



Description: Abnormal opening between the atria, allowing blood from the higher pressure left atrium to flow into the lower pressure right atrium. There are three types of ASD:

Ostium primum (ASD 1): Opening at lower end of septum; may be associated with mitral valve abnormalities

Ostium secundum (ASD 2): Opening near center of septum

Sinus venosus defect: Opening near junction of superior vena cava and right atrium; may be associated with partial anomalous pulmonary venous connection

Pathophysiology: Because left atrial pressure slightly exceeds right atrial pressure, blood flows from the left to the right atrium, causing an increased flow of oxygenated blood into the right side of the heart. Despite the low pressure difference, a high rate of flow can still occur because of low pulmonary vascular resistance and the greater distensibility of the right atrium, which further reduces flow resistance. This volume is well tolerated by the right ventricle because it is delivered under much lower pressure than