

Chronic Cardiac Conditions – Possible Signs

Valvular lesions

- See [murmurs page](#)

Assess for severity: e.g. **AS:** slow rising pulse, narrow pulse pressure, S2 intensity; **AR:** collapsing pulse, wide pulse pressure, backflow signs, displaced apex, short murmur; **MR:** AF, displaced apex, loud P2/RV heave (pulmonary hypertension); **MS:** AF, short gap between S2 and opening snap, loud P2/RV heave (pulmonary hypertension)

Assess for signs of cardiac decompensation: signs of heart failure

Assess for signs of infective endocarditis: splinter haemorrhages, Osler's nodes/Janeway lesions

Valve replacement

- See [valve replacement page](#)
- Midline sternotomy
- Abnormal S1 = mitral
- Abnormal S2 = aortic

Assess for valve function: signs of regurgitation e.g. **aortic:** collapsing pulse, wide pulse pressure, early diastolic murmur; **mitral:** pan systolic murmur, loud P2/RV heave (pulmonary hypertension)

Assess for signs of cardiac decompensation: signs of heart failure

Assess for signs of infective endocarditis: splinter haemorrhages, Osler's nodes/Janeway lesions

Assess for complications of over-anticoagulation: bruising, pale conjunctiva

Assess for haemolysis: jaundice, pale conjunctiva

Atrial septal defect

- Soft ejection systolic flow murmur (pulmonary area)
- Fixed, widely split S2
- RV heave

Signs of associations: low set ears/prominent epicanthic folds/flat nasal bridge (Down's syndrome), hypoplastic triphalangeal thumb/radial hypoplasia (Holt-Oram syndrome)

Signs of complications: loud P2 (pulmonary hypertension), peripheral oedema (right heart failure)

Ventricular septal defect

- Pan systolic murmur (loudest left lower sternal edge)
- Associated thrill
- RV heave

Signs of complications: raised JVP/peripheral oedema (right heart failure)

Cor pulmonale

- Plethoric facial appearance
- Central cyanosis
- Raised JVP (large a waves)
- Giant V waves + PSM (if secondary TR)
- Right ventricular heave
- Palpable/loud S2
- Ankle oedema

Signs of aetiology: clubbing (IPF), signs of COPD, end-inspiratory crepitations (pulmonary fibrosis)

HOCUM

- Pacemaker/ICD
- Jerky pulse/bisferiens
- Heaving non-displaced apex
- Ejection systolic murmur (left lower sternal edge)
- S4

Signs of complications: signs of heart failure

Ebstein's anomaly (of tricuspid valve)

- Tricuspid regurgitation
- Split S1 (delayed TV) and split S2 (RBBB)

Tetralogy of Fallot repair

- Sternotomy scar
- Lateral thoracotomy scar (Blalock-Taussig shunt)
- Clubbing ± cyanosis
- Left pulse weaker (Blalock-Taussig shunt)
- Loud pulmonary stenosis
- Raised JVP/peripheral oedema (right heart failure)

Signs of associations: syndromic features

Signs of complications: aortic regurgitation

Eisenmenger's syndrome

- Clubbing
- Plethoric facial appearance
- Cyanosis
- Ejection systolic murmur (left sternal border)
- Pulmonary hypertension (large A waves in JVP, RV heave, loud/palpable P2, PSM if TR)

Coarctation of aorta

- Left lateral thoracotomy scar (if had repair)
- Weak left pulse (if had repair)
- Radio-femoral delay
- Bruits (scapula, anterior axilla, left sternal border)
- Systolic murmur in 4th intercostal space posteriorly (if not had a repair)

Signs of associations: short/webbed neck/short 4th metacarpals (Turner's syndrome)

Signs of complications: splinter haemorrhages/Osler's nodes/Janeway lesions (infective endocarditis), severe hypertension, signs of heart failure

Heart failure

- Tachypnoea
- Raised JVP
- Displaced apex
- S3
- Bi-basal fine crepitations
- Peripheral oedema



Peripheral cyanosis



Nail Clubbing



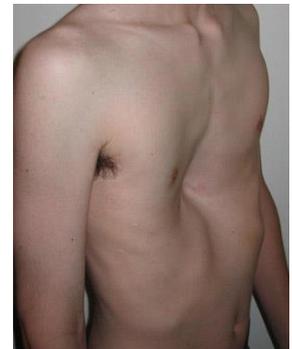
Splinter haemorrhages:
small haemorrhages under the nails form thin red lines parallel to the direction of nail growth



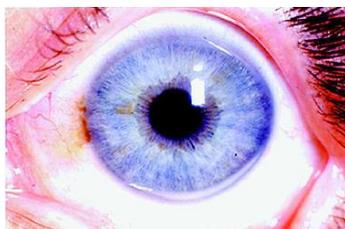
Osler nodes: Painful Purple Papules on finger Pulp (and also on thenar/hypothenar eminences)



Janeway lesions: painless erythematous/haemorrhagic macules on palms and soles



Pectus excavatum:
sunken chest – may be congenital or develop at puberty



Corneal arcus: lipid infiltration around the cornea



Peripheral oedema



Pectus carinatum:
protrusion of sternum – may be congenital, post-surgical or develop at puberty