



Total Anomalous Pulmonary Venous Connection

Definition:

In TAPVC, pulmonary veins that are bringing oxygenated blood to the left side of the heart from the lungs aren't connected to the left atrium as they should be. Instead, they drain to the right side of the heart (Right atrium) via abnormal connections.

What causes it?

Cause is unknown but known to occur with other heart defects.

How does it affect the heart?

Patients with TAPVC usually have an ASD or opening between the two atria. As a result of the abnormality, oxygenated blood will mix with deoxygenated blood. Some of this mixed blood will travel through the ASD to the left side of the heart where it will be pumped to the rest of the body via the aorta. It is important to note that this blood will not be fully oxygenated as it is mixed, so the child might be a little blue.

How does it affect your child?

Symptoms may appear soon after birth, and in mild cases might be delayed. This usually depends on whether the lung veins drainage into the right atrium is obstructed. If there is an obstruction, the cyanosis will be severe and there will be less oxygen for the body to use.

Management options:

Surgery is done to correct the abnormality at infancy. An open heart surgery is done to reconnect the pulmonary veins back to their proper place and allow them to drain into the left atrium, and the associated ASD is closed.

What activities can your child do?

Your pediatric cardiologist will decide whether or not limitation of physical activity will need to be restricted. This will depend on the degree of obstruction and efficiency of repair.

Follow up in the future:

When done early, long term follow up is great. Regular follow up will still be needed in order to make certain that there aren't any problems such as rhythm problems (heart beats too fast or slow). Sometimes, medication, catheterization or even surgeries might be required again depending on the abnormality and repair.

Children may need to receive antibiotics before any surgical or dental procedures to prevent infective endocarditis.