

Aortic Stenosis

In this defect, the outflow tract leading from the heart into the aorta, which carries oxygen-rich blood to the body, is obstructed.

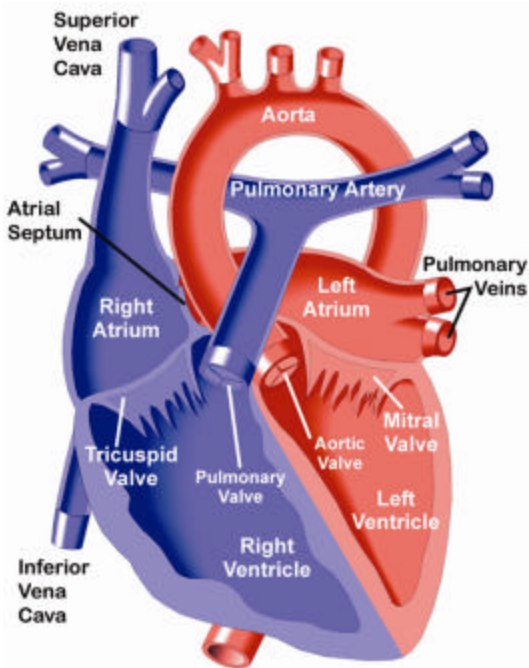
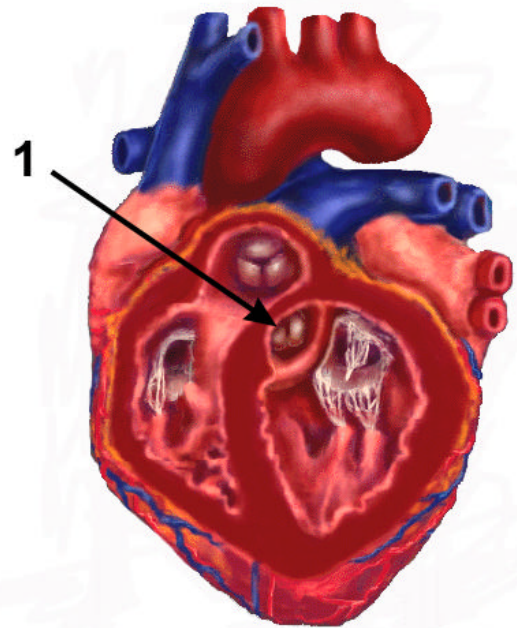
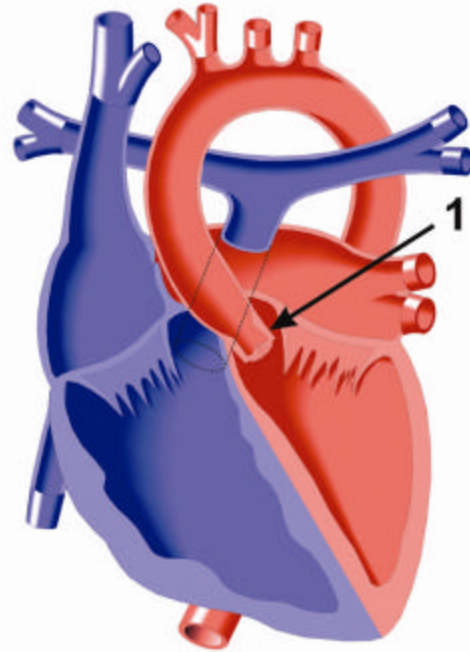
The most common type of Aortic Stenosis, known as valve stenosis, involves a narrowing of the aortic valve. This may be caused by the aortic valve leaflets being too small or too thick, or the valve may not open properly.

Occasionally, the obstruction does not involve the aortic valve itself but consists of a narrowing of the passage either above (supravalvular) or below it (subvalvular).

The left ventricle, the main pumping chamber of the heart, pumps oxygen-rich blood through the aortic valve into the aorta, which carries it to the body tissues. If the opening to the aorta is obstructed, as in Aortic Stenosis, the left ventricle must work harder to move blood in this way and its walls thicken (hypertrophy).

Aortic stenosis is usually progressive with worsening obstruction of the left ventricle resulting in left ventricular failure. Patients with moderate to severe obstruction are at risk of sudden death with exercise.

In Subvalvar Aortic Stenosis, insufficiency (leaking) of the aortic valve may also occur in addition to left ventricular obstruction.



Above:

- 1. Valvular Stenosis (shown).
- Bicuspid valve is most common.
- Stenosis may also be supravalvular or subvalvular.

Left: Normal Heart