

#14 COST ANALYSIS OF CAROTID ENDARTERECTOMY; IS AGE A FACTOR?

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Introduction: Carotid endarterectomy (CEA) has been demonstrated to be safe and effective in elderly when compared to younger patients. Our aim was to analyze outcome and cost of CEA in both elderly and younger groups. We hypothesized that despite similar outcomes, the cost of CEA in the elderly is significantly greater.

Methods: 122 consecutive CEA were examined. Patients were grouped and compared by age (<80 yo and 80 yo). Analysis of actual and total costs, itemized costs including room care, ICU, laboratory, radiology, ancillary, supplies, pharmacy, and OR were performed based upon DRG. Cost data was normalized to 100 by a ratio.

Results: Patient demographics, indications, and risk factors were similar except for a greater incidence of cardiac disease in the 80 yo compared to <80 yo (n=13, 44.8% vs. n=18, 19.4%, p=0.0001). There were no deaths and 1 peri-operative stroke, which occurred in the <80 yo group. Patients 80 yo had significantly higher post-op cardiac complications (n=3, 10% vs. none, p=0.0001), including 1 post-op MI. LOS and ICU admissions were significantly greater in the 80 yo group. Actual total costs of CEA were significantly higher for 80 yo. Significant cost analyses are itemized in the table:

Cost Category	<80 yo	80 yo	P
Normalized actual total cost	100	127.9	<0.001
Room Care/ ICU	0.8	10.6	<0.001
Clinical Labs	2.3	3.9	<0.01
Other center specialty	17.8	20.3	<0.05
OR/ Surgery	29.4	33.0	<0.05
Ancillary Services	0.9	1.9	<0.01

Conclusion: The cost of CEA in elderly patients is significantly greater than younger patients as a result of increased pre- and post- operative cardiac morbidity. This is highlighted by an increased cost of ICU care. Despite this increased cardiac morbidity, overall clinical outcomes were similar. Studies are necessary to determine if greater DRG weight should be applied to elderly patients undergoing CEA.