



## THYROID CANCER

### WHAT IS THE STUDY ABOUT?

The number of new cases of thyroid cancer has been rising over the last 30 years. Most thyroid cancers occur in women and currently thyroid cancer is the 6th most common cancer in women. Part of the reason is likely due to the increased use of imaging and biopsy studies, so smaller thyroid cancers can now be found. However, there is growing awareness that there may be other as yet unidentified causes for the increased number of new cases of thyroid cancer. This study was done to determine the rate of new cases of thyroid cancer and the trends in cancer size in Vigo, Spain, from 1979 through 2001.

**THE FULL ARTICLE TITLE:** Rego-Iraeta A, Perez-Mendez LF, Mantinan B, Garcia-Mayor RV. Time trends for thyroid cancer in northwestern Spain: true rise in the incidence of micro and larger forms of papillary thyroid carcinoma. *Thyroid* 2009;19:333-40.

### WHAT WAS THE AIM OF THE STUDY?

The aims of this study were to determine the rate of new cases of thyroid cancer and the trends in cancer size in Vigo, Spain, from 1979 through 2001.

### WHO WAS STUDIED?

Patient records were obtained from the Pathology Registry of the Vego University Hospital in Vigo, Spain, which contains information on almost all cancers in the area. The records of 322 cases of thyroid cancer were examined.

### HOW WAS THE STUDY DONE?

The records of 322 cases of papillary, follicular, anaplastic, and medullary thyroid cancer were examined. Papillary thyroid cancers  $\leq 1$  cm were categorized as papillary microcarcinoma.

### WHAT WERE THE RESULTS OF THE STUDY?

The number of thyroid surgeries done for all causes increased almost 14% from 1979 to 2001. The number of thyroid cancers increased from ~9% to over 12% of the thyroid surgeries. The average age of thyroid cancer patients was almost 47 years and almost 75% of these patients were women. Of the 322 cases of thyroid cancer, 245 (76%) were papillary, 44 (13.7%) follicular, 23 (7.1%) medullary, and 10 (3.1%) anaplastic thyroid cancers. Of the 245 papillary cancers, 95 were papillary microcarcinomas, over 90% of which were discovered after thyroid surgery done for reasons other than cancer. The rate of new thyroid

cancers steadily increased over the time period, with over six times as many cancers found in 2001 as in 1979. This increase was due solely to an increase in papillary cancer. The increase was the same for both papillary microcarcinomas and the larger papillary cancers.

### HOW DOES THIS COMPARE WITH OTHER STUDIES?

Previous studies in the United States and in Canada showed a similar increase in the rate of thyroid cancer and also have shown that the increase is due to new Papillary thyroid cancers. While several of these prior studies suggested that this increase was due to an increase in small thyroid cancers, a study discussed in the May 2009 issue of *Clinical Thyroidology for Patients* (Enewold et al, as cited in Farwell, 2009) was the first to show an increase in all sizes of papillary thyroid cancer. This study confirms an increase in both the small and large papillary cancers. (Farwell A. *Clinical Thyroidology for Patients* [serial online]. 2009;2(1):4. Available at: [http://thyroid.org/patients/ct/volume2/issue1/ct\\_patients\\_v21\\_4.pdf](http://thyroid.org/patients/ct/volume2/issue1/ct_patients_v21_4.pdf). Accessed July 6, 2009.)

### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The increase in new cases of thyroid cancer in Spain is only partly due to improved imaging tests. This study suggests that other environmental factors are playing a role in the recent increase in thyroid cancer.

— Alan P. Farwell, 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)

### ABBREVIATIONS & DEFINITIONS

**Papillary thyroid cancer** — the most common type of thyroid cancer

**Follicular thyroid cancer** — the second most common type of thyroid cancer

**Medullary thyroid cancer** — a relatively rare type of thyroid cancer that also may be inherited

**Anaplastic thyroid cancer** — a very rare but very aggressive type of thyroid cancer. In contrast to all other types of thyroid cancer, most patients with anaplastic thyroid cancer die of their cancer and do so within a few years

**Papillary microcarcinoma** — a papillary thyroid cancer smaller than 1 cm in diameter