

An Economic Analysis of Hand Surgery Performed Wide Awake versus Under Sedation

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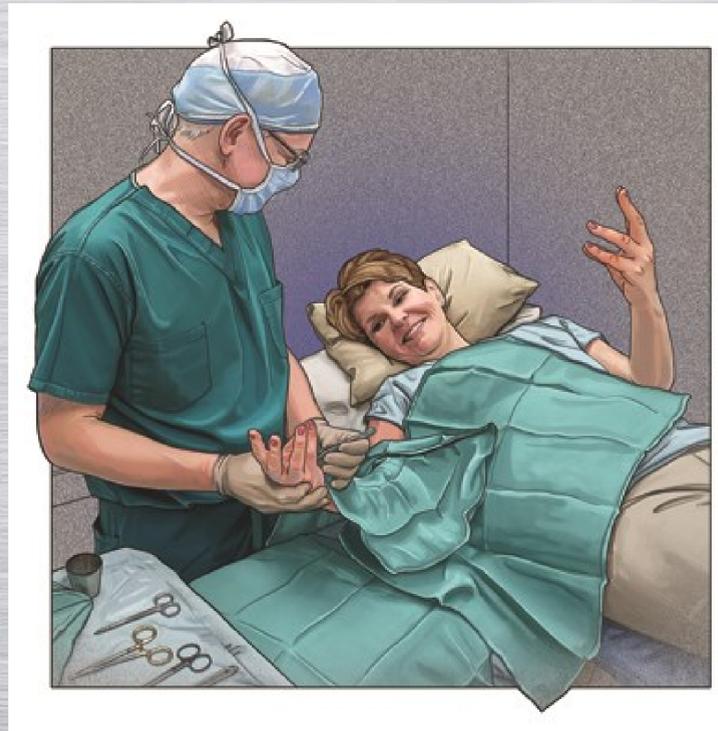
INTRODUCTION

“Wide Awake” Hand Surgery has several potential advantages including eliminating anesthetic risks, greater patient convenience, avoiding the discomfort of IV placement and postoperative anesthetic recovery, and reduced cost. The purpose of this study was to analyze cost differences relative to direct and indirect surgical costs of undergoing carpal tunnel release (CTR) performed under local anesthesia (WALANT) only to those performed under intravenous sedation (MAC), with the hypothesis that there would be less cost associated with WALANT rather than MAC for CTR surgeries.

MATERIALS & METHODS

A retrospective comparison of intra-operative (OR) surgical time and post-operative (PACU) time for consecutive CTR procedures performed under both MAC and WALANT was undertaken. All operations were performed by the same surgeon, at the same surgical center, using the same mini-open surgical technique in all cases. A cost analysis was performed using standardized anesthesia billing, OR time, and PACU time calculated through base units, time, and conversion rates.

TABLE & FIGURE



RESULTS

There were no significant differences between the two groups in terms of total OR time, 28 minutes in the MAC group versus 26 minutes in the WALANT group ($P=0.05$). PACU times were significantly longer in the MAC group (84 minutes) compared to the WALANT group (7 minutes) ($p<0.0001$). Depending on the conversion rates used, a total of \$138.83-\$431.52 was saved in each case done with WALANT by not using anesthesia services. In addition, a range of \$1,417.16-\$1709.84 was saved for the full episode of care including anesthesia costs, OR time, and PACU time for each patient undergoing WALANT CTR.

DISCUSSION

The hypothesis was upheld as CTR surgery performed with the WALANT technique was found to result in significantly less PACU time as well as overall lower cost of at least \$1,400 lower than those performed with MAC.