Aortic Regurgitation
Definition

A condition in which there is weakening or ballooning of the aortic heart valve, causing the valve to fail to close tightly with subsequent back flow of blood into the ventricle.
Causes, Incidence, and Risk Factors

• Aortic insufficiency is a heart valve disease where the aortic valve no longer functions adequately to control the flow of blood from the left ventricle into the aorta.

• Can result from any condition that weakens the aortic valve.

• Rheumatic fever primary cause. Other causes are being seen with increasing frequency.

• These include congenital conditions, endocarditis, hypertension, Marfan's syndrome, aortic dissection, ankylosing spondylitis, Reiter's syndrome, syphilis, and other disorders.

• The disorder affects approximately 5 out of 10,000 people. It is most common in men 30 to 60 years old.
Symptoms

- Palpitations
- Bounding Pulse (irregular, rapid, racing, pounding, or fluttering pulse)
- Syncope
- Weakness, particularly with activity
- Dyspnoea with activity
- Orthopnoea
- Fatigue
- Chest pain
- angina type
- under the sternum, may radiate
- crushing, squeezing, pressure, tightness
- pain increases with exercise, relieves with rest
Signs and Tests

• Auscultation
  - shows a heart murmur
  - pulmonary oedema (cackles at the base)
• Palpation revels parasternal heaves.
• Blood pressure may show up to 60mgMh between systolic and diastolic.
• An ECG test or Chest X-ray may show left ventricle enlargement.
• Aortic insufficiency may be seen on:
  • -an aortic angiography
  • -a left heart catheterization
  • -an echocardiogram
  • -a Doppler ultrasound
Angiography
Treatment

• Observation if no symptoms, or if symptoms are mild.
• Severe symptoms are best dealt with in hospital.
• Medications such as diuretics or digoxin may be used to stabilise the condition. These medications may also be used in people with mild symptoms to prevent the symptoms from worsening.
• Restrict activity
• Surgical repair or replacement of the aortic valve
Prognosis

- Aortic insufficiency is curable with surgical repair.

- The person may become symptom-free unless complications develop.
Complications

- Stable angina
- Left-sided heart failure
- Pulmonary oedema
- Endocarditis
Prevention

Aortic insufficiency cannot be prevented but some of the complications can be.

Prophylactic use of anti-biotic cover for any invasive procedures, dental treatment, surgery etc.