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Long-Term Results of the Subclavian Flap Repair for Coarctation of the Aorta

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Purpose:

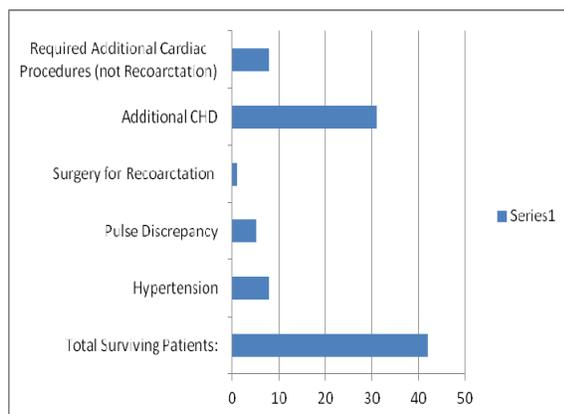
Coarctation of the aorta is a congenital narrowing of the thoracic aorta just beyond the takeoff of the left subclavian artery. Among the different surgical repair options for coarctation, the subclavian flap aortoplasty was once widely favored. Originally described by Waldhausen, this technique uses the left subclavian artery as an autologous patch to enlarge the area of coarctation. The absence of a circumferential suture line was purported to provide a decreased risk of recurrent stenosis. The goal of this study is to evaluate the long-term results of patients who underwent subclavian flap aortoplasty repair of coarctation of the aorta at least 20 years ago.

Methods:

Our operative database was reviewed for infants who with coarctation of the aorta that had subclavian flap aortoplasty between the years of 1966-1991. Medical records were reviewed for patient and operative characteristics, for early postoperative outcomes including morbidity and mortality, and for long-term outcomes such as reintervention for recurrent coarctation. From the initial cohort, survivors were identified for follow-up phone interview to assess for outcomes such as the presence of hypertension, left arm symptoms, functional class, and current level of cardiac care.

Results:

Fifty-nine patients met inclusion criteria. There were 17 non-survivors, and 42 long-term survivors. The presence of complex coarctation with other congenital heart defects was associated with increased early mortality. Among late survivors, recoarctation was rare; however, hypertension was common. Most patients are still receiving cardiology care at least 20 years following initial surgery.



Conclusions:

Subclavian flap aortoplasty provides excellent long-term results for the repair of coarctation in infants. Recoarctation requiring reintervention is rare, but hypertension requiring medication is common.