

Coarctation of the Aorta

In this condition the aorta (the main artery that carries blood from the heart to the body) is pinched or constricted. This obstructs blood flow from the heart to the rest of the body. Blood pressure also increases above the constriction. Usually no symptoms exist at birth, but they can develop as early as the first week after birth.

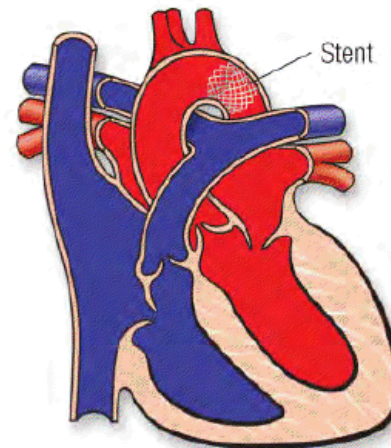
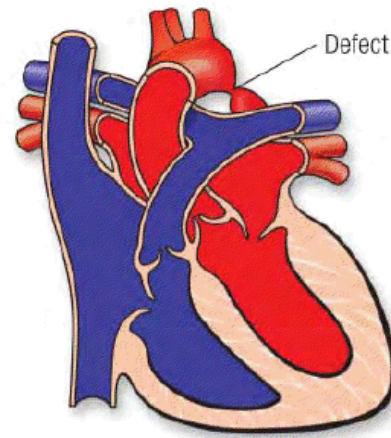
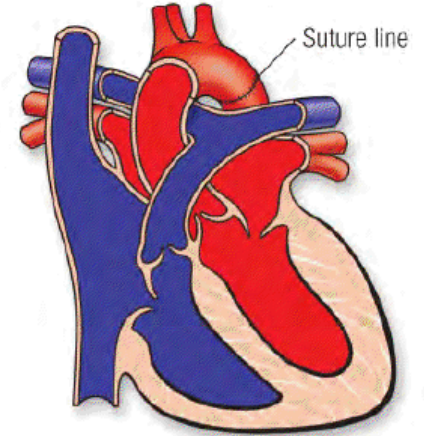
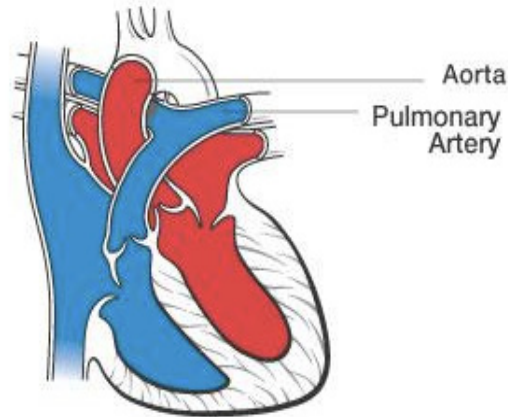
A baby may develop congestive heart failure or high blood pressure that requires early surgery. Otherwise, surgery usually can be delayed. A child with a severe coarctation should have surgery in early childhood. This prevents problems, such as developing high blood pressure as an adult.

Repairing CoA

Surgery is often used to repair coarctation. A surgeon doesn't have to open the heart to repair the defect. It can be fixed in several ways. One way is for the surgeon to remove the narrowed segment of aorta. Another option is to sew a patch over the narrowed section using part of the blood vessel to the arm or a graft of synthetic material.

Cardiac catheter balloon dilation and stent placement is also used, more commonly in older patients and in patients with recurrent coarctation after surgery.

Normal



The outlook after surgery is favorable, but long-term follow-up is required. Rarely, coarctation of the aorta may recur. Then another procedure may be needed. Some of the cases can be treated by a new procedure called balloon angioplasty. During cardiac catheterization a special catheter containing a balloon is placed in the constricted area. Then the balloon is inflated, stretching the constricted area open. The long-term results of this procedure are still being studied. Also, blood pressure may stay high even when the aorta's narrowing has been repaired.

After surgery, long-term follow-up by a pediatric cardiologist is needed. Children with coarctation of the aorta risk infection within the aorta or the heart valves (endocarditis) before or after surgery. To prevent endocarditis your child should be given antibiotics such as amoxicillin before dental work and certain surgeries. Good dental hygiene lowers the risk of endocarditis. For more information about dental hygiene and preventing endocarditis, ask your pediatric cardiologist.

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