

Echocardiography

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■ Hemodynamics:-

Stroke volume = area (0.785 X dia²) X TVI (time velocity integral)

Shunt size = Qp/Qs

Mitral valve area (pressure half-time) = $220/P_{1/2}$

Aortic valve area (continuity equation) =
Area (outflow tract dia² X 0.785) X $\frac{TVI_{ot}}{TVI_{ao}}$

- ## ■ Atrial septum:
1. Patent foramen ovale (PFO)
 2. Atrial septal defect (ASD)
 3. Atrial septal aneurysm



■ **Right atrium:**

eustachian valve = remnant of embryologic valve
(for directing inferior vena caval
blood across atrial septum to left
atrium) normally regress during
embryologic development

chiari network = highly mobile, usu fenestrated

■ **Right ventricle:** moderator band

■ **Left ventricle:** false tendon