscle with ease.

Whatever treatment method has been selected for you, it is still important to prevent further coronary heart disease from developing. The following information is designed as a basic starting point.

## ***How you can prevent further heart disease***

The best way to decrease the risk of further disease is to reduce or remove the risk factors that contribute to it by:

- stopping smoking
- eating less fat, especially saturated fat
- controlling high blood pressure
- exercising regularly and losing weight
- managing your blood sugar levels (if diabetic)

## **Please note**

Cardiovascular disease runs in families, so any changes YOU make in your household will benefit ALL of your family.

If you would like further information about these topics, please see the list of web addresses on the last page.

*At St Vincent's we will look after you and your heart. Please make sure you continue to do this when you get home. Our duty of care is to help you get better, but it is up to you to make sure you stay that way.*

## ***What to do if you get further chest pain***

If you get further chest pain, it's important to act quickly, use the right medication and notify your doctor as soon as possible. The following five steps are a good guide for managing chest pain (for a printable diagram, please go to [www.heartfoundation.org](http://www.heartfoundation.org) and type "managing chest pain" into the search bar).

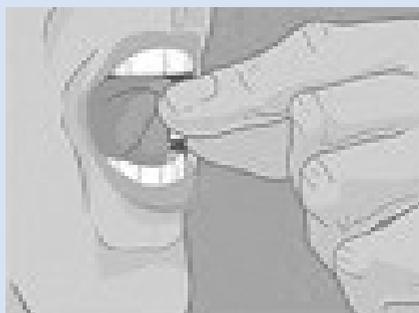
Steps:

1. Identify the location, type of pain and the severity. Giving it a number out of 10 is a good way to do this.

2. STOP what you are doing and REST! It is a good idea to tell someone else how you feel.
3. Locate your Anginine tablets or spray and administer it under your tongue.
4. Wait five minutes – if the pain is still there, administer again. If in another five minutes the pain is still there, administer again.
5. If the pain is still there after 15 minutes and three doses of Anginine, CALL 000.

**If the pain is getting worse after 1-2 doses of Anginine, CALL 000 sooner.**

**If you are having ongoing chest pain, please inform your GP and cardiologist.**



## **What to do when you go home**

### **Puncture site**

Remove any dressings the day after your procedure. There is no need to re-dress the site. Keep it clean until healed. The best way to do this is to shower daily, rinsing the site with warm water. DO NOT use any creams, powders or lotions near the site.

Assess your puncture site twice a day for signs of bleeding, swelling or infection (redness, heat or mucky discharge). Please notify your GP if you notice any of these symptoms.

You may get a dull ache around the puncture site. Panadol can be taken for this.

### **In case of bleeding or swelling**

If you notice a lump forming at the puncture site or bleeding:

1. Lie flat in a comfortable position on a bed or couch.
2. Place 3 fingers over the bleeding site and apply firm pressure for at least 10 minutes after bleeding has stopped. Once bleeding has stopped, keep your feet up for 2 hours to allow a clot to form.

This will prevent it bleeding or swelling again.

If bleeding does not stop, or the swelling gets bigger, call an ambulance on 000.

### **Shower**

You may shower the day after your procedure. If you go home the same day as your procedure, please wait until the following day to shower. Do not try to wash off the Betadine stain around the groin puncture site as you could dislodge the clot that has formed and cause bleeding.

Gently pat dry the site when drying. Daily showers are recommended.

### **Activity**

If your home has stairs, keep your use of the stairs to a minimum as this will put pressure on the groin site.

No heavy lifting or straining is permitted for one week – this includes heavy housework (i.e. vacuuming, mowing the lawn).

For the first few days it's important to let your leg heal, but you may

recommence your normal walking exercise the day after the angiogram.

It is preferred that you leave running, gym, group sports, tennis etc for a period of a week. Allow the puncture site to heal properly before you recommence your normal sports.

Depending on the results of your angiogram, you may not be able to recommence your normal exercise routine. Please check with your cardiologist before going home.

If you are a smoker, it is important to stop as this reduces your risk of heart disease. Passive smoking is also dangerous.

### **Return to work**

This will depend on your occupation. Medical staff should advise you on your return to work date. If you drive a heavy vehicle such as a bus or truck for a living, you may have further restrictions.

Please ask your doctor or nurse prior to discharge about resuming work. A medical certificate can be provided if required.

### **Driving**

NO driving is permitted for 48 hours after discharge.

### **Cardiac card**

A 'cardiac card' will be given to you upon discharge. This contains your personal details and current medical information.

If you ever need an ambulance, give your cardiac card to the ambulance officer. The information will assist them to treat your condition promptly.

We highly recommend that you carry the cardiac card with you at all times.

**Should any problems arise in the next 24 hours, please phone St Vincent's on (03) 9288 2211 and ask to speak to the cardiology registrar.**

***Phone numbers/web addresses of interest***

beyondblue  
Tel: 1300 224 636  
[www.beyondblue.org.au](http://www.beyondblue.org.au)

National Heart Foundation  
Tel: 1300 362 787  
[www.heartfoundation.org.au](http://www.heartfoundation.org.au)

Quit  
Tel: 137 848  
[www.keepquitting.org.au](http://www.keepquitting.org.au)