# CLINICAL THYROIDOLOGY FOR PATIENTS

A publication of the American Thyroid Association

# **THYROID CANCER**

In Patients With Thyroid Microcarcinoma, Spread Of The Cancer To The Lymph Nodes Or Outside Of The Neck At The Time Of Diagnosis Is Associated With An Unfavorable Outcome

## 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. Almost all of the increase has been in papillary thyroid cancer. While there has been an increase of papillary cancer of all sizes, of particular interest has been in the increase in the so-called papillary microcarcinomas – those <1 cm in size. Some studies suggest that these microcarcinomas are much less likely to spread than larger cancers while some suggest that size does not make any difference in cancer spread. Because of this, there has been a wide range of opinions as to how patients with papillary microcarcinomas of patients with papillary microcancers as compared to those with those papillary cancers >1 cm (macrocarcinomas) in size.

#### THE FULL ARTICLE TITLE:

Tzvetov G, Hirsch D, Shraga-Slutzky I, Weinstein R, Manistersky Y, Kalmanovich R, Lapidot M, Grozinsky-Glasberg S, Singer J, Sulkes J, Shimon I, Benbassat C. Welldifferentiated thyroid carcinoma: comparison of microscopic and macroscopic disease. Thyroid 2009;19:487-94.

#### WHAT WAS THE AIM OF THE STUDY?

The aim of this study is to look at outcomes of patients with papillary microcancers as compared to those with those papillary cancers >1 cm (macrocarcinomas) in size.

#### WHO WAS STUDIED?

This study looked at a total of 768 patients treated for thyroid cancer in the Rabin Medical Center in Israel from 1973 through 2005. Of the 768 patients, 543 had cancers > 1 cm (71%) and 225 had cancers ≤1 cm (29%).

#### HOW WAS THE STUDY DONE?

The patient's records were reviewed as to patient age, sex, cancer type, primary therapy and the extent of cancer, local recurrence of the cancer, and distant metastases. Persistent or recurrent cancer was defined as detectable cancer 1 year after initial therapy. Patients were considered cancer-free if they had no evidence of the cancer by blood tests and ultrasonography at their last visit.

## WHAT WERE THE RESULTS OF THE STUDY?

At the time of initial treatment, there was no difference between the microcarcinomas and the macrocarcinomas in terms of spread to the lymph nodes (26% vs 30%) or spread outside of the neck (2% vs 5%). In the follow up period, cancer recurrence was found more frequently in patients with macrocarcinomas (32% vs 11%), as was spread outside of the neck (10% vs 5%). At the end of follow-up, 216 patients (96%) in the microscopic and 543 (77%) in the macroscopic cancer group were cancer-free. In patients with microcarcinomas, spread of the cancer to the lymph nodes or outside of the neck at the time of diagnosis was associated with an unfavorable outcome.

#### HOW DOES THIS COMPARE WITH OTHER STUDIES?

In other studies, the recurrence rate for papillary microcarcinomas ranges from 5-17%, so the 11% recurrence falls about in the middle. Spread to lymph nodes in the neck and extension of the cancer outside of the neck has also been shown to be associated with unfavorable outcomes in other studies.

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

Patients with papillary microcarcinoma are more likely to have a favorable outcome than patients with larger cancers. However, the factors associated with unfavorable outcomes (spread of the cancer to the lymph nodes or outside of the neck at the time of diagnosis) are similar in both the papillary microcarcinomas and macrocarcinomas. —Alan Farwell, MD

#### **ATA THYROID BROCHURE LINKS**

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

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# THYROID CANCER, continued

## **ABBREVIATIONS & DEFINITIONS**

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

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

Lymph node — bean-shaped organ that plays a role in removing what the body considers harmful, such as infections and cancer cells.

Cancer recurrence — this occurs when the cancer comes back after an initial treatment that was successful in destroying all detectable cancer at some point.











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