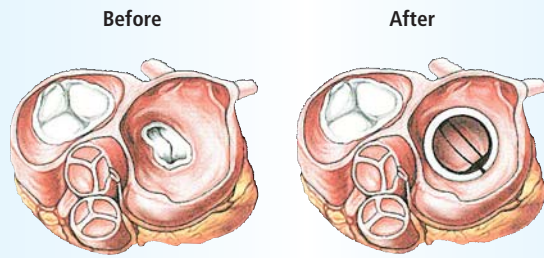


- You get to visit the Cardiac Surgery Intensive Care Unit (CTICU) where the nurse will explain to you what to expect after the surgery.
- The anaesthetist will visit you and explain the anaesthetic procedure.
- You will be given a mild sedative to help you sleep that night.
- Further sedation may be given the next morning just before the operation.
- An antibacterial soap will be used to clean you the night before and on the morning of the surgery to reduce the risk of wound infection.
- You will not be allowed to eat or drink after midnight.



### Operation and post-operative care

- The surgery will usually take between three to five hours after which you will be looked after in the CTICU for one to two days.
- The chest tubes and urinary catheter will be removed and you will be transferred to the ward.
- You will stay for another three to four days before discharge.
- Total recovery usually takes four to six weeks.
- You will be given follow-up dates to see your surgeon – at the second week after the operation.
- Your surgeon may want to see you more frequently if there is a need.
- At the same time, you will also be seen by your family doctor and cardiologist.

## Contact information

**Department of Cardiac, Thoracic and Vascular Surgery**  
Main Building 1, Level 2

**Opening Hours:** 8.30 am - 6.00 pm (Mon - Fri)  
(except on Public Holidays)

### For appointments, please contact

Tel: (65) 6772 2002  
Email: [appointment@nuh.com.sg](mailto:appointment@nuh.com.sg)

### For International Patients And Visitors

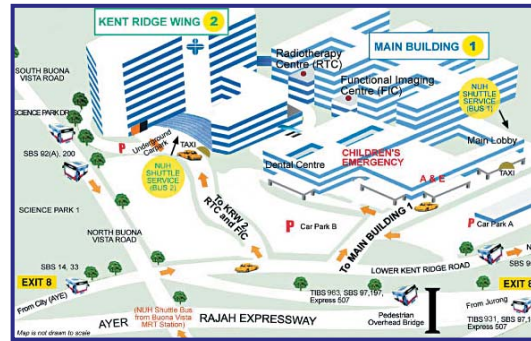
The International Patients Liaison Centre (IPLC) is a one-stop service centre to support all the medical needs of our foreign patients

Tel : (65) 6779 2777 (24-Hours Helpline)  
Fax : (65) 6777 8065  
Website : [www.nuh.com.sg/iplc.html](http://www.nuh.com.sg/iplc.html)

### National University Hospital

5 Lower Kent Ridge Road, Singapore 119074  
Tel: 6779 5555 Fax: 6779 5678 Website: [www.nuh.com.sg](http://www.nuh.com.sg)

## Location



## Free Shuttle Bus Service

Free Shuttle Bus Service from Dover MRT Station to NUH

**Operation hours :** 8.00 am – 8.30 pm (Mondays – Fridays)  
8.00 am – 2.00 pm (Saturdays)  
Not available on Sundays and Public Holidays

**Dover/NUH passenger pickup/ drop off point**

1. Dover MRT Station (opposite Singapore Polytechnic)
2. Main Building, Lobby Entrance (near roundabout)
3. Kent Ridge Wing, Level 3, South Entrance

For more information on Shuttle Bus schedule, you may go to NUH internet website at [www.nuh.com.sg](http://www.nuh.com.sg)

Information in this brochure is given as a guide only and does not replace medical advice from your doctor. Please seek the advice of your doctor if you have any questions related to the surgery, your health or medical condition.

Information is correct at time of printing (Aug 2009) and subject to revision without notice.



## Heart Valve Surgery



## What is Valvular Heart Disease?

Heart valves are 'doors' that control the flow of blood between the different chambers or parts of the heart.

In valvular heart disease, one or more of the heart valves become damaged and cannot function properly. Different diseases affect different valves. Certain diseases tend to affect one heart valve more than the others. The valves in the left side of the heart are more commonly affected than those in the right side of the heart.

## What are the symptoms?

Patients will start experiencing symptoms at different ages depending on the disease that they have. This can range from the very young to the very old.

In general, valves can become "floppy" and allow blood to flow backwards or become "tight" thereby narrowing the space through which the blood can flow forward. There can also be a mixture of both.

In the early stage, you may have no symptoms and feel alright even if your valve is badly damaged. The symptoms may appear later and become progressively worse.

Common symptoms include:

- Shortness of breath on exertion
- Fatigue or tiredness
- Feeling of faintness
- Irregular heart beat
- Swelling of the ankles

If you experience these symptoms, you should see your family doctor who will take a detailed history, do a thorough physical examination and order the necessary tests.

Your doctor may refer you to a cardiologist for further evaluation. The cardiologist may do an echocardiogram, a painless test using ultrasound, to

help him look at your heart and its different structures. This will help your doctor to understand your condition and be able to make an accurate diagnosis and give the correct treatment.

## What is the treatment?

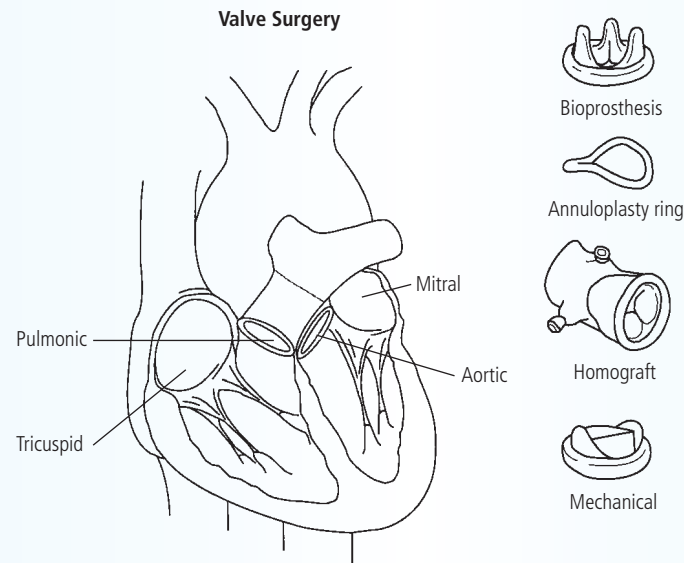
Depending on what is found, you may be:

- Given medications and be followed up regularly or
- Referred to an interventional cardiologist or
- Referred to a cardiac surgeon

The interventional cardiologist is a cardiologist who carries out procedures on the heart using percutaneous methods through the skin.

The cardiac surgeon will:

- Explain why open surgery may be the best option for your condition
- Explain the different ways of treating the valves
- Explain the risks, benefits and possible complications
- Describe the surgical procedure
- Explain the post operative care
- Answer your questions and clarify your doubts
- Help you reach a decision and set a date for the surgery



## What are the types of valve surgery?

Your damaged valves can either be repaired or replaced.

Your surgeon will always try to save as much of your valve as possible unless this affects the result of the surgery. If the repair fails, he will replace the valve at the same operation.

Valves can be replaced by:

- Mechanical Valves
- Bioprosthetic valves which are made from pig or cow tissue
- Allograft valves which are taken from human valve tissue

## How do you prepare for surgery?

### Pre-Admissions Testing

- All the necessary tests (e.g. blood tests, X-Ray etc) will be done two weeks before your admission to hospital.
- In this way, you will only need to be admitted the day before surgery, helping you save on your hospital bill.
- Should any of your tests be abnormal, you can be treated in time so as not to delay surgery.
- You should stop smoking at least four weeks before surgery to enable faster recovery and to reduce the risk of complications. In fact, you should think about stopping smoking for good.
- You should eat a healthy balanced diet and rest well before the surgery.
- Taking multivitamins may help in your recovery.

### Admission

- You are admitted on the day before surgery.
- A team of doctors will check you to make sure that everything is in order.
- They will explain to you again the surgery and other details. You can address any further concerns with them.