

#2 **THE BENEFITS OF SURGICAL CAROTID ENDARTERECTOMY
IN THE OCTOGENARIAN: A CHALLENGE TO THE RESULTS OF
CAROTID ANGIOPLASTY AND STENTING**

C.B. Rockman, MD, G.R. Jacobowitz, MD, M.A. Adelman, MD,
P.J. Lamparello, MD, P.J. Gagne, MD, M.N. Nalbandian, MD,
R. Landis, MD, T.S. Riles, MD,

New York University Medical Center, New York, NY

Objective: Proponents of carotid angioplasty and stenting (CAS) believe that this technique would be preferred over carotid endarterectomy (CEA) for the high risk patient. Presumably this would include patients over 80 years of age. However, a recent large series of CAS revealed a 16% incidence of nonfatal strokes and deaths for patients over the age of 80; these results were significantly worse than younger patients undergoing CAS. The objective of this study was to reassess results of CEA in patients over 80, and to compare surgical results with the published results of CAS in this patient group.

Methods: A review was conducted of a prospectively maintained database of all carotid surgery performed at our institution. Primary carotid endarterectomies which took place from 1997 through 1999 were included for analysis (N = 658). Our institutional results were compared with representative results from a recently published large series of CAS.

Results: Of 658 CEA's performed from 1997 through 1999 at our institution, 151 were in patients older than 80 (22.9%), while 507 were in younger patients (77.1%). The overall rate of nonfatal stroke and death was 3.2%. This was not significantly different in younger patients (3.6%) versus older patients (2.0%) (p=NS). The results for CEA in patients over the age of 80 were then compared with published results of CAS. For CEA, the incidence of nonfatal strokes and deaths was 3/151 or 2.0%. For CAS, the incidence of nonfatal strokes and deaths was 12/63 or 16%. The results of CEA in patients over the age of 80 thus compared extremely favorably with those of CAS .

Conclusions: CEA can be performed safely in the octogenarian, and results are equivalent to those of younger patients. CEA appears to have significantly better results in the octogenarian than CAS. The reason for the poor outcomes of CAS in the octogenarian are unclear. The results of CAS in the older patient population are concerning, and this "less invasive" technique may prove to be an inferior alternative in this patient group.