SAFETY AND EFFICACY OF CAROTID ARTERY STENTING IN PATIENTS AGED 80 AND ABOVE

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Background: Carotid artery stenting (CAS) remains a controversial procedure. Patients aged 80 and above undergoing CAS continue to face scrutiny due to safety concerns.

Methods: Thirty-five patients with an average age of 82.6 yr at the time of procedure underwent CAS. A total of 39 lesions were treated. Of the 35 patients, 18 had experienced either a TIA or a CVA. Angiographic films, CTA, and MRA studies were analyzed for procedural success and aortic arch type. Filter dwell times were also recorded. Thirty-two patients returned for clinic follow-up (average 11.0 months). Twenty-seven patients had ultrasound follow-up (average 13.7 months). All patients underwent ultrasonography on the day after CAS. Velocities on day 1 were within normal limits. On follow-up, there were two cases of in-stent restenosis.

Results: Procedural Success (<35% stenosis):

18/18 symptomatic; 17/17 asymptomatic Average filter time: 9 minutes, 6 seconds

One minor ipsilateral CVA occurred, which resolved within 12 hours. Three deaths occurred due to cardiac arrest in patients with end-stage cardiomyopathy 7, 16, and 17 months after CAS. One patient died of respiratory failure/COPD 21 months post-CAS.

Conclusion: Demonstrating the safety of CAS in the elderly population is very important if it is to remain a viable alternative to CEA. Factors such as post-procedural residual stenosis, aortic arch type, and filter dwell times may be important to determining the success of procedures. With close follow-up, in our community-based experience, CAS for the elderly has been and continues to be a very safe and durable procedure.