



## THYROID CANCER

# Minimal extrathyroidal extension leads to a slight increase in thyroid cancer recurrence, but does not impact survival for thyroid cancer

### BACKGROUND

Thyroid cancer is the fastest rising cancer in women. Overall, prognosis is excellent and staging and management of thyroid cancer focuses on risk of recurrence rather than risk of death. The first risk assessment in thyroid cancer is done after the initial surgery based on the type of cancer, extension of the cancer outside of the thyroid (extrathyroidal extension, ETE) and spread of the cancer into lymph nodes in the neck. It is controversial whether minimal ETE (cancer extends into or just beyond the thyroid capsule, but not grossly into any muscles or structures in the neck) impacts thyroid cancer recurrence or death. The new pathological society (AJCC) thyroid cancer staging took minimal ETE out of staging for survival, but currently it is still part of the American Thyroid Association (ATA) guidelines risk of recurrence model that was last updated in 2015. This study wanted to re-examine the role of minimal ETE on recurrence and survival for papillary and follicular thyroid cancer.

### THE FULL ARTICLE TITLE

Diker-Cohen T et al, 2018 Impact of minimal extra-thyroid extension in differentiated thyroid cancer: systematic review and meta-analysis. J Clin Endocrinol Metab. Epub 2018 Mar 1. PMID: 29506045.

### SUMMARY OF THE STUDY

The authors looked at all the results in the medical literature (systemic review) and examined the results of the good studies (meta-analysis) that had previously examined the impact of ETE on recurrence and/or survival from thyroid cancer. They also looked at if it made a difference depending on if you had positive (spread of cancer into the lymph node) or negative lymph nodes and if you had very small cancers. A national database study that used SEER and 12 smaller single center studies were included. In patients with very small microcarcinomas, minimal ETE did not affect risk of recurrence or survival, regardless of positive or negative nodes. In other patients, it appeared that minimal ETE increased the recurrence rate a very small amount (about 0.8-1.3%) and it did not impact survival.

### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Minimal ETE *very* minimally impacts risk of recurrence (but only about 1%) and does not impact survival of thyroid cancer. Therefore, it really shouldn't be taken into account when counseling for treatment or prognostic purposes, especially in patients with microcarcinomas. This is a change from previous recommendations (but are reflected in the new staging system).

— Melanie Goldfarb, MD

### ATA THYROID BROCHURE LINKS

Thyroid Cancer (Papillary and Follicular): <https://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).

**Papillary microcarcinoma:** a papillary thyroid cancer smaller than 1 cm in diameter.

**Follicular thyroid cancer:** the second most common type of thyroid cancer.





## THYROID CANCER, continued

**Thyroidectomy:** surgery to remove the entire thyroid gland. When the entire thyroid is removed it is termed a *total thyroidectomy*. When less is removed, such as in removal of a lobe, it is termed a *partial thyroidectomy*.

**Lobectomy:** surgery to remove one lobe of the thyroid.

**Completion thyroidectomy:** surgery to remove the remaining thyroid lobe in thyroid cancer patients who initially had a lobectomy.

**Total thyroidectomy:** surgery to remove the entire thyroid gland.

**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/>

