



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT OF PHYSICIAN ASSISTANT

COURSE NAME: SURGERY

II YEAR

UNIT III:

TOPIC II: Rheumatic heart disease



Definition



Rheumatic heart disease is a **condition in which the heart valves have been permanently damaged by rheumatic fever**. Rheumatic fever is an inflammatory disease that can affect many connective tissues, especially in the heart.



Causes



- **rheumatic fever**, an inflammatory disease that can affect many connective tissues, especially in the heart, joints, skin, or brain. The heart valves can be inflamed

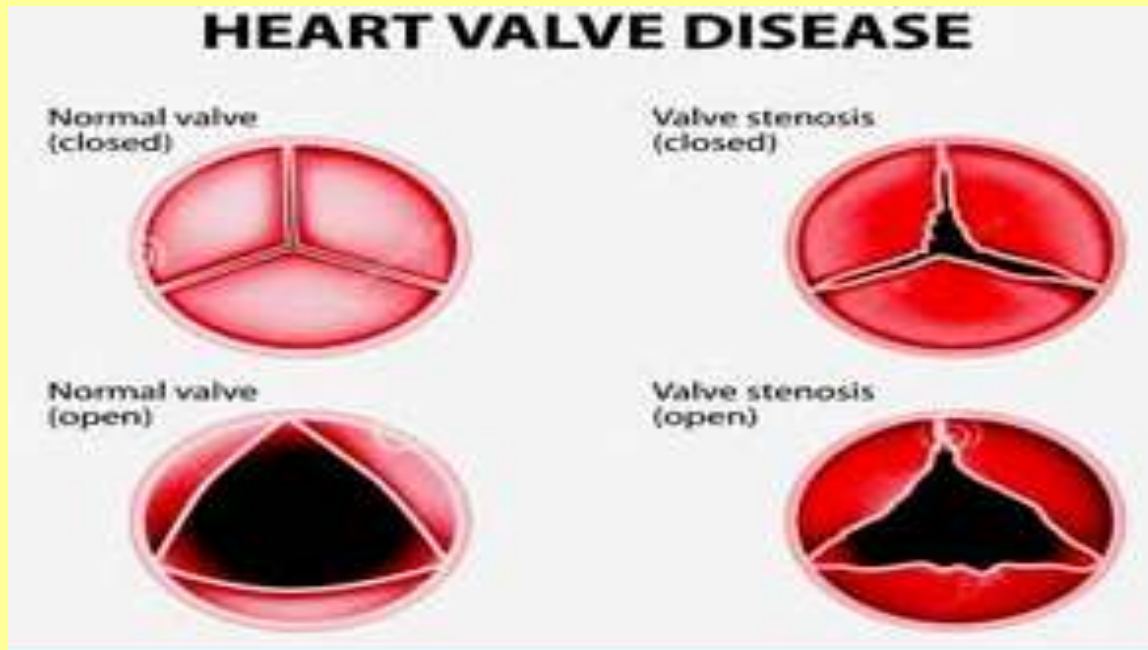


DEFINITION

- Rheumatic heart disease is a chronic condition resulting from rheumatic fever which involves all the layers of the heart (i.e. pancarditis) and is characterized by scarring and deformity of the heart valves.
- The commonest valves affecting are the mitral and aortic, in that order. However all four valves can be affected.



Valve disease





Symptoms



- Heart murmur
- Chest pain
- Breathlessness during physical inactivity
- Weakness and tiredness
- Swelling of the legs and face

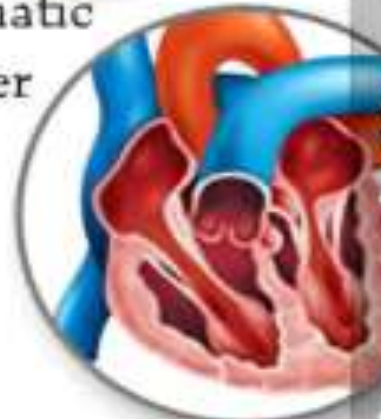
signs



Strep Throat Rheumatic Fever



Streptococci



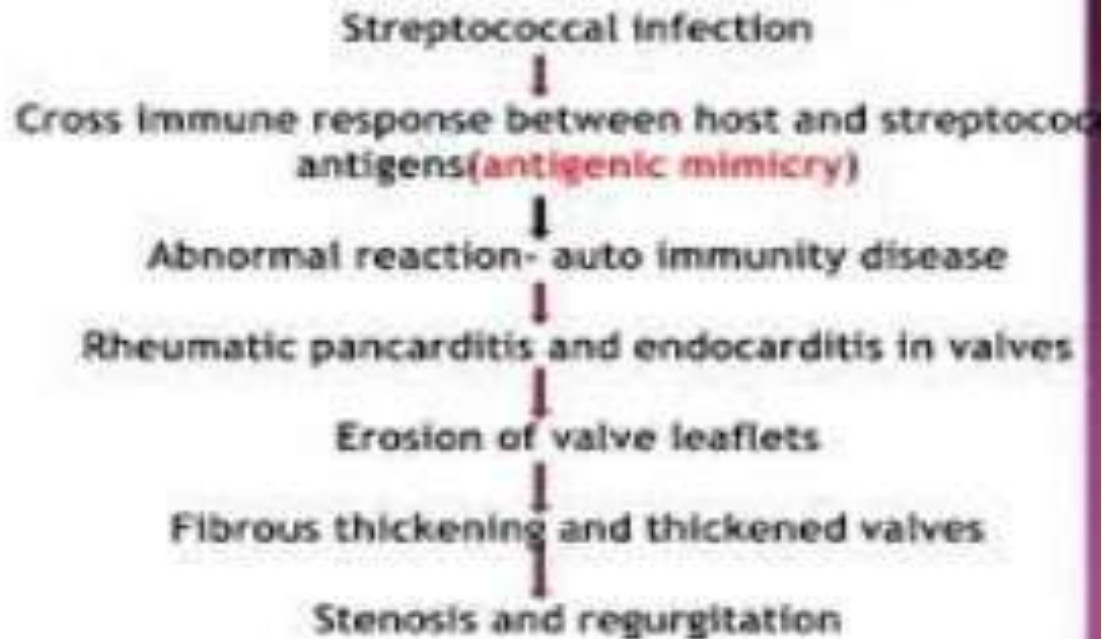
Heart Valve Damage



Pathophysiology



PATHOPHYSIOLOGY:





Diagnosis



- **Physical examination** look for a heart murmur
- **Chest X-ray** an enlargement of the heart or the fluid on the lungs
- **Medical history** ARF (acute rheumatic fever) or a strep infection.
- **Blood tests.** Blood tests can be done to check for signs (markers) of inflammation in the blood. These tests include C-reactive protein
- **Electrocardiogram (ECG or EKG).** This test records the electrical activity of the heart. It can help diagnose irregular heartbeats, active protein and the erythrocyte sedimentation rate.
- echocardiogram shows the blood flows through the heart and



Medical Management



- The goals of treatment for rheumatic fever are to treat the infection, relieve symptoms, control inflammation and prevent the condition from returning.
- **Antibiotics.** Penicillin or another antibiotic is typically prescribed to treat the strep bacteria.
- **Anti-inflammatory drugs.** Aspirin or naproxen (Naprosyn, Naprelan, Anaprox DS) can help reduce inflammation, fever and pain.



- **Antiseizure drugs.** Medications such as valproic acid or carbamazepine (Carbatrol, Tegretol, others) may be used to treat severe involuntary movements caused by Sydenham chorea.

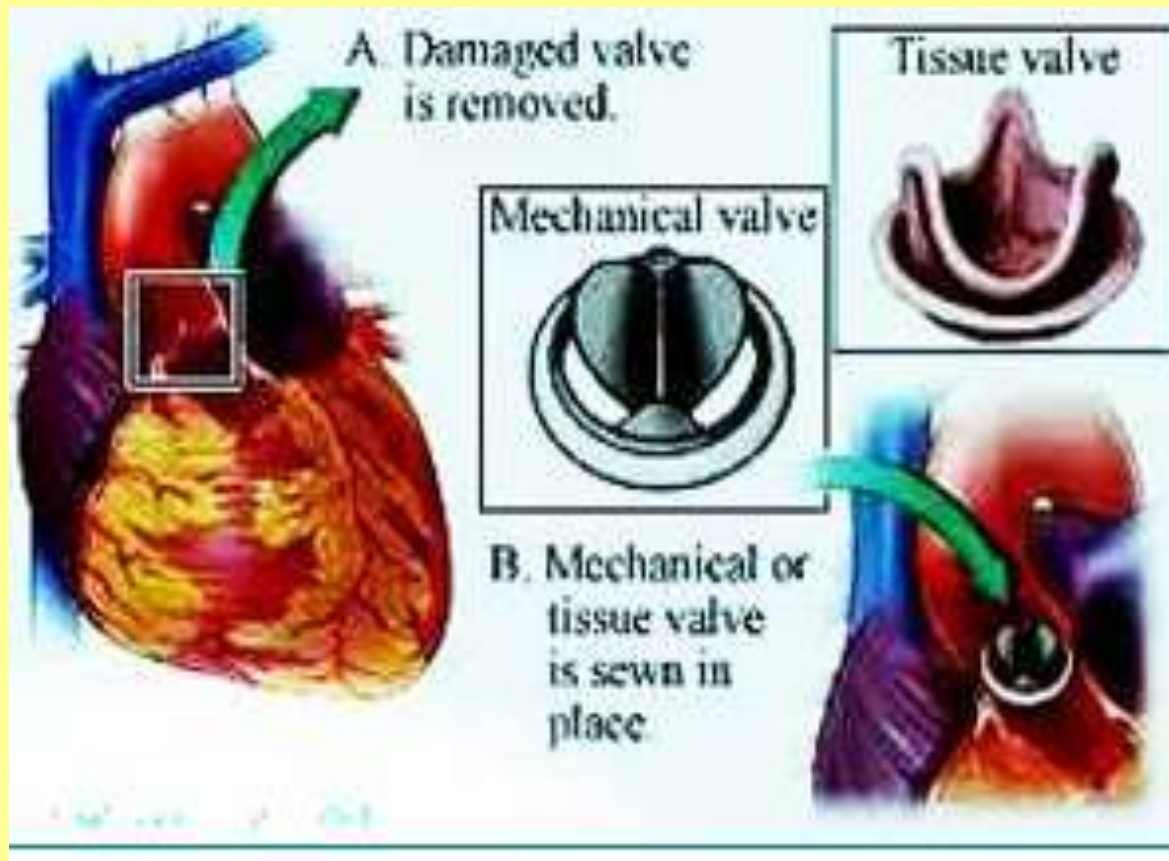


Surgical management



- **Valve Repair** : It means that the valve is mended to help to work better. During repair, a ring may be sewn around the opening of the valve to support it.
- **Valve Replacement** : Valve replacement or valvuloplasty is a non-surgical technique that uses a cardiac catheterization. During replacement, the diseased valve is removed and a new valve is inserted in its place. The replacement is done either with the help of a mechanical or a biological valve.

Valve replacement



Valve repair

