CARDIAC MURMURS • 1/1

Failed oximetry:
See **Pulse-oximetry (universal) screening** guideline
- Lower limb SpO_2 <95%
- Pre and postductal difference of >2%

Cardiac murmur detected on routine postnatal examination

- Thorough cardiovascular examination
- Pre and postductal saturations
- **Senior paediatric review**

Any of the following
- Failed oximetry (see box above)
- Weak or absent femoral pulses
- Symptoms of heart failure
- Signs of heart failure
- Cardiovascular shock

Significant congenital heart disease

URGENT
- Admit to NNU
- +/- ECG, chest X-ray, 4-limb BP and blood gas analysis
- Hyperoxia test +/- prostin (see **Congenital heart disease: duct dependent lesions** and **Prostaglandin infusion** guidelines)
- Echo (performed locally, if available)
- Liaise with regional cardiologist

Any of the following
- Pansystolic/diastolic/continuous
- Loud murmur (≥3/6 intensity)
- Murmur plus dysmorphic features

Possible congenital heart disease

SOON
- Senior review
- ECG +/- echo before discharge if available
- **Review by consultant paediatrician** (+/- echo skills) within 2–3 weeks
- Advise parents to watch for signs of heart failure
- Inform GP

All of the following
- Asymptomatic well baby
- No signs of heart failure
- Normal pulses
- Normal saturations
- Soft systolic murmur (≤2/6)

Likely innocent heart murmur

ROUTINE
- Baby to remain in hospital
- Review aged ≥24 hr
- Recheck saturation level
- Echo before discharge if available or
- Review in paediatrician outpatient clinic within 4–6 weeks
- Advise parents to watch for signs of heart failure
- Inform GP

Grades of cardiac murmur
Grade 1 – barely audible
Grade 2 – soft but easily audible
Grade 3 – moderately loud, no thrill
Grade 4 – loud with thrill
Grade 5 – audible with stethoscope barely on chest
Grade 6 – audible with stethoscope off chest

Signs and symptoms of heart failure:
- Lethargy, not waking up for feeds
- Poor feeding
- Fast or abnormal breathing
- Chest recessions
- Sweaty during feeds
- Colour changes
- Poor weight gain