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VASCULAR DISEASE

DO PATIENTS WITH SEVERE ASYMPTOMATIC CAROTID ARTERY STENOSIS HAVE A HIGHER RISK OF STROKE AND MORTALITY FOLLOWING CORONARY ARTERY BYPASS GRAFTING?

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Tuesday, April 05, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Carotid Disease and Stroke

Abstract Category: 11. Peripheral Arterial/Carotid Disease/Aortic Disease

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Background: Stroke development is a major concern in patients undergoing coronary artery bypass grafting (CABG) with concomitant severe carotid artery stenosis (CAS). Whether synchronous carotid revascularization reduces this risk is unclear.

Methods: A retrospective analysis of 8,595 patients who underwent isolated CABG from January 2003 to December 2009 was performed. Preoperative carotid duplex ultrasound was performed in 898 patients who fulfilled our preoperative guidelines. Severe CAS was identified in 117 of these patients. Patients with severe CAS were compared to those without severe CAS to assess the rates of stroke and mortality during surgical hospitalization.

Results: Patients with severe CAS were older, had a higher prevalence of hypertension, diabetes mellitus, current smokers, peripheral arterial disease, as well as having a previous history of stroke and congestive heart failure. Patients with severe CAS had similar rates of in-hospital stroke (3.3% vs. 2.7%; $p=0.74$) and mortality (3.4% vs. 2.8%; $p=0.57$) compared to patients without severe CAS. Independent predictors of in-hospital stroke were male sex (OR=0.54; 95% CI=0.37-0.81; $p=0.002$), previous history of myocardial infarction (OR=1.83; 95% CI=1.22-2.75; $p=0.004$), dyslipidemia (OR=0.60; 95% CI=0.39-0.92; $p=0.02$), and on-pump CABG (OR=1.66; 95% CI=1.1-2.52; $p=0.02$).

Conclusions: Severe CAS alone is not a risk factor for stroke or mortality in patients undergoing CABG. The decision to perform carotid revascularization at the time of CABG must be individualized and based on clinical judgement.