Aortic Stenosis (AS)

Valvar Aortic Stenosis

A narrowing occurs between the bottom left heart chamber and the main artery that sends blood to the body (aorta). The narrowing is at the aortic valve. The narrowing causes a reduced amount of blood carrying oxygen to the body. Also, the bottom left heart chamber overworks from having to push blood through the narrowing.

The type of surgery to correct valvular aortic stenosis depends on the degree of narrowing. One option is the Ross Procedure. This is to replace the aortic valve with the child’s own pulmonary valve and a section of the pulmonary artery.

A homograft (human) aortic or pulmonary valve and artery section replaces the transferred pulmonary valve. The coronary arteries must also be moved during this operation. (The coronary arteries are the very small blood vessels that supply the heart muscle itself with oxygen-rich blood.)

This surgical option eliminates the need for anticoagulation (blood thinning) therapy after surgery.

The operation to repair aortic stenosis is done with a median sternotomy (chest) incision.