



THYROID SURGERY

Robotic thyroidectomy costs more than standard cervical thyroidectomy

BACKGROUND

Thyroid surgery is performed for multiple reasons including thyroid cancer, non-cancerous thyroid nodules and enlarged thyroid glands and hyperthyroidism. Thyroid surgery is traditionally performed through an incision in the neck. In the past several years, new approaches to thyroid surgery have been developed in Asia to move the incision from the neck to more concealed locations. These new techniques include surgery performed through an incision in the armpit using manual or robotic instruments. This study looked to compare the costs of standard thyroid surgery to the costs of robotic thyroid surgery.

THE FULL ARTICLE TITLE:

Cabot JC et al. Robotic and endoscopic transaxillary thyroidectomies may be cost prohibitive when compared to standard cervical thyroidectomy. *Surgery* 2012;152:1016-24.

SUMMARY OF THE STUDY

The authors looked at a group of 90 patients that underwent surgery in Seoul, Korea and 50 that underwent surgery in the United States. Costs were looked at from the perspective of reimbursement in the United States. The costs of standard thyroidectomy was \$9,028 versus \$12,505 for thyroid surgery performed with manual instruments through an incision in the armpit, versus \$13,670 when performed with robotic instruments. The higher expense in these new techniques is related to the higher cost of the disposable instruments needed and longer operative time needed to perform these procedures.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

New techniques for thyroid surgery are more costly and take longer to perform. As with any innovation, there may

be new costs that with time may result in new benefits for patients, surgeons and the health system. These techniques are currently evolving and whether they will ultimately be widely adopted in the United States remains to be seen. More likely than not, these will continue as niche operations in the United States.

Some patients may be interested in having surgery by these new approaches, but they are not for every patient and not for every surgeon. Patients are typically interested because these techniques eliminate the neck incision of standard thyroid surgery while others are attracted to the idea of having robotic surgery. Studies clearly show that these procedures can be safely performed by well-trained surgeons. In spite of this, these techniques are difficult to learn and have new potential complications that do not occur with standard surgery. Furthermore, the company that manufactures the robot is not currently supporting the use of the technology for thyroid surgery in the United States.

— Ronald B. Koppersmith, MD, FACS

ATA THYROID BROCHURE LINKS

Thyroid Surgery: http://thyroid.org/patients/patient_brochures/surgery.html

ABBREVIATIONS & DEFINITIONS

Thyroidectomy: surgery to remove the entire thyroid gland. When the entire thyroid is removed it is termed a total thyroidectomy. When less is removed, such as in removal of a lobe, it is termed a partial thyroidectomy.