

POSTER ABSTRACTS

11th Annual HMO Research Network Conference

April 4-6, 2005 Santa Fe, NM

TRIP
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Local Anesthesia with Monitored Anesthesia Care Versus General Anesthesia in Thyroidectomy: Translating Research Into Practice

Christie Cummings, Samuel K. Snyder, Charles R. Roberson, Mohammad H. Rajab
Scott and White/Texas A&M University College of Medicine; Temple, Texas

Background: It has been the usual practice for surgeons to perform thyroidectomy exclusively under general anesthesia. However, recent reports of thyroidectomy under local anesthesia claim similar results to general anesthesia. The objective of this study was to determine the effectiveness, safety, and patient satisfaction of local anesthesia with intravenous sedation compared with general anesthesia in patients undergoing thyroidectomy.

Methods: We conducted a prospective randomized study comparing local anesthesia with monitored anesthesia care versus general anesthesia in adult patients undergoing thyroidectomy in a potential outpatient setting. Patients were excluded if they were not able to receive local or general anesthesia. In addition, we performed an outcome evaluation of the use of local anesthesia with monitored anesthesia care for thyroidectomy and the use of outpatient surgery for thyroidectomy. We compared 58 consecutive thyroidectomies performed prior to the study with 58 consecutive thyroidectomies performed after the study.

Results: Fifty-eight patients undergoing thyroidectomy received random assignment; 29 to local anesthesia with monitored anesthesia care and 29 to general anesthesia under study protocol. Fifty-one (88%) operations were completed as outpatient surgery. No significant differences were found between the two study groups in demographics, postoperative adverse symptoms, complications, hospital admission, or patient satisfaction. Patients in the general anesthesia group spent, on average, more time postoperatively in the outpatient surgery center until same day dismissal ($p=0.023$). When compared before the study, we found a significant increase after the randomized study in the use of local anesthesia with monitored anesthesia care ($p<0.001$) and outpatient thyroidectomies ($p<0.0001$).

Conclusions: Thyroidectomy can be performed in the studied patient population under either general anesthesia or local anesthesia with monitored anesthesia care expecting similar operative results, clinical results, and patient satisfaction. In addition, local anesthesia with monitored anesthesia care can reduce the postoperative time spent in an outpatient surgery setting with potential healthcare cost savings. A change of practice has resulted from this study.