



Demographic And Technical Risk Factors Of 30-Day Stroke, Myocardial Infarction, And/Or Death In Standard And High Risk Patients Who Underwent Carotid Angioplasty And Stenting

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Background: Carotid angioplasty and stenting (CAS) is an accepted treatment to prevent stroke in patients with carotid artery stenosis. The purpose of this study is to identify risk factors for major complications after carotid angioplasty and stenting.

Methods and Material: This is a prospective study conducted at Shiraz University of Medical Sciences in southern Iran from March 2011 to June 2014. Consecutive patients undergoing carotid angioplasty and stenting were enrolled. Both standard risk and high risk patients for endarterectomy were enrolled. Demographic data, atherosclerotic risk factors, site of stenosis, degree of stenosis, and data regarding technical factors were recorded. 30-day stroke, myocardial infarction, and/or death were considered as the composite primary outcome of the study.

Results: two hundred and fifty one patients were recruited (mean age: 71.1+ 9.6 years, male: 65.3%). One hundred and seventy eight (70.9%) patients were symptomatic; 73 (29.1%), 129 (51.4%), 165 (65.7%) and 62 (24.7%) patients were diabetic, hyperlipidemic, hypertensive and smoker respectively. CAS performed for left ICA in 113 (45.4%) patients. 14 (5.6%) patients had Sequential bilateral stenting. Mean stenosis of operated ICA was 80.2 +13.8 %. Embolic protection device was used in 203 (96.2%) patients. Predilation and post-dilation were performed in 39 (18.5%) and 182 (86.3%) patients respectively. Composite outcome was observed in 3.6% (3.2% stroke, 0% myocardial infarction and 1.2% death). Left sided lesions and presence of DM was significantly associated with poor short term outcome. (P value: 0.025 and 0.020, respectively)

Conclusion: There was a higher risk of short term major complications in diabetic patients and left carotid artery intervention.

Key words: stroke, carotid artery angioplasty and stenting, outcome, patients



DOI: 10.7575/aiac.abcmcd.ca1.13

Published Date: February 2017

Peer-review is under responsibility of *the 9th Iranian Stroke Congress*.

Published by Australian International Academic Centre, Australia

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