

10. Recurrent Stenosis after Carotid Stenting

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BACKGROUND: Carotid angioplasty and stenting (CAS) is performed in patients who are deemed too high-risk for carotid endarterectomy. The incidence of recurrent carotid stenosis (RCS) after stenting is low, however, the precise incidence and management has not been clearly defined.

PURPOSE: To review the incidence and management of recurrent carotid stenosis after stenting.

METHODS: All patients treated with CAS were entered in a prospective database. Clinical follow-up with carotid duplex scan was done at 30 days, 6 & 12 months, then yearly. RCS detected by duplex was then confirmed by digital subtraction angiography, and >80% RCS was treated with repeat angioplasty and stenting. All patients were kept on aspirin and Plavix.

RESULTS: In a 7-year period, ending in March 2009, 127 CAS procedures were performed in 118 patients, 50 women and 68 men. There were nine patients, 7 women and 2 men, who had bilateral CAS. The average age was 70. Forty six patients (36%) were symptomatic on initial presentation with amaurosis fugax, transient ischemic attacks or mild strokes. During follow-up, severe >80% RCS developed in 9 patients (7%) in an average time of 17 months (range 9-26 months). Four of nine patients (2 women and 7 men) were symptomatic (44%) on presentation. All patients received an initial stent for recurrent stenosis after endarterectomy. Only one patient had bilateral carotid stents. The recurrent lesion was outside the initial stent in 6 cases. Redo-CAS was performed in all patients without any complications. There were no deaths, TIAs or strokes, and no access site complications. All vessels remained patent in follow-up

CONCLUSION: Patients should be followed closely after receiving a carotid stent. The incidence of RCS after CAS appears to be similar to recurrence after endarterectomy. Repeat treatment with CAS is feasible with excellent short-term results.