Heart Valve Surgery

Why surgery is needed

There are 4 valves in the heart that open and close with each heart beat. They are the tricuspid, pulmonary, mitral and aortic valves. The valves let blood flow in and out of the heart’s four chambers. Valve surgery repairs or replaces damaged or scarred valves.

Scarring can occur from birth defects, heart attacks, infection or rheumatic fever. When valves do not open and close as they should, the heart has to pump harder to get blood to the body. This weakens the heart, causing pain, shortness of breath or dizziness. When medicine is no longer effective, surgery is needed.

After surgery, be sure to tell your dentist that you have had a heart valve replacement. You may need to take medicine before any dental work.

Valve conditions

Getting Started

• Stenosis - narrow opening of valve
• Regurgitation - leaky valve
• Prolapse - parts of the valve not working or floppy
• Endocarditis - infection in one or more valves
• Malformation - valve is defective, often from birth

Types of valves

All valves are man-made. Some are made with human or animal tissue. Others are made of ceramic or carbon materials. If you are to have the mitral or aortic valve replaced, your doctor will talk to you about having a tissue or mechanical valve.

Tissue valve (bioprosthetic)

• Made of animal or human tissue.
• Does not usually need long term blood thinners.
• Does not last as long as a mechanical valve, but may last 10 to 15 years.

Mechanical valve

• Made of man-made materials like carbon or ceramic.
• Last a long time and do not usually need replaced.
• Requires life-long treatment with a blood thinner called warfarin.
Transcatheter aortic valve replacement

- Made with animal tissue and wire frame (stent).
- Placed using thin tube inside old valve.
- May be option if high risk for surgery or if surgery is not an option.
- May require use of blood thinner or antiplatelet medicine for short time.