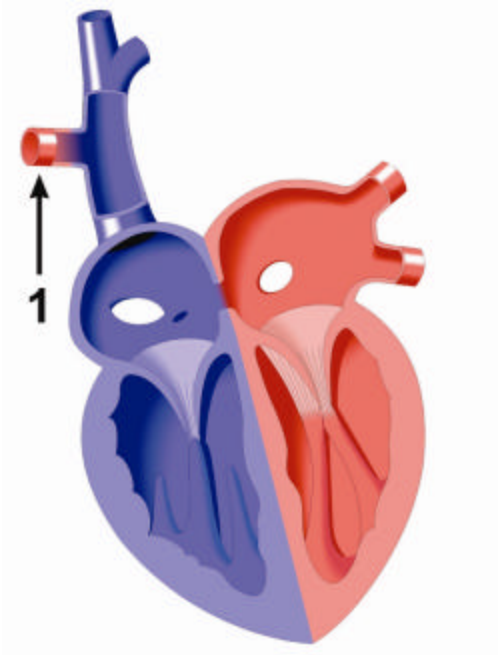
Anomalous Pulmonary Venous Return - Partial

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

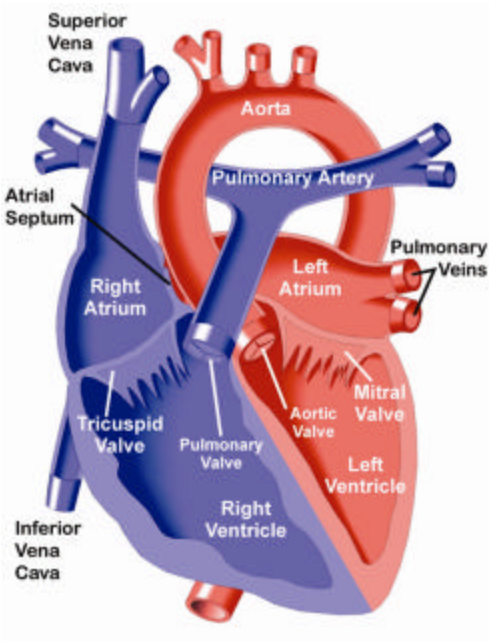


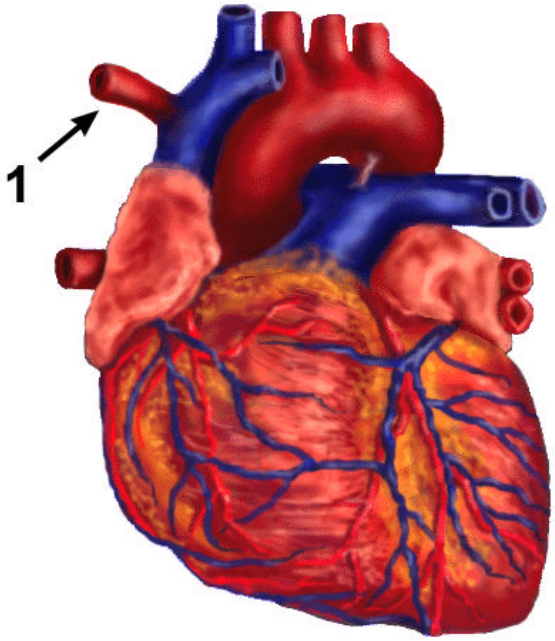
The anomalous (abnormal) pulmonary vein or veins may be connected directly to the right atrium (RA). They may also be connected to one of the veins that carry oxygen-poor blood from the body to the right atrium, such as the inferior (IVC) or superior vena cava (SVC). There are many variations of this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

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.





Above:
1. One or more (but not all) pulmonary veins drain into the RA or its tributaries (SVC, IVC, left innominate).

Left: Normal Heart