

#20 SURGICAL TREATMENT OF CORONARY SUBCLAVIAN STEAL SYNDROME WITH CAROTID SUBCLAVIAN BYPASS

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Purpose: Myocardial ischemia due to proximal subclavian artery lesions resulting in reversal of flow through internal mammary artery conduits after coronary artery bypass (CAB) is termed Coronary subclavian steal syndrome (CSS). Percutaneous transluminal angioplasty/stent (PTAS) for subclavian lesions, is not always feasible. Herein, we analyzed our results of carotid-subclavian artery bypass (CSB) for symptomatic CSS due to subclavian occlusion and stenosis not amenable to PTAS.

Methods: Records of patients undergoing CSB for CSS between 1991 and 2001 were analyzed. Patients with lesions not amenable to PTAS were selected for CSB. Degree of preoperative myocardial ischemia was stratified according to New York Heart Association classification. Graft patency was determined by life table methods.

Results: Over 10 years, CSB was performed in 62 patients for symptomatic subclavian artery disease. Within this group, 10 patients (7 females, 3 males) presented with CSS manifested as Class III (n=5) and Class IV angina (n=5). Six patients had subclavian artery occlusions and 4 had high-grade lesions not amenable to PTAS. The mean duration between initial CAB and CSB was 43 months. All patients had resolution of myocardial ischemia with no operative deaths. At mean 30-month follow-up, 8 patients (80%) are alive and 2 have died secondary to cancer. All bypasses are patent and patients remain asymptomatic.

Conclusion: CSB for treatment of symptomatic CSS can be performed safely with excellent mid-term results. In the setting of proximal subclavian artery disease not amenable to PTAS, CSB provides an acceptable means of treatment for symptomatic CSS.