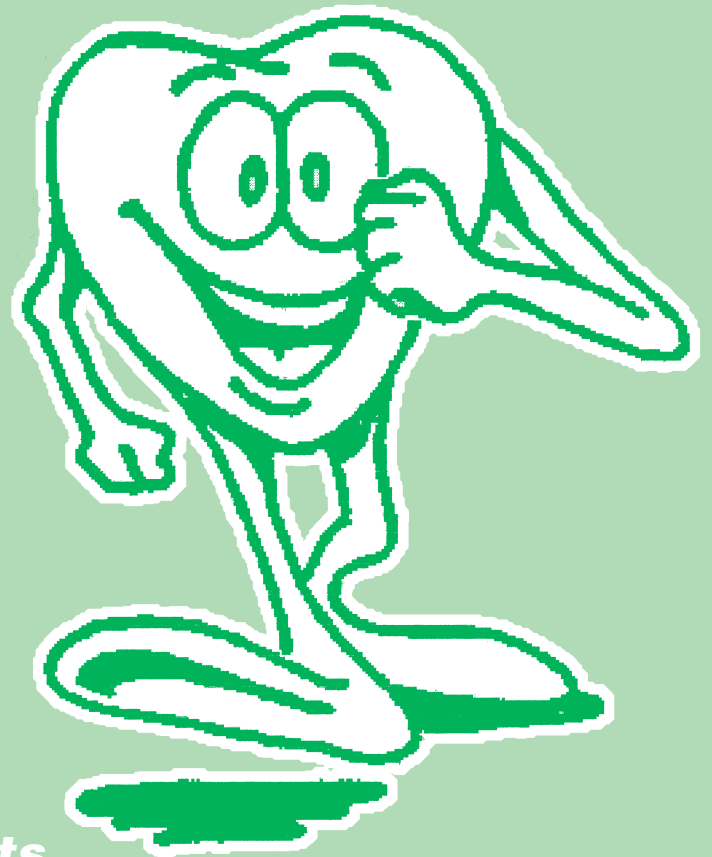


ST. JAMES'S HOSPITAL

KEITH SHAW

CARDIAC SURGERY

UNIT



***Information for Patients
who are waiting for heart surgery***

Introduction

This booklet has been written to help you understand about your operation, the preparation before your operation, and the care you will receive afterwards both in the intensive care unit and on the ward.

Pre-Admission Clinic

During this pre-admission clinic you will be assessed and fully prepared for surgery. You will meet several members of the multi-disciplinary team who will care for you during your hospital stay.

Initially you will have an ECG and Chest X-ray performed. Blood samples will be taken and your blood pressure and weight will be recorded. You will also have swabs taken to test for MRSA (Meticillin-Resistant Staphylococcus Aureus).

You will then be seen individually by the following team members:

The Advanced Nurse Practitioner or Senior House Officer

To examine you and make sure all your tests have been carried out.

The Anaesthetist

To assess your lung function and to explain about the drugs you will be given during the operation. You will be asked about previous operations and if you have any allergies.

The Pharmacist

Who will make a record and discuss your present medications with you. Please bring the medication boxes with you with labels on how to take the medication on them, including inhalers, creams and eye-drops, and the phone number of your local pharmacy.

The Social Worker

Will discuss your plan for discharge post your heart surgery. They will provide information regarding any assistance which may be needed e.g. convalescence.

As a group you will receive a 10-15 minute talk from the following:

The Physiotherapist

Will see you to teach you about deep breathing, coughing and exercises which are important following the operation.

The Cardiac Rehabilitation Nurse

Will provide an introduction to cardiac rehabilitation and leading a healthy lifestyle after your heart surgery.

The Clinical Nutritionist

A clinical nutritionist will provide dietary help and advice after your heart surgery.

The Advanced Nurse Practitioner (ANP)

Will give a brief outline of what will happen from the day of your admission to the day of discharge. She will give you a clear description of what will occur during surgery.

The Keith Shaw Cardiac Surgery Unit

This unit is comprised of a 15 bed ward and 6 bed ICU that specialises in the care of patients undergoing cardiac surgery. You will be admitted to the ward the day prior to surgery. Following surgery you will stay in the ICU for the first 6-24 hours, then transfer to the High Dependency section of the ward for the next 24 hours. Finally you will then spend the next 4-5 days recovering on the ward

You will meet many different healthcare providers during your stay on the unit.

The following will help you identify who is who.

Ward Sister	Dark Blue Tunic Navy Trousers
Staff Nurse	Light Blue Tunic Navy Trousers
Student Nurse	White Tunic Blue Trousers
Nurse Practitioner	White Top Navy Trousers
Ward Attendants	White Tunic Burgundy/Grey Trousers
Ward Clerk	Navy Suit

Meal Times

Breakfast	8-8.30 am
Coffee/Tea	mid morning
Lunch	12.00-12.30
Coffee/Tea	mid afternoon
Supper	5-6pm

You are given a choice of main course at each meal.

Preparing for admission to the hospital

- Ring the ward after 9.00 (01) 4103389, the day before your admission to confirm a bed. You may be asked to reconfirm your bed again the morning of your admission
- DO NOT BRING ANY VALUABLES WITH YOU TO HOSPITAL.
- Bring wash bag, pyjamas, nighties, towels, dressing gown and slippers (we would recommend supportive non-underwire bras for the ladies). We encourage patients to send as much property home with relatives as possible.
- Bring a list of your medication with you, no need to bring medications.
- There is strictly no visiting between 12.00-14.30 each day, as you will be very tired and a rest period is encouraged. We also recommend that relatives do not visit for the first few mornings as you will be busy having physio and having tubes and drains removed.
- If you are on Warfarin or Plavix — check with the ward as to when you should stop taking it prior to your operation. Please make this enquiry as soon as you get a date for your operation.

Preparing for Surgery

When you are admitted to the hospital a nurse will talk with you and your family about what you can expect while you are in the hospital. This is often a very busy day with visits from the following:

The Surgeon To discuss your operation and answer any questions you may have.

The ANP or House officer To examine you and make sure all your tests have been carried out.

The Anaesthetist To assess your lung function and to explain about the drugs you will be given during the operation. You will be asked about previous operations and if you have any allergies.

Nurse/Attendent Will assist you with a bath/shower.

You will be given a body shave. The nurse/attendent will tell you which areas they will need to shave. You will also be asked to have a shower or bath with a medicated soap called Hibiscrub.

YOUR PLAN OF CARE is outlined on the next few pages. We use **integrated care pathways**.

Patient Guide to Integrated Care Pathways for Cardiac Surgery Patients

An integrated pathway is designed to plan your care more systematically. It is used by doctors, nurses, physiotherapists and any other healthcare professional you might meet during your stay in St. James's Hospital Cardiac Surgery Unit. This is a guide of what might happen to you.

THE DAY BEFORE SURGERY:

- On arrival to the ward you will be allocated and shown to your bed.
- The nursing staff will introduce themselves and other patients to you.
- A nurse will come and talk to you and tell you what to expect when you wake from your operation.
- You will also be assisted to be prepared for your surgery i.e. shave and shower.

OPERATION DAY:

- You will be fasting from midnight prior to your operation.
- You will need a shower before your operation
- You will be given a pre-med before your transfer to the theatre and this will make you feel a little drowsy.
- You will return to the Intensive Care following your surgery where you will be monitored closely for the first 6-24 hour period

DAY ONE POST OP:

- You will be transferred to the High Dependency Unit on Keith Shaw ward.
- You will still require oxygen day one post op and this will be administered via an oxygen mask.
- In order to monitor your heart rate you will be attached to a heart monitor, your blood pressure and pulse will be recorded every two hours, or more frequently if necessary.
- You may have pacing wires in your chest. These can be used to assist your heart if your heart rate is slow post operatively.
- You will have an intravenous line in your neck and your arm through which you may be administered some medications.
- You will have drains in your chest to drain any excess blood.
- A urinary catheter will be in situ and your urine output will be measured and recorded every hour. This is to check that your kidneys are working properly and blood supply around your body is adequate.
- Fluids and a light diet are encouraged.

- The Physiotherapist will see you and perform breathing exercises with you and will sit you out in a chair. You will have Elastic Stockings on until you are fully mobile.
- You will have a Chest X-ray, ECG and some bloods taken.

DAY TWO POST OP:

- You will be transferred out of the High Dependency Unit into one of the ward bay areas.
- You will be disconnected from the heart monitor today, neck lines and urinary catheter will be removed. Your heart rate and blood pressure will be taken and recorded every six hours.
- You will sit out of bed for longer periods of time today and you will be able to gently mobilise around your bed area.

DAY THREE POST OP:

- Your heart rate and blood pressure will be taken and recorded every six hours.
- your sternal and leg (if applicable) dressings will be changed.
- You will have an assisted shower.
- You will sit out of bed for longer periods of time today and you will be able to gently mobilise around your bed area.

DAY FOUR POST OP:

- By this time you will be able to mobilise all around the ward area.
- Today you will have an ECG, Chest X-ray, and blood tests, to check if everything is all right before you go home. If you have had valve surgery you will also have an echocardiograph on Day 4.
- Your pacing wires will be removed today.
- The Cardiac Rehabilitation Sister will see you today and talk to you about your local rehabilitation programme.
- Your heart rate and blood pressure will be taken today and recorded twice daily.
- You will be given a discharge advice booklet to read so that you can prepare for discharge home.

DAY FIVE POST OP:

- If everything has gone to plan you will be discharged home today.
- By this time you will be able to mobilise independently and the Physiotherapist will walk the stairs with you. The Physiotherapist will also give you advice regarding progression of exercise after your discharge.
- You will attend a discharge talk given on the ward by the cardiac rehab nurse.

- The Pharmacist will go through your medications and give you a green medication card.
- The dietician will advise you on
 - (a) A guide to nutrition immediately after your surgery to help optimise your recovery.
 - (b) Long term heart healthy eating guidelines.

This is the expected course for patients undergoing cardiac surgery. However as every patient is treated individually your post operative course may differ.

Rehabilitation talks:

Talks are given twice a week for you and your family.

It is wise to attend so that you understand what you should and should not do once you get home.

Ask the nurses for details about when the talks are held.

The aim of a bypass operation is to relieve you of angina.

After surgery you will not require your GTN spray.

You should now be able to get back to a full and active life

Discharge Home

The process of planning your discharge commences on admission to the Hospital. You need to organise who is going to collect you from hospital once you are discharged, as an ambulance service is not provided unless you are being transferred to another hospital.

We expect you will be discharged from hospital 5 or 6 days after your operation. If you live alone we request you have a family member or friend stay with you for at least a week after your surgery. If this is not possible please let us know as soon as possible so that alternative arrangements can be made.

Following discharge please contact the ward on 01 410 3389 if you have any queries or concerns.

Useful telephone numbers:

Keith Shaw Ward 01 410 3389

Keith Shaw Intensive Care 01 410 3398

Advanced Nurse Practitioners 01 410 3338

Please phone at any time (except between 07.30 - 08.30 and 20.30 - 21.30 as the ward rounds are taking place). It is recommended to have one key spokesperson per family.

Visiting hours:

10.30 - 12.00

14.30 - 20.00 (afternoon visiting is more suitable for the patients).

Strictly no visiting between 12.00 - 14.30 as this is the patients rest period.

Intensive Care and High Dependency — the visitors per bed are restricted to 2.

Please adhere to the hand hygiene recommendations displayed throughout the hospital. Information leaflets are available in the Ward Day room.

The Heart and how it works

Your heart is a strong muscle located slightly to the left in your chest. It pumps blood around your body. Inside it is divided into 4 chambers, 2 upper chambers—the **right** and **left atria**, and 2 lower chambers—the **right** and **left ventricles**.

A wall divides the heart into right and left sides. The **right** side of the heart receives blood from the body and sends it to the lungs. Once in the lungs, the blood becomes rich in oxygen and is returned to the body via the **left** side of the heart.

4 Valves separate the chambers and act as one way doors to direct blood through the heart in a specific pattern. The blood on its way to the lungs through the right side of the heart passes through the **Pulmonary** and **Tricuspid Valves**. The blood returning from the lungs through the left side of the heart passes through the **Mitral** and **Aortic Valves**.

Coronary Arteries

The heart pumps an average of 60-100 times per minute. In order to do this it requires energy. It gets its energy from the oxygen and nutrients in the blood. Therefore, the heart needs its own blood supply.

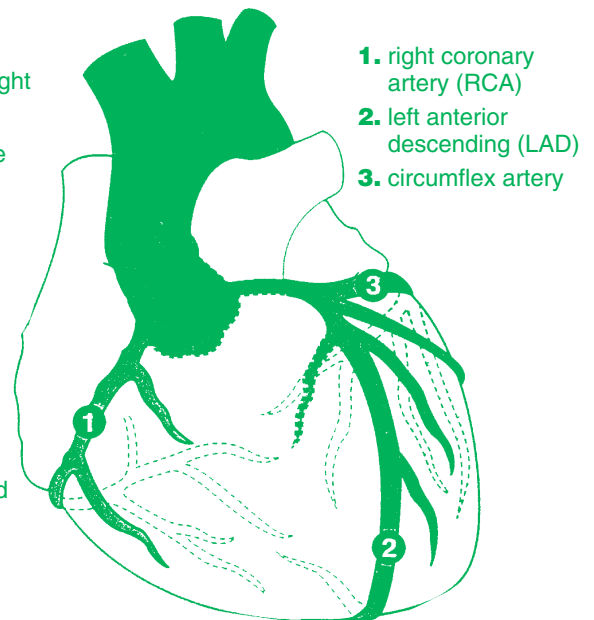
Arteries are the blood vessels that carry blood rich in oxygen. The **Coronary Arteries** are the vessels which supply the heart. They surround the heart, lie on the surface and divide into tiny branches so that every part of the heart is reached.

What are they called?

There are three main arteries that supply the heart. The muscle on the right side of the heart is supplied by the **Right Coronary Artery**, which also stretches around to the back of the heart. On the left side of the heart the arteries are the **Left Anterior Descending Artery** which supplies the muscle to the front and the **Circumflex Artery** which supplies the muscle to the back.

Open Heart Surgery

The term **open heart surgery** is used to describe any operation in which a heart-lung machine is used to replace the normal function of the heart during the operation. This machine diverts blood from the heart and provides it with oxygen, allowing the heart to be still while the surgeon operates. At the end of the operation when the heart has begun to beat normally again, the heart- lung machine is disconnected.



Coronary Artery Bypass Graft Surgery

When the blood supply to the heart is reduced because of narrowing in the coronary arteries the body responds in various ways. These symptoms can include chest pain, breathlessness and generally being unable to perform everyday activities. Coronary artery bypass surgery is done to restore an adequate blood supply to the heart muscle.

In order to supply blood beyond the blockages in the arteries it is necessary to bypass the affected part. This is done by taking some vein from either the leg or the arm and attaching it above and below the blockage. Sometimes an artery in the chest wall is also used.

Heart Valve Surgery

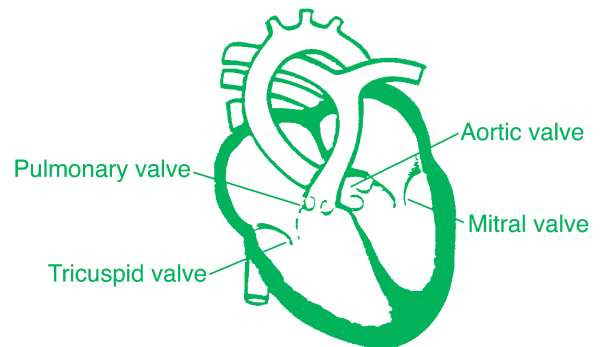
There are two main conditions that affect the heart valves

1. Narrowing of the valve which restricts blood flow—**stenosis**
2. Inability of the valve to close properly causing a leakage or a backflow of blood—**incompetency**.

Both conditions will affect the overall performance of the heart. The valves can either be affected from a birth defect or from infection. Surgery to treat the faulty valve will be either repair or replacement. The two valves most commonly affected are the **Mitral** and **Aortic** valves. The valve can be replaced using either a mechanical or a tissue valve. Your doctor will discuss with you which valve requires treatment and whether it needs to be repaired or replaced.

To prevent any blood clots from forming in the vessels or valves you may be required to take special medication which keeps the blood thin i.e. it prolongs the time it takes for the blood to clot. This medication is called an **anticoagulant** and you will receive special instructions and information for taking it.

Infection of the valves and inner heart lining can occur when bacteria enter the bloodstream during dental work, any surgical procedures or infection. This infection is called **bacterial endocarditis** and it can cause scarring or destruction of the heart valves. To reduce the risk of this happening antibiotics should be taken prior to, and sometimes after, surgical procedures and dental work. Consult your Doctor prior to any treatment if you are unsure.



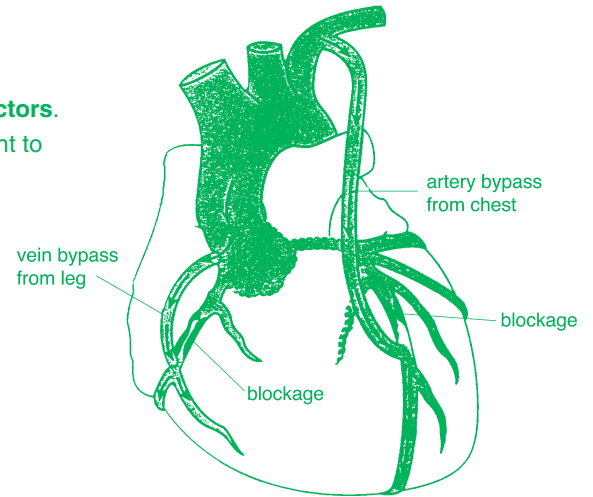
Coronary Artery Disease

Blood flows through the centre of the artery, this is called the **lumen**. The lumen can become narrowed, reducing the amount of blood flow through the artery. This narrowing is the result of a build up of a plaque in patches along the inside of the artery wall. This is known as **atherosclerosis**.

What causes atherosclerosis?

There are many causes of atherosclerosis, commonly known as **risk factors**. Some risk factors can be changed, whereas others cannot. It is important to eliminate as many risk factors as possible. Risk factors include:

- Smoking
- Diabetes
- Lack of physical activity
- Stress
- Age and gender
- Raised cholesterol
- High blood pressure
- Being overweight
- Family history



Smoking

We cannot emphasise how important it is that you do not smoke before your surgery. Smoking is one of the main causes of heart disease and should be stopped. Even by stopping now you can reduce the risk of complications after surgery. If you have difficulty in attempting to stop smoking please let us know as we can offer assistance from our smoking cessation nurse.