What Is It?

This kind of congenital heart defect involves the incomplete development of the inner tissues of the heart, which are collectively known as the Endocardial Cushions.

These tissues normally contribute to the separation of the chambers of the heart during fetal development.

The upper chambers (atria, singular atrium) are separated by a muscle wall (septum) known as the atrial septum. The lower chambers (ventricles) are separated by a muscle wall known as the ventricular septum. The right atrium is separated from the right ventricle by the mitral valve, and the left atrium is separated from the left ventricle by the tricuspid valve (see diagram).
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.
What Are Its Effects?

The effects of Endocardial Cushion Defect depend on the degree of tissue formation.

Please see the discussions of the three major types of this disorder (Ostium Primum type Atrial Septal Defect, Atrioventricular Septal Defect, Partial, and Atrioventricular Septal Defect, Complete) for summaries of the affects and methods of treatment.
Major Types of Endocardial Cushion Defect