

#6 CAROTID STENTING AND ENDARTERECTOMY IN THE COMMUNITY HOSPITAL

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Stenting of the carotid artery as an alternative to carotid endarterectomy remains a controversial procedure awaiting the results of large multi-center trials currently underway. At present its role in the community hospital setting is unclear. In 1999 a multidisciplinary committee was established to monitor the introduction of carotid stenting (CS) as an alternative to carotid endarterectomy (CE) in the ThedaCare hospital system. From January 1, 2000 to December 31, 2001, 286 carotid interventional procedures were carried out consisting of 40 patients undergoing CS and 246 patients undergoing CE in a nonrandomized fashion. The indications for CS were unstable cardiac or medical disease (32.5%), recurrent carotid stenosis (22.5%), and physician or patient preference (40%). Of the patients undergoing CS, 73% (29/40) were asymptomatic as opposed to 55% (136/246) in the CE group. Only 57.5% (23/40) of patients undergoing CS met criteria established by the multidisciplinary committee. Thirty-day mortality was similar in the two groups: CS (1/40=2.5%) versus CE (2/246=0.8%). Complications occurring within 30 days are reported below:

	<u>CS</u>	<u>CE</u>
Persistent Deficit	10.0% (4/40)	2.0% (5/246)
Transient Deficit	2.5% (1/40)	2.4% (6/246)
MI	0% (0/40)	0.4% (1/246)
Renal Failure	2.5% (1/40)	0% (0/246)
Hematoma	0% (0/40)	2% (6/246)
Cranial Nerve Deficit	0% (0/40)	3.7% (9/246)

Follow-up duplex scanning was available in 38/40 patients undergoing CS and 106/246 patients following CE. Significant early re-stenosis ($\geq 80\%$) was noted in 3% (1/38) of patients following CS and 7% (7/106) patients following CE. In elderly patients (>75 years) CS was associated with no neurologic morbidity or mortality in 17 patients. The average cost of an uncomplicated CS (LOS 0.6 days) was \$8,788.00 versus an uncomplicated CE (LOS 1.7 days) at \$6,757.00. CS is a promising alternative to CE. However the introduction of CS in the community hospital may be associated with increased morbidity relative to CE. Careful monitoring of results is mandatory to insure patient safety. Its initial use should be limited to recurrent carotid stenosis or symptomatic patients who are otherwise not good candidates for CE.