



THYROID CANCER

Neck ultrasound before surgery may change the extent of surgery in patients with thyroid cancer

BACKGROUND

Thyroid cancer is the fastest rising cancer in women. Papillary cancer is the most common type of thyroid cancer. Surgery to remove the entire thyroid (total thyroidectomy) is the usual first treatment. Nearly 1/3 of patients with papillary cancer may have spread of the cancer to the lymph nodes at the time their thyroid cancer is discovered. These patients have a higher risk that the cancer will come back after the initial surgery. Neck ultrasound often can identify abnormal lymph nodes prior to surgery, especially when these lymph nodes are lateral to the thyroid. This allows surgeons to find and remove these worrisome lymph nodes at the time of the patient's first operation. However, removing lymph nodes lateral to the thyroid requires more extensive surgery as compared routine total thyroidectomy. It is not clear how often the preoperative neck ultrasound identifies lymph nodes that actually change the surgeon's plan. The present study examines the role of preoperative neck ultrasound in thyroid cancer patients and whether the results change the surgeons' plan.

THE FULL ARTICLE TITLE

O'Connell K et al. The utility of routine preoperative cervical ultrasonography in patients undergoing thyroidectomy for differentiated thyroid cancer. Surgery. September 5, 2013 [Epub ahead of print]. doi: 10.1016/j.surg.2013.06.040.

SUMMARY OF THE STUDY

A total of 70 patients with thyroid cancer underwent neck ultrasound prior to surgery. All of these patients then had surgery to remove the thyroid gland and removal of lymph nodes when the surgeon decided this was appropriate. A total of 7 patients were found to have enlarged lymph nodes on physical examination.

In the remaining 63 patients, 16 had no evidence of enlargement of lymph nodes on physical exam but did have worrisome lymph node changes on ultrasound alone, including 2 patients with abnormal lymph nodes lateral to the thyroid. Of these 16 patients, 15 were found at the time of surgery to have spread of their thyroid cancer to the lymph nodes. Therefore, 23% (16 out of 70) patients had a change in their operation. In only 1 case was the patient found to have no evidence of spread to the lymph nodes when the neck ultrasound indicated that there were worrisome lymph nodes.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study suggests that performing neck ultrasound prior to surgery in patients with thyroid cancer, as recommended by the American Thyroid Association, improves the ability of the surgeon to find and remove lymph nodes that contain spread of thyroid cancer at the time of the first operation in patients. Neck ultrasound appears to be better than physical examination alone to identify patients who are at risk for spread to their lymph nodes. Only 1 patient had to undergo unnecessary additional surgery as a result of the neck ultrasound findings. This study adds to the potential ability of surgeons to improve the results of the first operation in patients with thyroid cancer.

— Jennifer Rosen, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: <http://www.thyroid.org/cancer-of-the-thyroid-gland>

Thyroid Surgery: <http://thyroid.org/patients/patient-brochures/surgery.html>



THYROID CANCER, continued

ABBREVIATIONS & DEFINITIONS

Thyroid Ultrasound: a common imaging test used to evaluate the structure of the thyroid gland. Ultrasound uses soundwaves to create a picture of the structure of the thyroid gland and accurately identify and characterize nodules within the thyroid. Ultrasound is also frequently used to guide the needle into a nodule during a thyroid nodule biopsy.

Papillary thyroid cancer: the most common type of thyroid cancer.

Total thyroidectomy: surgery to remove the entire thyroid gland.

Lymph node: bean-shaped organ that plays a role in removing what the body considers harmful, such as infections and cancer cells.