CLINICAL THYROIDOLOGY FOR PATIENTS

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THYROID CANCER

Cancer staging for younger patients with extensive thyroid cancer needs to be re-evaluated

BACKGROUND

Thyroid cancer is uncommon in younger patients. However, younger patients often have more extensive disease as compared to adults and are more likely to present with spread of the cancer, both to the lymph nodes in the neck and outside of the neck. Despite this, most young patients have a good prognosis and usually have a long life expectancy that is minimally affected by the thyroid cancer. The American Joint Cancer Committee (AJCC) stages all types of cancer according to severity and risk of death from stages 1 - 4, with the risk of cancer recurrence and death highest in stage 4. However, according to the AJCC, spreading of thyroid cancer to other parts of the body is correlated with higher risk in older patients but not in patients younger than 45. Thus, extensive cancer that would be classified as stage 4 in an older patient would be no higher than stage 2 in a patient under 45. Although age is an important predictive factor for outcome of thyroid cancer, this way of classification may underestimate the risk of cancer in younger patients. This study analyzes the data from the Surveillance, Epidemiology and End Results (SEER) in order to determine the effectiveness of the AJCC staging system in predicting the risk of thyroid cancer for patients with thyroid cancer younger than 45.

THE FULL ARTICLE TITLE

Tran Cao HS et al. A critical analysis of the American Joint Committee on Cancer (AJCC) staging system for differentiated thyroid carcinoma in young patients on the basis of the Surveillance, Epidemiology, and End Results (SEER) registry. Surgery. April 11, 2012 [Epub ahead of print].

SUMMARY OF THE STUDY

The records of 49240 patients with thyroid cancer from the SEER database were reviewed as to the patient's age, initial presentation, treatment and follow up. Effect of age, cancer size, spread to lymph nodes and spread to other parts of the body were analyzed in order to determine the effect on risk of death because of thyroid cancer.

Increasing age correlated with increased risk for death because of cancer. Young patients with cancer spreading outside the thyroid and to other parts of the body had a higher risk of dying because of thyroid cancer as compared to those with cancer confined to thyroid gland.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study confirmed the major effect that age has on risk of cancer recurrence and death in patients with thyroid cancer. However, in contrast to the current AJCC staging system, this study showed that patients younger than 45 with extensive thyroid cancer are at higher risk of dying because of their cancer. Thus, the AJCC cancer staging system for patients with thyroid cancer younger than 45 years of age needs to be re-evaluated.

— Jamshid Farahati, MD

ATA THYROID BROCHURE LINKS

Cancer of the Thyroid: <u>http://www.thyroid.org/</u> <u>cancer-of-the-thyroid-gland</u>

ABBREVIATIONS & DEFINITIONS

Cancer metastasis: spread of the cancer from the initial organ where it developed to other organs, such as the lungs and bone.

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/

American Joint Cancer Committee (AJCC): the source for the generally accepted staging system that stages all types of cancer according to severity and risk of death from stage I - 4, with the risk of cancer recurrence and death highest in stage 4.

