

# VENTRICULAR SEPTAL DEFECTS

**Objective :** To show the definition and management of VSD ( Ventricular Septal Defects)

A ventricular septal defect (VSD) is a hole in the interventricular septum (IVS). VSD, in its isolated form, is the most commonly recognized congenital heart defect and represents 30% to 40% of all congenital heart malformations at birth.

## 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 a VSD 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 features

Tachypnea, poor feeding, growth failure, recurrent respiratory tract infections, exercise intolerance. Eisenmenger's complex or cardiac failure may develop if a large VSD is not treated early.

Those with a small VSD are either asymptomatic or are minimally symptomatic.

## Examination

A pansystolic murmur is heard in the left lower sternal border.

## Investigations

### - Chest Radiograph

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

### - Electrocardiogram

There may be ECG findings

### - Echocardiography

It's diagnostic

### - Cardiac Catheterization

For further evaluation.

## Treatment

*Surgery is indicated for large VSDs or for those VSDs which didn't close spontaeously*