

Randomized Trial of Stent versus Surgery for Asymptomatic Carotid Stenosis: Initial and Five-year Results of the ACT 1 Trial

Purpose: A comparison of carotid artery stenting with embolic protection (CAS) to carotid endarterectomy (CEA) for asymptomatic surgery patients < 80 years of age with severe carotid artery stenosis.

Trial Design: N=1453. 5-year f/u. Patients with asymptomatic severe carotid artery stenosis were not at high risk for complications from surgery. Age=< 80. F/U up to 5 years.

Primary Endpoint: death, stroke, and myocardial infarction by 30 days of procedure, and ipsilateral stroke within one year.

| Trial Results | CAS | CEA | P value |
|--|-------|-------|---------|
| Composite: death, MI, stroke w/in 30 days + ipsilateral stroke w/in 1 year | 3.8% | 3.4% | 0.01 |
| Stroke and death @ 30 days | 2.9% | 1.7% | 0.33 |
| No Stroke 30 days-5 years | 97.8% | 97.3% | 0.51 |
| 5-year stroke survival | 93.1% | 94.7% | 0.44 |

Conclusions: CAS was comparable to CEA in this patient population at 1 and 5 years.