



THYROID CANCER

The age cutoff of 45 years may not be appropriate for papillary thyroid cancer staging

BACKGROUND

The rate of diagnosis of thyroid cancer has increased in the past several decades. There are different types of thyroid cancers but the most common type is Papillary thyroid cancer. Papillary thyroid cancer is a curable disease in the majority of cases and 90% of patients with Papillary thyroid cancer are still alive 10 years after the diagnosis. Older patients are at higher risk of developing a more aggressive type of Papillary thyroid cancer with higher chance of cancer recurrence and death. A cut off age of 45 had traditionally been used by American Joint Committee on Cancer to separate patients with a higher possibility of recurrence and death (>45) from those with higher possibility of cure (<45). Recent studies suggest this is not a hard cut off age. As this cutoff is important for staging of thyroid cancer and naturally the type of treatment that one would receive, the aim of this study was to evaluate whether cutoff age of 45 is still appropriate.

THE FULL ARTICLE TITLE

Adam MA et al Exploring the relationship between patient age and cancer-specific survival in papillary thyroid cancer: rethinking current staging systems. *J Clin Oncol* 2016;34:4415-20. Epub October 28, 2016.

SUMMARY OF THE STUDY

A total of 31,802 patients with Papillary thyroid cancer were found in United State SEER cancer registry for the period of 1998 to 2012. The rate of death from Papillary

thyroid cancer was calculated at different age groups among these patients.

As expected, majority of patients were women (about 79%) and the average age at the time of diagnosis of cancer was 45. A total of 331 patients died of thyroid cancer; the rate of death was found to be higher with increasing age, without finding a specific age that could serve as a cutoff for separating patients at higher risk of death from the others.

This study has shown that the chance of dying from Papillary thyroid cancer is indeed higher with increasing age. However, no age cutoff was found to distinguish patients with a better outcome from the others.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The finding of this study may change the staging system for thyroid cancer. This study suggests that an age >45 does not necessarily indicate a significantly higher risk of thyroid cancer recurrence and it may not be appropriate to recommend more aggressive treatment options. More studies are needed to clarify these findings.

— Shirin Haddady, MD

ATA THYROID BROCHURE LINKS

Thyroid Cancer (Papillary and Follicular): <http://www.thyroid.org/thyroid-cancer/>

ABBREVIATIONS & DEFINITIONS

Papillary thyroid cancer: the most common type of thyroid cancer. There are 4 variants of papillary thyroid cancer: classic, follicular, tall-cell and noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP).

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/>