COMPARISON OF MID-TERM OUTCOMES OF CAROTID ARTERY STENTING FOR MODERATE VERSUS CRITICAL STENOSIS

i2 Poster Contributions
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Background: Little is known about prognosis of moderate versus critical carotid stenosis treated percutaneously (CAS).

Methods: This was a retrospective analysis of a single-center registry including 271 consecutive patients (69±9 years, 35% symptomatic, 87% at high-risk for surgery), in whom 308 procedures were performed. The study included both symptomatic (≥50% carotid artery stenosis) and asymptomatic (≥70% carotid artery stenosis) patients. The primary endpoint was the rate of adverse events during follow-up (median 12 months, range 1-48 months), defined as all-cause death or stroke.

Results: We treated 115 critical and 193 moderate stenoses and implanted 318 stents (56% with closed cell design). Embolic protection systems were used in 296 cases (96%). The technical success rate was 98.2% in the critical stenoses group and 99% in the moderate group, respectively (NS). During follow-up, the incidence of the primary endpoint was 12.9% (13 pts.) in the critical stenoses group and 14.7% (25 pts.) in the moderate stenoses group (estimated 3-year freedom from death/stroke was 0.844 vs 0.812; log-rank test p = 0.983). Left ventricular ejection fraction <40%, significant contralateral carotid artery occlusion or stenosis and renal insufficiency were identified as significant predictors of the primary endpoint (p<0.03).

Conclusions: CAS with embolic protection systems in patients at high risk for carotid endarterectomy is safe. Patients with initially moderate and critical stenoses have an identical mid-term prognosis with regard to death and stroke.