What Is It?

The coronary arteries are the blood vessels that carry oxygen-rich blood to the heart muscles.

In this defect, one of these arteries (usually the left coronary artery) is abnormally formed. Rather than connecting with a coronary vein, as in the normal heart, it enters one of the heart chambers, usually on the right side. (Note the point of entry on the diagram, indicated by a yellow circle.) In rare cases, the abnormal coronary artery may enter the aorta or pulmonary artery, or one of their branches, rather than a heart chamber.

A fistula is an abnormal connection between two hollow organs in the body - in this case, a coronary artery and a chamber of the heart, or another vessel.
What Are Its Effects?

Children with Coronary Artery Fistula normally show no symptoms other than a heart murmur. After diagnosis, closure of the opening is often performed because of the danger of complications, such as a rupture of the fistula, chest pain or a heart attack brought on by part of the heart muscle not receiving sufficient oxygen.

Closure of a coronary artery fistula may be achieved through surgery or with the use of a coil or occlusion device introduced through a catheterization procedure. Most often, the surgical procedure involves closing the fistula with sutures on the surface of the heart chamber it enters, though there are several other approaches that may be used.