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All-cause, Vascular, and Stroke Mortality in a Midterm Follow-up in Standard and High Risk Patients Having Undergone Carotid Angioplasty and Stenting

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ABSTRACT

Background and Aim: This study presents the risks of all-cause, vascular, and stroke mortality in the mid-term follow up of carotid angioplasty and stenting (CAS) for high and standard risk patients for carotid endarterectomy (CEA).

Materials and Methods: Patients with recent ischemic stroke and with >50% stenosis (symptomatic) and with >80% stenosis (asymptomatic) in catheter angiography were included. Follow-up visits were conducted at third month and every 6 months later. All-cause mortality, vascular mortality (ischemic stroke or hemorrhagic stroke, myocardial infarction, peripheral vascular disease), and stroke attributed to indexed carotid artery were investigated.

Results: Two hundred ninety-three (293) CAS procedures were documented in the database. Forty-three (43) patients had missed data. Follow-up of 250 patients were performed (65.6 % male, mean age 74 years).

The patients were followed 1-34 months. Out of 36 deaths, 16 (6.4%) were cardiocerebral vascular related deaths, 20 (8%) non-cardiovascular deaths, and 9 (3.6%) due to unknown reasons. Among vascular deaths, there were 11 ischemic strokes, 4 hemorrhagic stroke, and one myocardial infarction. The overall survival rate for all-cause mortality was 90.1% at 1 year, and 79.3% at 2 years and 59.7% (49.3 for men and 87.9 for women) at 34 months. The survival rate for vascular mortality was 94.4% at one year and 90% at two years and 80.7 % (73 for men and 97.6 for women) at 34 months. Male sex was an independent predictor of all-cause mortality (P=0.003) and vascular mortality (P=0.046).

Conclusion: CAS may guarantee an acceptable stroke-free survival in high and standard surgical risk patients.