

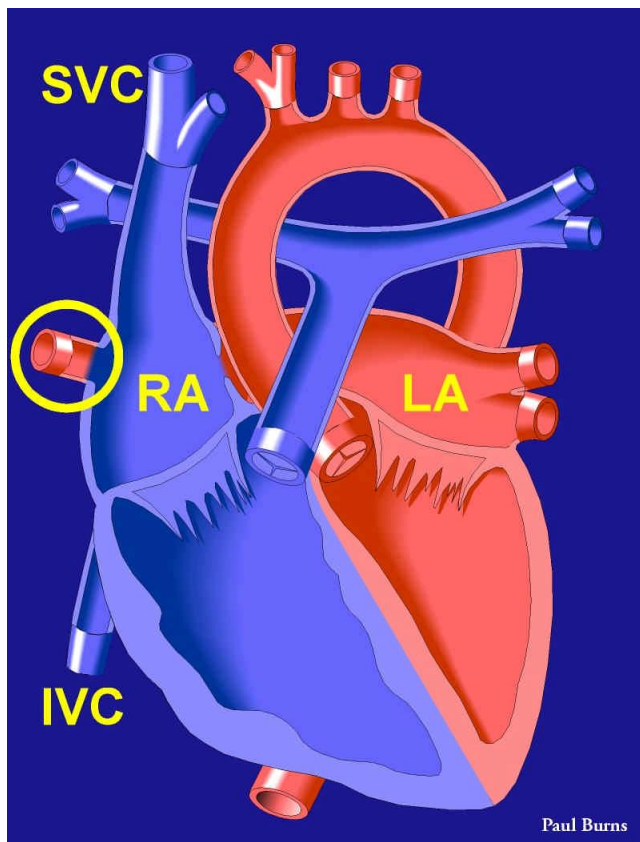
Partial Anomalous Pulmonary Venous Return



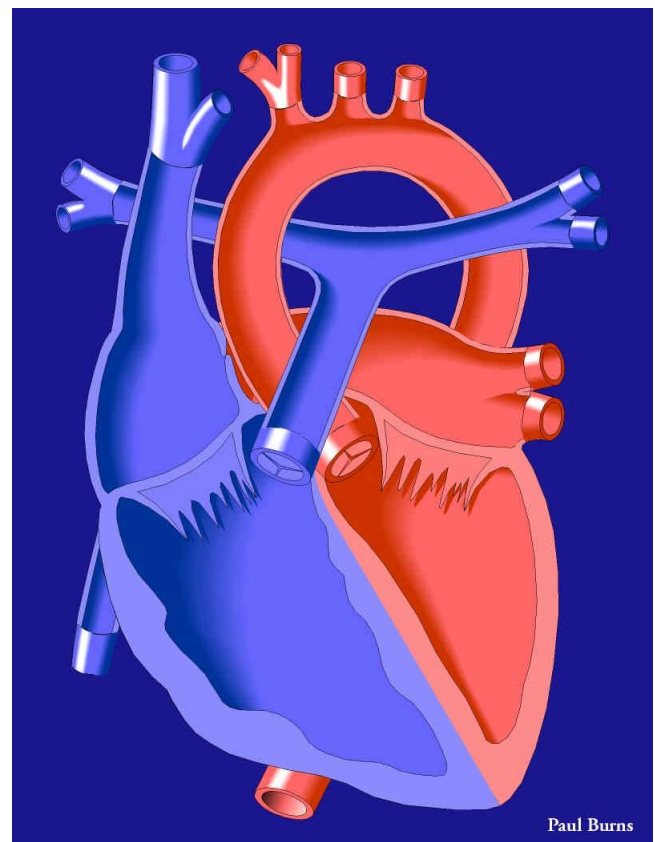
What Is It?

In this rare defect, one or both of the right pulmonary veins carries blood from the right lung to the right side of the heart, rather than to the left atrium (LA), as in the normal heart.

The anomalous (abnormal) pulmonary vein or veins may be connected directly to the right atrium (RA) or they may be connected to one of the veins that carry oxygen-poor blood from the body to the right atrium, such as the inferior (IVC) or superior vena cava (SVC)(shown in diagram). There are many variations of this anomaly, which occurs in boys and girls with equal frequency.



Partial Anomalous Pulmonary Venous Return



Normal Heart

What Are Its Effects?

Normally, this defect causes no negative symptoms and the child grows and behaves normally, without the need for medicine or surgical intervention.

However, the mixing of oxygen-rich blood from the lungs with oxygen-poor blood from the body in the right atrium reduces the efficiency of the circulatory system and may cause difficulties in later life.

Also, if 50% or more of the pulmonary veins enter the right side of the heart, or if an entire lung is drained by pulmonary veins into the right heart, surgical correction of the defect may be necessary.

In such cases, the increased blood flow may tax the right heart muscles and cause enlargement (dilatation) of the right atrium, right ventricle, and the pulmonary artery. Also, the child may tire easily with strenuous exercise.

How Is It Treated?

The surgical repair of Partial Anomalous Pulmonary Venous Return involves the construction of a right to left shunt, or passageway (shown in light blue in the illustration). This shunt carries blood from the anomalous pulmonary vein through the right atrium into the left atrium.

The shunt, or "patch", is made of pericardium (part of the membrane that covers the heart) or of a synthetic material.

Recovery from this operation is usually straightforward, requiring a hospital stay of 3 to 4 days.

