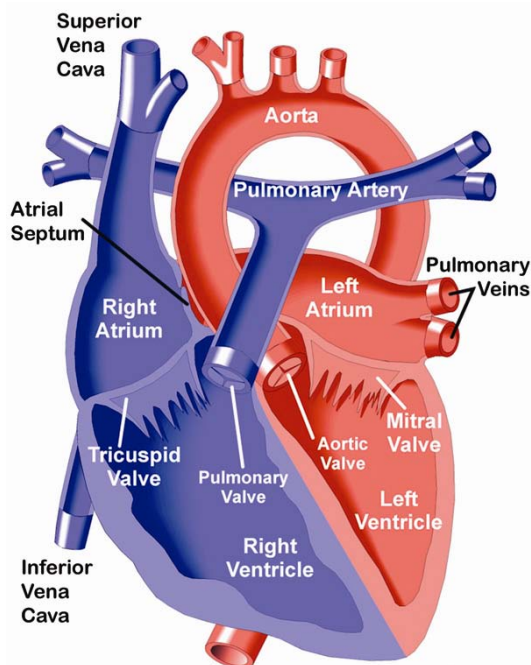
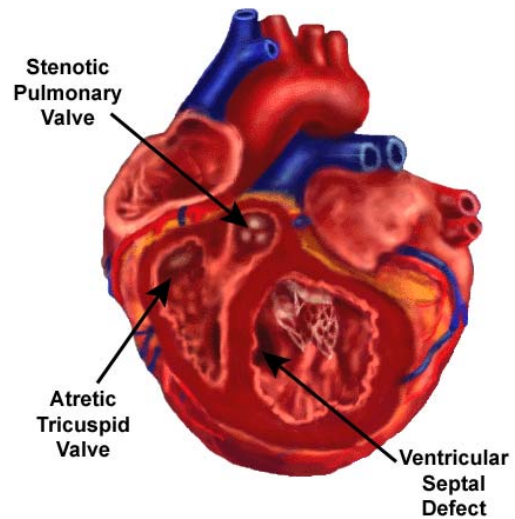
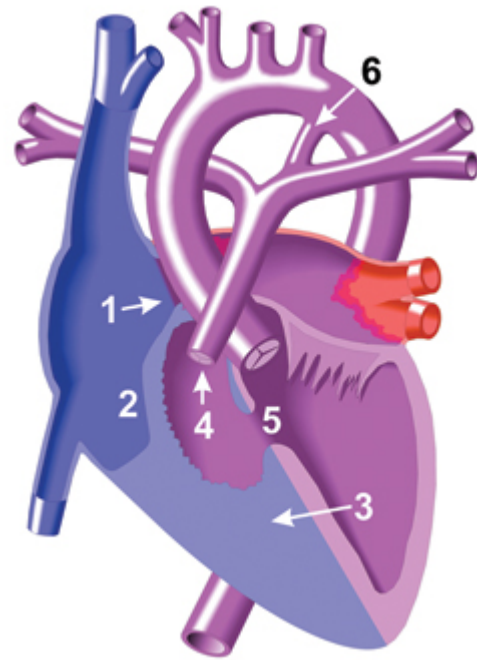


Tricuspid Atresia

In Tricuspid Atresia, the heart has three valves rather than four. The tricuspid valve, which connects the right atrium (collecting chamber) and right ventricle (pumping chamber) in the normal heart, is abnormal and does not open. In addition, the atrial septum, or muscle wall, which divides the left and right atria, has an opening in it, called an atrial septal defect (ASD). This atrial septal defect is required to unload the blocked right atrium and allows the mixing of blood from the right and left atria.

The muscle wall, which separates the right and left ventricles, is known as the ventricular septum. In Tricuspid Atresia, this septum generally has a hole in it, called a Ventricular Septal Defect, or VSD. In addition, the right ventricle is usually quite small and the pulmonary valve, through which blood is pumped to the lungs, can be narrowed. This narrowing of the pulmonary valve is known as a stenosis.

Because of multiple levels of right heart obstruction, most children with Tricuspid Atresia require a Patent (open) Ductus Arteriosus (PDA) after birth to maintain adequate pulmonary (lung) blood flow. When the PDA closes soon after birth, there is inadequate blood flow to the lungs and the body becomes starved for oxygen-rich (red) blood and the patient will show worsening cyanosis, or blueness. These children may become very ill and require surgery to increase the blood flow to the lungs.



Top:

1. Atrial septal defect
2. Atretic tricuspid valve
3. Hypoplastic right ventricle
4. Pulmonary stenosis
5. Ventricular septal defect
6. Patent ductus arteriosus

Left: Normal Heart