

# **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.

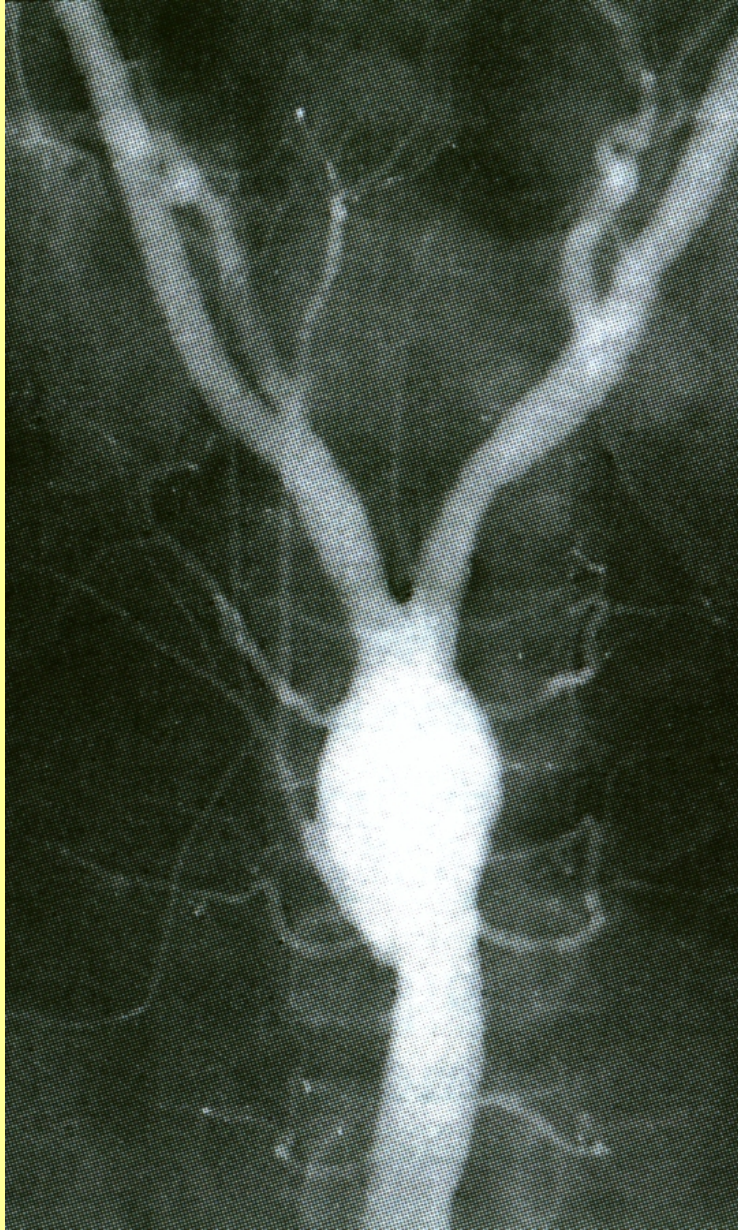
# Symptoms

- 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 reveals 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.