

Patent Ductus Arteriosus (PDA)

What is it?

- A persistent communication between the left PA and the descending aorta as it fails to close when a baby is born.
- Can be associated with a variety of CHD lesions.
- In adults it is usually an isolated finding.
- Can be closed surgically or percutaneously.

How is it diagnosed?

- Echocardiogram.
- Cardiac MRI and CT.
- Cardiac catheterisation.

How does it affect the heart?

- Originally results in a left to right shunt and LV volume overload.
- In moderate and large PDA, large LV with normal or reduced function and pulmonary pressure is elevated.
- Large PDA show Eisenmenger physiology with differential hypoxaemia and differential cyanosis.
- Risk of endarteritis (inflammation of the artery inner lining).

What is the treatment/long term management?

- Device closure is method of choice and suitable for vast majority of patients.
- Surgery an option if duct is too large for device or has unsuitable anatomy such as aneurysm formation.
- No exercise restrictions in asymptomatic patients before or after intervention.
- Risk from pregnancy for patients without pulmonary hypertension is low.

What is the follow up?

- Follow-up echocardiogram.
- Patients with no residual shunt, normal LV and normal PAP do not require follow-up after 6 months.
- Patients with LV dysfunction and/or residual pulmonary artery hypertension should have ACHD follow-up every 1-3 years' dependant on severity.

