

Atrial Septal Defect

What is it?

- A hole in the wall (septum) that separates both atria.
- Commonly remains undiagnosed until adulthood.
- Often present with exertional shortness of breath, palpitations and right heart failure.
- Associated lesions include anomalous pulmonary venous connection, persistent left SVC, PV stenosis and MV prolapse.
- Can be located at different places in the septum and be different sizes.

How is it diagnosed?

- Transthoracic echocardiogram and transoesophageal echo.
- Cardiac MRI and CT.
- Cardiac Catheterisation.
- Often asymptomatic until adulthood but can then show reduced functional capacity, shortness of breath, palpitations, pulmonary infections and right heart failure.

How does it affect the heart?

- Oxygenated blood flows from the left atria back to the right atria (left to right shunt).
- Risk of right-sided volume overload.
- Risk of pulmonary arterial hypertension.
- Risk of atrial arrhythmias.

What is the treatment/long term management?

- Can be closed either surgically or via transcatheter device (depends on location within septum/patient risk factors).
- Best results when repair age <25 years.
- Anti-platelet therapy required for at least 6 months.
- Risk from pregnancy for patients without pulmonary hypertension is low.

What is the follow up?

- Follow-up echocardiogram.
- Repairs on young (<25 years) and asymptomatic patients (no residual shunt, normal PAP and RV and no arrhythmias) do not require regular follow-up.
- Regular follow up post ASD closure, then 2-4 year follow up once stable.
- May be discharged after several years of stable follow up.

