



THE HYPOPLASTIC LEFT HEART

Hypoplastic Left Heart Syndrome is a Congenital Heart Condition (a problem that a baby is born with). It is made up of a collection of problems on the left side of the heart. Usually, the pumping chamber (Left Ventricle) is small (Hypoplastic) and the Mitral and/or the Aortic valve may be narrow, blocked or not formed at all. The body artery (Aorta) is often small (Hypoplastic) and there is a hole (Atrial Septal Defect) between the two collecting chambers.

The blood's journey through the heart is very different from normal. The blue (deoxygenated) blood flows into the right collecting chamber (Right Atrium), through the valve (Tricuspid) into the right pumping chamber (Right Ventricle). From there it is pumped up to the lungs where the blood receives oxygen. The red oxygen-filled blood then flows from the lungs into the collecting chamber (Left Atrium) in the left side of the heart, but it will be unable to then pass into the left pumping chamber (Left Ventricle). As the valve will be blocked, it therefore passes through the hole between the two collecting chambers into the right side, where it mixes with the blue blood and follows the normal path to the lungs.

Whilst the Ductus Arteriosus is still open (patent), the blood will pass from the lung artery into the body artery and then around the body. When the duct closes, the baby will no longer have oxygen flowing to their body. Gradually they become sicker and die.

Hypoplastic Left Heart Syndrome is a fairly rare problem that occurs in approximately 1 in 5000 babies and accounts for 1% of all Congenital Heart Disorders.