

**#3 STATE WIDE DISTRIBUTION OF PROCEDURES, OUTCOMES,
AND COSTS FOLLOWING CAROTID ENDARTERECTOMY**

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Purpose: There has been a large increase in the number of carotid endarterectomies (CEA) performed since the publication of the NASCET and ACAS studies. We investigated a state-wide database to determine the distribution of CEAs performed by various surgical specialties and to compare outcomes and associated costs.

Methods: Using the latest available data from the Inpatient Hospital Discharge database of one state, we examined all hospital admissions for CEA in the state for the years 1995, 1996, and 1997. Case distribution and outcomes were examined as a function of surgeon specialty and patient demographics. Differences in mortality were examined using Freeman-Halton testing while lengths of stay and charges were compared using analysis of variance (ANOVA), with Duncan's multiple range testing for clustering of surgical specialties.

Results: A total of 5,153 procedures were performed during this time period. Although the majority of cases were performed by other surgical specialists, vascular surgeons had the lowest mortality, shortest hospital length of stay (LOS), and the least associated charges (all $p < 0.0001$). These differences in outcomes persisted even when corrected for associated patient medical co-morbidity (Charlson-Denyo Index).

Specialty	Procedures	%	Mortality	%	Odds Ratio	L.O.S.	Charges
Vascular surgeons	1,225	24%	1	0.1%	0.12	2.7	\$10,096
General surgeons	1,643	32%	11	0.7%	1.42	3.8	\$13,591
Cardio-vascular surgeons	958	19%	6	0.6%	0.92	3.5	\$12,849
Neuro-surgeons	504	10%	2	0.4%	0.59	3.8	\$13,655
Others	823	16%	14	1.7%	2.36	7.2	\$21,137
	5,153	100%	24	0.5%			

Conclusions: These results suggest that vascular surgeons as a group have significantly better clinical and economic outcomes for CEA than other surgical specialists.