Caucasians (CA, 31% females, p<0.0001) underwent 5590 PCI procedures and 10384 CABG pro-
cedures (gender p=0.122) and non-CA (p=0.841) had no significant impact on the choice of procedure. There were 397 (25.6% of 15994 patients) in hospital post-procedural fatal-
ties. Mortality rates were similar in AA and CA but significantly higher in women (3.3% versus 2.1% in men, p<0.0001). Within race analysis showed no effect of gender on mor-
tality in all AA patients and in PCI or CABG groups separately. However, in-hospital mor-
tality in CA women was 60% higher than in CA men (193/4865 versus 228/10700, p<0.0001). This mortality excess was observed only in CABG patients (4.2% in CA women versus 2.6% in CA men, p<0.0001). Demoralization of female gender on in-
hospital mortality remained unchanged when outcomes were adjusted by age, diabetes, hyper-
pression, congestive heart failure, and smoking history.

Conclusion: In a large all-inclusive cohort of patients with coronary artery disease post-
revascularization mortality was not affected by race. However, white women undergoing
CABG incurred a 50% higher mortality than men. This gender-related increase in mortal-
ity was independent of age, diabetes, and other co-morbidities.

Intra- and Post-Operative Treatment and Course

Variables Associated With Stroke Subtypes Following Coronary Artery Bypass Graft Surgery


Background: We previously determined that embolic and hypoperfusion strokes accounted for 62% and 9% of all strokes secondary to CABG surgery, respectively. In this study we quantified the association between intra- and post-operative factors and the risk of etiologic stroke subtypes.

Methods: We conducted a prospective cohort study of 26,096 patients undergoing isolated
cABG surgery from 1992-2000. Etiology was classified as: embolic, hypoperfusion, or other. These analyses focused on the first two subgroups due to their homogeneity. Embolic strokes were defined as ischemic strokes with one of three likely sources of thrombus: aortic, cardiac or carotid. Hypoperfusion strokes were defined as strokes due to a mixture of extracranial stenoses and/or systemic hypotension. Odds ratios were adjusted for age, gender, diabetes, vascular disease, renal failure, acute ejection fraction, and those without strokes were the reference group for odds ratios.

Results: Atrial fibrillation was significantly associated with embolic (OR 2.4, CI 95% 1.8 - 3.2, p<0.001) and hypoperfusion strokes (OR 5.4, CI 95% 2.2 - 13.7, p<0.001). Patients having cardiopulmonary bypass duration greater than 120 minutes, versus less than 60 minutes, had a 1.5-fold (CI 95% 0.8 - 2.5, p=0.03) risk of embolic, and a 6.4-fold (CI 95% 3.2, p=0.001) risk of hypoperfusion strokes.

Conclusion: After adjusting for pre-operative factors, post-operative atrial fibrillation and duration of cardiopulmonary bypass remained significant predictors of both embolic and hypoperfusion strokes. Prevention and management of atrial fibrillation and attention to prolonged extracorporeal circulation may offer leverage areas for the improvement of stroke outcomes.