CLINICAL THYROIDOLOGY FOR THE PUBLIC

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THYROID CANCER

Incidentally identified thyroid cancers are not rare and may be advanced at the time of discovery

BACKGROUND

The frequency of thyroid cancer is rising in the United States, especially among women. One reason this may be the case is the increase in the use imaging studies (ie CT scans) that include imaging the thyroid (incidental imaging). Consistent with this idea is that small papillary thyroid cancers make up a large percentage of newly diagnosed thyroid cancers and are the fastest growing type of thyroid cancer. However, studies have also demonstrated an increase in larger or more advanced thyroid cancers. Screening and incidental imaging are now thought to be responsible for finding approximately half of all thyroid cancers. In this study, the authors determined the method by which thyroid cancers were detected in patients undergoing thyroid surgery for cancer at their institution.

THE FULL ARTICLE TITLE

Malone M et al. Thyroid cancers detected by imaging are not necessarily small or early stage. Thyroid 2014;24;314-8. Epub September 13, 2013.

SUMMARY OF THE STUDY

The authors reviewed the charts of the 473 patients who underwent thyroidectomy at a single center between January 2007 and August 2010 and were found to have cancer on the final pathology review. Patients were separated into three groups based on how the cancer was found. Imaging detected 184 cancers (39%), physical exam detected 218 cancers (46%) and final pathology after the thyroid was removed for a benign process found cancer in 71 patients (15%).

Only 77% of patients in the physical exam group had the mass first felt by their health-care provider. Early-

stage, smaller cancers without lymph node involvement were more likely to be found in the specimen only or by imaging. A total of 38% of cancers larger than 4 cm were found on imaging. Nearly half (47%) of advanced cancers were found in the imaging group; 39% of cancers with lymph node involvement were also found in this group.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Over one third of the thyroid cancers in this study were initially found through an imaging study and not through examination. Interestingly, nearly half of those cancers could be felt on examination at the time of surgery, even though they were not originally detected on physical exam. This is a worrisome finding that calls into question the effectiveness of physical exam in screening for thyroid malignancy. The fact that many (46%) of these "occult" cancers were actually palpable at the time of surgery underscores the fact that clinicians often have difficulty detecting thyroid disease and lymph node enlargement on physical exam. Inability to detect thyroid cancer by palpation offers a possible explanation for why the increasing frequency of thyroid cancer is not limited to small early-stage cancers.

— Ronald B. Kuppersmith, MD, FACS

ATA THYROID BROCHURE LINKS

Thyroid cancer: <u>http://www.thyroid.org/</u> <u>cancer-of-the-thyroid-gland</u> Thyroid Surgery: <u>http://thyroid.org/patients/patient</u> <u>brochures/surgery.html</u>

DEFINITIONS

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

