



## THYROID CANCER

### Prevalence of thyroid cancer in nodular goiter

#### BACKGROUND

Thyroid cancer is common and appears to be increasing in incidence. The diagnosis of thyroid cancer results from the evaluation of thyroid nodules. There has been controversy in the literature as to whether thyroid glands with single thyroid nodules carry the same risk of cancer as nodules found in multinodular goiters. Initially, research suggested that nodules in multinodular goiters carried a lower risk of thyroid cancer than single nodules, then later studies demonstrated they carried the same risk of cancer. The authors of this study analyzed results from many different studies to answer the question of whether nodules in multinodular goiters are more or less likely cancerous than single thyroid nodules.

#### THE FULL ARTICLE TITLE:

Brito JP et al. Prevalence of thyroid cancer in multinodular goiter vs. single nodule: a systematic review and meta-analysis. *Thyroid*. October 15, 2012 [Epub ahead of print].

#### SUMMARY OF THE STUDY

The authors reviewed the literature for studies of thyroid cancer in thyroid glands with single thyroid nodules and multinodular goiters. A total of 14 studies were identified for use in the analysis and included 23,565 patients in

the multinodular goiter group and 20,723 patients with thyroid glands with single nodules. These authors pooled results from all these studies and found that multinodular goiters were associated with ~20% lower risk of thyroid cancer than single nodules. Interestingly, this lowered risk was only seen in studies from Europe, as there was no difference in studies conducted in the United States.

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The authors conclude thyroid cancer may be less frequent in multinodular goiters compared to thyroid glands with single nodules, especially outside the United States. At this time, these results do not change the general recommendations that nodules greater than 1-1.5 cm in size be considered for fine needle aspiration biopsy to evaluate for thyroid cancer, regardless if they were a solitary nodule or within a multinodular goiter.

—Whitney Woodmansee, MD

#### ATA THYROID BROCHURE LINKS

Thyroid cancer: [http://thyroid.org/patients/patient-brochures/cancer\\_of\\_thyroid.html](http://thyroid.org/patients/patient-brochures/cancer_of_thyroid.html)

Thyroid Nodules: <http://www.thyroid.org/what-are-thyroid-nodules>

#### ABBREVIATIONS & DEFINITIONS

**Thyroid nodule:** an abnormal growth of thyroid cells that forms a lump within the thyroid. While most thyroid nodules are non-cancerous (Benign), ~5% are cancerous.

**Goiter:** a thyroid gland that is enlarged for any reason is called a goiter. A goiter can be seen when the thyroid is overactive, underactive or functioning normally. If there are nodules in the goiter it is called a nodular goiter; if there is more than one nodule it is called a multinodular goiter.