Long-term results of the subclavian flap repair for coarctation of the aorta in infants.

Adams EE, Davidson WR Jr, Swallow NA, Nickolaus MJ, Myers JL, Clark JB.

Source: Department of Pediatrics, Penn State Hershey Medical Center, Hershey, PA, USA.

Abstract:

BACKGROUND:
Coarctation is a congenital narrowing of the aorta that often requires repair during infancy. The subclavian flap aortoplasty was once widely favored for its avoidance of a circumferential suture line and low incidence of recoarctation. The aim of this study is to report the long-term results of the subclavian flap repair for coarctation of the aorta in infants.

METHODS:
Our operative database was queried for infants with coarctation who underwent subclavian flap aortoplasty from 1966 to 1991. Medical records were reviewed for patient characteristics and outcomes. Survivors were identified for additional phone interview.

RESULTS:
Fifty-five patients met the inclusion criteria. There were 7 early deaths (in hospital), 11 late deaths, 5 patients lost to follow-up, and 32 known long-term survivors with a mean follow-up of 22.0 years (range 2.4-34.9). Hospital mortality was not associated with patient characteristics but was associated with earlier year of surgery (P = .015). A trend toward decreased overall survival was seen in patients with coarctation with associated cardiac defects (P = .072). Reintervention for recoarctation was required in 3 (6.6%) patients and was not related to the patient characteristics. There were no apparent complications related to subclavian artery sacrifice.

CONCLUSIONS:
Subclavian flap aortoplasty provides excellent long-term results for the repair of coarctation in infants. The incidence of recoarctation requiring reintervention is low and compares favorably with other techniques. Compromise of growth or function of the left arm was not appreciated. The subclavian flap technique remains a viable surgical option for the repair of coarctation in infants.

KEYWORDS:
aorta/aortic, aortic operation, coarctation, congenital heart disease, congenital heart surgery, surgery (complications)