

ABSTRACT NO. R10

A RETROSPECTIVE REVIEW OF MORTALITY AND MORBIDITY AFTER CAROTID ENDARTERECTOMY CONSIDERING ANESTHESIA MODALITY

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Carotid endarterectomy (CEA) remains the most definitively proven method of treating extracranial carotid occlusive disease. The current analysis involves direct, retrospective comparison of perioperative outcomes among patients undergoing CEA for high grade extracranial carotid stenosis, stratified according to intraoperative anesthetic method. Patients undergoing CEA between January 1998 and December 2006 were identified from a prospectively maintained registry. Patients were divided into groups for analysis based on the anesthetic modality employed (general versus regional anesthetic). Primary end-points included 30 day stroke, death, myocardial infarction and pulmonary related events. Secondary end points included cranial nerve injury, hematoma, transient ischemia and length of stay. Statistical analysis was performed using chi square analysis, Fisher's exact and Wilcoxon rank sum tests. P-value < 0.05 was used to indicate statistical significance. Two hundred and ninety-seven patients underwent CEA (149 (50.2%) under general anesthesia vs 148 (49.8 %) using regional anesthesia). One hundred and forty-two patients (47.8 %) were asymptomatic relative to their carotid stenosis. Perioperative incidence of stroke among all patients was 2.0%, however, no significant difference was observed among patients receiving general anesthesia (3.4%) compared to regional anesthesia (0.7 %), (p=0.21). Observed incidence (% , general vs. regional) of myocardial infarction (0.7 vs 0.7; p=1.0), and pulmonary related events (0 vs 1.4; p=0.50) was not significantly different. Two (1.5) perioperative deaths occurred among patients receiving regional anesthesia compared to 3 (2.2) receiving general anesthesia (p=0.68). Analysis of secondary endpoints revealed no statistically significant difference in outcome for post-operative hematoma, cranial nerve injury, transient ischemia after surgery, and overall major complications. General and regional anesthetic modalities can safely be used to treat carotid bifurcation stenosis in VA patients.