



# Victorian Heart Centre

## HEART VALVE REPLACEMENT

A guide for patients



Epworth

**H**earth valves control blood flow through the heart. With each heart beat, the valves open and close to ensure the blood flows in only one direction.

If one or more valves are not working properly, blood flow through the heart and lungs can decrease significantly. Symptoms can include chest pain, fatigue, shortness of breath, inability to sleep, and swelling of the ankles and wrists.

The two types of valve defects are:

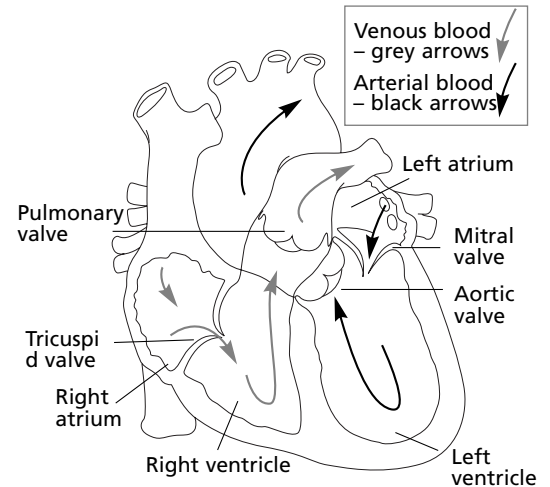
- stenosis, where the valve opening

becomes narrow and stiff, and the heart has to work harder to pump blood through the valve

- regurgitation, where the valve does not close properly, allowing blood to flow backward; this also makes the heart work harder.

Common causes of heart valve problems include:

- a congenital heart defect
- rheumatic fever
- a previous infection within the heart
- ageing.



Each heart valve controls blood flow between two chambers of the heart.

### Heart valve surgery

A defective heart valve can be replaced with either a “biologic” valve (containing specially treated animal tissue) or a mechanical valve made of metal or plastic. These “prosthetic” heart valves are designed to function like natural valves.

During a valve-replacement procedure, the surgeon stops the heart, and a heart-lung machine takes over the pumping of blood to the head and body (cardiopulmonary bypass). The faulty heart valve is removed, and the prosthetic heart valve is sewn into place. After the surgeon checks to make certain that the prosthetic valve is functioning correctly, the incision in the heart is closed. After the heart beats on its own again, the patient is removed from cardiopulmonary bypass. The operation takes between three and six hours.

#### 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 heart valve replacement. There may be other adverse 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 benefits and risks so you can make an informed decision about having treatment.

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### Recovery

Following surgery, you are cared for in an intensive care unit. After one or two days, you are transferred to a ward and attended by specially trained nurses. Your physiotherapist will start you on a simple exercise program. Your cardiologist will advise you about a return to work, driving, daily activities, medications and related issues.

Most patients who have a prosthetic heart valve need to be on anticoagulant (“blood thinning”) therapy for the rest of their lives. This is because the prosthetic valve is a foreign body and poses the risk of the formation of blood clots. See the patient education leaflet “Warfarin – a guide for patients”, available from your ward nurse or doctor.

### Possible Complications

As with all surgical procedures, heart valve replacement does have risks, despite the highest standards of practice. Most people do not have serious and permanent complications. If a complication occurs, it is usually temporary. However, some complications may have permanent effects or may even be life threatening.

#### MAIN RISKS OF HEART VALVE SURGERY

- Stroke may occur in about one or two of every 100 patients. The risk is higher for elderly patients and those in poor health. Effects of stroke may resolve after weeks or months, or can be permanent.
- Infection of the breastbone and persisting pain in the breastbone.

- About five patients in 100 require further surgery to stop internal bleeding.
- Infection or collapse of the lungs.
- Problems with the heart’s rhythm, requiring medications or a pacemaker.
- Bleeding problems due to anticoagulant therapy.

### Lifestyle Changes

- Healthy diet (good intake of vegetables, fruits and cereal-based foods, moderate amounts of lean meats, poultry, fish, and reduced-fat dairy products, and a reduced intake of saturated fat and salt).
- Exercise regularly according to your rehabilitation program, HeartSmart.
- NO SMOKING.
- Talk to your doctor before taking any other medications, including over-the-counter or complementary medicines.
- Tell any doctor that you visit that you are on anticoagulant therapy.

### Dental Care

Before heart valve surgery, your teeth must be cleaned and checked by a dentist. Any dental work that you need must be completed before surgery, with antibiotic cover. After heart valve surgery, dental checks with antibiotic cover should continue every six months.

Always tell your dentist that you have had a heart valve replacement because you will need an antibiotic to reduce the risk of a heart infection caused by oral bacteria.