



THYROID CANCER

Extra-thyroidal extension in papillary thyroid cancer has an impact on the risk of recurrence and response to therapy

BACKGROUND

Doctors use different staging systems to predict the prognosis of patients with cancer. One of the most widely used staging systems is the AJCC system which predicts the risk of death from cancer based on the size of the cancer, if it has spread to the lymph nodes and if it has spread to other parts of the body. In general, stages I and II have a very low risk of death. The risk of death increases in stage III and is the highest in stage IV.

Most patients with thyroid cancer fall into stage I or II. One factor that resulted in an increase to stage III was whether the cancer was seen extending out from the thyroid into the neck muscles at the time of surgery (gross extra-thyroidal extension) or if this was seen only by examining the cancer under the microscope (minimal extra-thyroidal extension). With the AJCC update in 2017, patients with minimal extra-thyroidal extension were downgraded to stage II and only patients with gross extra-thyroidal extension were included in stage III.

The current study was done to compare the risk of recurrence and response to treatment between patients with gross extra-thyroidal extension and those with minimal extra-thyroidal extension.

THE FULL ARTICLE TITLE

Danilovic DLS et al 2020 Is there a difference between minimal and gross extension into the strap muscles for the risk of recurrence in papillary thyroid carcinoma? *Thyroid*. Epub 2020 Mar 17. PMID: 32059626.

SUMMARY OF THE STUDY

This study was conducted in Universidade de São Paulo in São Paulo, Brazil. The authors reviewed the medical records of patients with thyroid cancer who had follow up there from 2012 to 2018. A total of 596 patients with papillary thyroid cancer were included and patients with other types of thyroid cancers and those with advanced papillary thyroid cancer were excluded. Of these, 88% of patients were female with an average age of ~50 years. Overall, 87% of patients had stage I and 13% had stage II thyroid cancer. A total of 191 had minimal extra-thyroidal extension and 65 had gross extra-thyroidal extension. About 14% of patients with minimal extension had recurrence while the recurrence in the group of patients with gross extension was about 25%. At the time of final evaluation, the proportion of patients who were free of cancer was significantly higher in the group with microscopic extension.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The extent of local spread of thyroid cancer to adjacent structures in the neck changes the risk of recurrence for patients with papillary thyroid cancer. Based on this finding, patients with gross extra-thyroidal extension need closer and, possibly, more aggressive treatment while those with minimal extra-thyroidal extension can be treated more conservatively

— Shirin Haddady, MD

ATA THYROID BROCHURE LINKS

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





THYROID CANCER, continued

ABBREVIATIONS & DEFINITIONS

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

Papillary thyroid carcinoma: 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).

Extra-thyroidal extension: cancer that extends out from the thyroid into the neck muscles. If this is visible at the time of surgery, it is termed gross extra-thyroidal extension. If it is only seen by examining the cancer under the microscope, it is termed minimal extra-thyroidal extension.

American Joint Committee on Cancer (AJCC) staging system: predicts the risk of death from cancer based on the size of the cancer, if it has spread to the lymph nodes and if it has spread to other parts of the body. In general, stages I and II have a very low risk of death. The risk of death increases in stage III and is the highest in stage IV.

