

Interrupted Aortic Arch

With Ventricular Septal Defect

There is an absent portion of the top, rounded part of the main blood vessel leaving the left side of the heart (aorta). The flow of blood from the left side of the heart to the body is interrupted. The absent portion can be anywhere along the aortic arch (top rounded part of the aorta).

There is also a hole between the bottom two chambers of the heart (ventricular septal defect). It can be high, in the middle or low in the wall separating the chambers. The red blood from the high pressured left side of the heart goes across the hole to the lower pressured right side. The heart is overworked with the extra blood pumping to the lungs. The lungs can be damaged from the extra supply of blood flowing into them. There can also be an enlarged muscle under the aortic valve that blocks the flow of blood into the aorta.

The goal of surgery is to connect the aorta to allow a smooth flow of blood from the heart to the body. Most often the two parts of the aorta can be sewn together end-to-end. Other times the connection may be made with a patch or a part of another blood vessel.

The hole between the bottom two chambers is closed with stitches or, more often, with a patch of material called Dacron®. The extra piece of muscle under the aortic valve is cut away for normal blood flow.

The surgery is done through a median sternotomy (chest) incision.

