BACKGROUND: Carotid endarterectomy (CEA) can be performed using either general anesthesia (GA) or cervical plexus block with local anesthesia (LA) and intraoperative sedation. GA is utilized with much greater frequency nationally, however the basis for this trend is unclear. Despite numerous studies there is no existing consensus on the ideal method of anesthesia for CEA. Anesthetic approach utilized for CEA is based largely on surgeon preference or institutional bias. This study aims to assess the benefits of utilizing LA over GA endarterectomy in a community hospital setting. METHODS: Retrospective review of a high volume community hospital surgical database was performed to identify all patients who underwent CEA from January 1, 2007 to December 31, 2013. Study groups consisted of patients who received LA and those who received GA for CEA. Data collected includes patient demographic and comorbidities, operative time, postoperative vasopressor requirements, postoperative complications, hospital length of stay, and discharge disposition. RESULTS: During the study period 1513 patients underwent CEA, with an average of 215 CEA’s performed each year. Of those, 1183 received a LA and sedation, while 330 underwent GA for CEA. Patients who received a LA as opposed to GA were found to have an overall shorter hospital length of stay (2.7 days vs 3.6 days, p=0.0009), fewer myocardial infarctions (0.1% vs 0.9%, p=0.0345), and fewer postoperative strokes (0.9% vs 2.4%, p=0.0311). There was no difference found between operative time (112.1 minutes vs 112.7 minutes, p=0.3788), postoperative vasopressor requirement (4.6% vs 5.2%, p=0.6558), re-operation for hematoma (1.3% vs 2.7%, p=0.0606), mortality (0.2% vs 0.3%, p=0.5223), or discharge disposition (discharge to rehab 5.2% vs 6.4%, p=0.3917; discharge to home 94.7% vs 93.3%, p=0.3496). CONCLUSIONS: CEA with LA is a safe and superior alternative to GA when performed routinely at a high volume community hospital. LA was found to offer several clinical advantages such as fewer postoperative myocardial infarctions, strokes, and an overall decrease in hospital length of stay. These results must be confirmed in a prospective, randomized multicenter trial at community hospitals to promote LA as the standard of care.