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# THYROID CANCER

Changing Age and Size Trends in Papillary Thyroid Cancer

# BACKGROUND

The number of cases of papillary thyroid cancer being diagnosed in the United States is increasing according to data from the National Cancer Institute and is growing at a faster rate than any other cancer. While there are more cases being diagnosed, the risk of death from has actually decreased from the 1970's, possibly suggesting that papillary thyroid cancer is being diagnosed earlier or more low-risk cases are being identified. It is unclear what the role age has on the increasing development of papillary thyroid cancer. The authors of this study examined a large database to examine how frequently papillary thyroid carcinoma occurs by age and cancer size. They compared these rates over the past three decades. By looking at this data, the authors hoped to obtain a better understanding of the role of age in the development of papillary thyroid cancer.

# THE FULL ARTICLE TITLE:

Hughes DT et al. The most commonly occurring papillary thyroid cancer in the United States is now a microcarcinoma in a patient older than 45 years. Thyroid. 2011 Mar;21(3):231-6. Epub 2011 Jan 26.

#### SUMMARY OF THE STUDY

This study reviewed the how frequently new cases of papillary thyroid carcinoma developed by year from 1973 to 2006 as reported in the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) database. The authors looked at new cases each year based on age and size of the cancer. Between 1974 and 2006, the most common age of diagnosis shifted from patients in their 30s to patients in the age range of 40 to 50 years. Before 1999, most cases where found in patients younger than 45 years. After 1999, papillary thyroid carcinoma was more common in patients older than 45 years. From 1988 to 2003, there was an increased number of patients diagnosed in all sizes of papillary thyroid carcinoma, with the largest increase in tumors <1 cm in patients older than 45 years.

# WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The number of papillary thyroid carcinomas being diagnosed is increasing, especially in patients older than 45 years. This study is important because patients who are older than 45 years old are at higher risk to have a more aggressive thyroid cancer relative to younger patients and, therefore, may warrant more aggressive treatment. The number of papillary thyroid carcinomas smaller than 1 cm (papillary microcancer) is increasing in all age groups. Fortunately for patients, papillary microcancers are usually easily treatable and curable.

- Ronald Kuppersmith, MD

# **ATA THYROID BROCHURE LINKS**

Thyroid cancer: <u>http://thyroid.org/patients/patient</u> <u>brochures/cancer\_of\_thyroid.html</u>

# **ABBREVIATIONS & DEFINITIONS**

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

Papillary microcarcinoma — a papillary thyroid cancer smaller than I cm in diameter.

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: <u>http://seer.cancer.gov/</u>

