



THYROID CANCER

WHAT IS THE STUDY ABOUT?

There has been a rapid increase in the number of new cases of thyroid cancer over the last 30 years. Most thyroid cancers occur in women and currently thyroid cancer is the 6th most common cancer in women. With the increased use of imaging and biopsy studies, smaller thyroid cancers can be found. This study was done to determine if the increase in new cases of thyroid cancer was due to finding more of these small thyroid cancers or due to an overall increase in all thyroid cancers.

THE FULL ARTICLE TITLE: Enewold L, Zhu K, Ron E, Marrogi AJ, Stojadinovic A, Peoples GE, Devesa SS. Rising thyroid cancer incidence in the United States by demographic and tumor characteristics, 1980-2005. *Cancer Epidemiol Biomarkers Prev* 2009;18:784-91.

WHAT WAS THE AIM OF THE STUDY?

This study was done to determine if the increase in new cases of thyroid cancer was due to using more sensitive imaging tests. If this were the case, then one would expect more cases of smaller sized cancers with fewer cases of larger sized cancers.

WHO WAS STUDIED?

For this study, the authors collected information from 47,516 patients who were diagnosed with thyroid cancer between 1980 and 2005 and whose information was stored in nation-wide thyroid cancer registries (SEER-9 and SEER-13) which include 14% of the population of the United States. The patients came from many different ethnic backgrounds, including Whites, Blacks, Hispanics and Asian/Pacific Islanders. Both men and women were included in the study.

HOW WAS THE STUDY DONE?

The authors searched the nation-wide registries for all confirmed cases of thyroid cancers and divided the number of new cases by type of cancer, cancer size, race/ethnic background, and sex.

WHAT WERE THE RESULTS OF THE STUDY?

The authors found that the rate of new thyroid cancers increased 2-3-fold over the 25 year period. This increase in both men and women was due entirely to an increase in

new cases of papillary thyroid cancer (the most common type of thyroid cancer) as the rate of new cases of other types of thyroid cancer did not change. They also found, as was expected, a large increase in cases of smaller sized cancers. Unexpectedly, they also found that there was an increase in cases of larger sized cancers. Thus, there has been an increase in new cases of thyroid cancer of all sizes.

HOW DOES THIS COMPARE WITH OTHER STUDIES?

Previous studies in the United States and in Canada showed a similar increase in the rate of new Papillary thyroid cancers. In these prior studies it was suggested that this increased was due to an increase in small thyroid cancers. The study from Canada also showed an increase in large thyroid cancers. The current study is the only one to show an increase in all sizes of thyroid cancer.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The rapid increase in new cases of thyroid cancer detected over time can be partly, but not fully, explained by increased use of improved imaging tests. It is important to know the other causes that are responsible for the new cases to help identify patients who are at risk of developing thyroid cancer.

— Mona Sabra, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: http://thyroid.org/patients/patient-brochures/cancer_of_thyroid.html

ABBREVIATIONS & DEFINITIONS

Papillary thyroid cancer – the most common type of thyroid cancer

SEER: Surveillance, Epidemiology and End Results program, a nation-wide anonymous cancer registry generated by the National Cancer Institute that contains information on 26% of the United States population. Website: <http://seer.cancer.gov/>