

ATRIAL SEPTAL DEFECTS

Objective : To show the definition and management of ASD (Atrial Septal Defects)

Atrial septal defect (ASD) is an opening in the atrial septum that enables mixing of blood from the systemic and pulmonary venous circulations.

Pathophysiology

left-to-right shunting of blood across the defect and a marked increase in pulmonary blood flow occurs.

The magnitude of the shunt across an ASD depends on the size of the defect. Eisenmenger's complex develops when the pulmonary vascular resistance becomes highly elevated leading to reversal of shunting (right to left)

Clinical Presentation

A great majority of patients with ASD are asymptomatic. Failure to thrive may be observed. Occasional dyspnea on extreme exertion is observed. Recurrent respiratory infection is not uncommon.

Auscultatory findings include a systolic flow (ejection systolic) murmur heard over the pulmonary area in the 2nd or 3rd left intercostal & a fixed split S2.

Investigations

-Chest X-ray

- It may be normal apart of plethoric lungs for small ASDs.
- The pulmonary arteries may be enlarged with plethoric lungs & possibly cardiomegaly if the presentation is late for large ASDs.

-Electrocardiogram

There are ECG findings

-Echocardiography

Echocardiography with color flow Doppler imaging is now the diagnostic modality of choice.

-Cardiac catheterization

It's seldomly employed in the diagnosis of ASD

Treatment

Surgical intervention is indicated for large ASDs and for children with significant shunt after 2 years of life (unusual for ASD to close after 2 years of age).

