



THYROID CANCER

The Effect of Surgery Extent for Low-Risk Thyroid Cancer on Quality of Life

BACKGROUND

Papillary thyroid cancer is the most common type of thyroid cancer and, although this cancer generally has a very good survival rate/prognosis, thyroid surgery is still needed in most cases. Most papillary thyroid cancers are 'low risk', meaning that they are small (< 4 cm in diameter), are completely contained within the thyroid and do not spread into neighboring tissues or to distant body sites. There are two surgery choices for people diagnosed with low risk papillary thyroid cancer: 1) removal of just that part of the thyroid that contains the thyroid cancer (this is called a hemithyroidectomy or partial thyroidectomy) or 2) removal of the whole thyroid gland (this is called a total thyroidectomy).

There are two advantages of hemithyroidectomy. First, the part of the thyroid that is left in place (is not surgically removed) will continue to make thyroid hormone, which is the normal job of the thyroid and is needed for controlling how the body uses energy (metabolism). For this reason, many people who undergo hemithyroidectomy do not need to take a thyroid hormone replacement pill. On the other hand, people who have had all of their thyroid tissue removed (total thyroidectomy) must take this pill every day following surgery. Second, hemithyroidectomy is a smaller surgery than is total thyroidectomy and, for this reason, the risk of complications from surgery are also smaller. Recent studies also suggest that, because hemithyroidectomy is a smaller surgery than total thyroidectomy and with a lower risk of complications, overall quality of life after surgery may be better for people who undergo a hemithyroidectomy.

Hemithyroidectomy does have disadvantages, however. First, the thyroid tissue that is not surgically removed generally must be monitored over time for formation of new thyroid cancer and, if this does happen, another surgery might be needed to remove this cancer. Second, it can be more difficult for doctors to tell if a thyroid cancer recurs (comes back) if the whole thyroid gland is not removed.

The purpose of the study reviewed here was to compare quality of life for people who underwent a hemithyroidectomy for low risk papillary thyroid cancer to quality of life for people who underwent total thyroidectomy.

FULL ARTICLE TITLE

Bongers PJ et al. 2020 Differences in long-term quality of life between hemithyroidectomy and total thyroidectomy in patients treated for low-risk differentiated thyroid carcinoma. *Surgery* 167:94–101

SUMMARY OF THE STUDY

The authors identified 529 patients who underwent either hemithyroidectomy or total thyroidectomy at their hospital between 2005 and 2016. A survey designed to gather information about quality of life was then mailed to each patient and, of the 529 patients in the group, 270 (51%) filled out and returned the survey. A total of 59 of these patients had undergone hemithyroidectomy and the remainder (211 patients) had undergone total thyroidectomy.

When the surveys were analyzed, the study team ultimately found no difference in quality of life between people who had undergone hemithyroidectomy compared to those having had a total thyroidectomy. They did, however, find that people who had undergone hemithyroidectomy worried more about their cancer coming back (recurring) than did people who underwent total thyroidectomy. There was no actual difference in the rate of cancer coming back between the two groups during the study time frame, however.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The study suggests that the overall quality of life after surgery for people who underwent a hemithyroidectomy for low risk papillary thyroid cancer, compared to those who underwent a total thyroidectomy, was the same. This is an important finding because less surgery (hemithyroidectomy) is becoming much more common. However,



THYROID CANCER, continued

patients who underwent hemithyroidectomy did worry more that their cancer could come back compared to people for whom the whole thyroid was removed. This is important and should be included in the discussion of the

risks and benefits of both more and less surgery in patients diagnosed with low risk papillary thyroid cancer to help each patient choose their best surgery option.

— Jason D. Prescott, MD PhD

ATA THYROID BROCHURE LINKS

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

Thyroid Surgery: <https://www.thyroid.org/thyroid-surgery/>

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).

Total thyroidectomy: surgery to remove the entire thyroid gland.

Hemithyroidectomy: surgery that removes only part of the thyroid gland (usually one lobe with or without the isthmus).

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

Watch how your donations help find answers to thyroid cancer



The American Thyroid Association (ATA) – Searching for Answers to Thyroid Cancer
April 17, 2016



Differentiated Thyroid Cancer – Support ATA's ongoing Research
April 17, 2016



Medullary Thyroid Cancer – Help the ATA Find a Cure
April 17, 2016



Anaplastic Thyroid Cancer – Support Research for Treatments
April 17, 2016



www.thyroid.org/donate/

