



THYROID CANCER

Adequate surgery for low-risk papillary thyroid cancer—the debate rages on

BACKGROUND

The initial treatment for thyroid cancer is surgery. According to expert guidelines, a total thyroidectomy, or removal of the entire thyroid gland, is recommended for papillary thyroid cancer greater than 1 cm in size. However, the consideration of risk of recurrence of the thyroid cancer is now playing a more prominent role in planning the management of thyroid cancer. Low risk thyroid cancer patients include those with smaller single cancers and those without spread of the cancer to the lymph nodes in the neck. For a while, there has been debate over the extent of surgery needed for low risk papillary thyroid cancer, with some surgeons recommending only lobectomy (removal of the thyroid lobe containing the cancer). Indeed, recent reports have questioned the need for total thyroidectomy for cancers smaller than 4 cm. This study examined the risk of survival in patients with small thyroid cancers that were treated total thyroidectomy vs lobectomy.

THE FULL ARTICLE TITLE

Adam MA et al. Extent of surgery for papillary thyroid cancer is not associated with survival: an analysis of 61,775 patients. *Ann Surg* 2014;260:601-7.

SUMMARY OF THE STUDY

The National Cancer Database was searched for adult patients who underwent thyroid surgery for papillary thyroid cancers between 1 to 4 cm in size between the years 1998 and 2006. Patients with aggressive cancer types were not included in the study. Patients who underwent lobectomy were compared with those who underwent total thyroidectomy. The relationship between overall

survival and the extent of surgery was evaluated using statistical methods.

A total of 54,926 patients (89%) had total thyroidectomy and 6849 (11%) had lobectomy. Overall survival was not statistically different between the groups. Independent predictors of worse survival included older age, male sex, black race, lower income, larger tumor size and presence of spread of the cancer to lymph node or outside the neck. No overall survival advantage was seen based on the extent of thyroid surgery for papillary thyroid cancers between 1 and 4 cm in size.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Patients with low risk papillary thyroid cancer have an excellent prognosis overall. While this study does look at survival it does not address recurrent cancer and has other limitations. The size of the cancer is only one factor in the consideration of the proper treatment for any particular case. Patients should discuss the specifics of their situation with their endocrinologist and surgeon to understand what is the appropriate approach for their situation. If multiple options are available, the risks and benefits of each approach should be discussed.

— Ronald B. Kuppersmith, MD, FACS

ATA THYROID BROCHURE LINKS

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

Thyroid Surgery: <http://thyroid.org/patients/patient-brochures/surgery.html>

ABBREVIATIONS & DEFINITIONS

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.

Total thyroidectomy: surgery to remove the entire thyroid gland

Lobectomy: surgery to remove one lobe of the thyroid.

Lymph node: bean-shaped organ that plays a role in removing what the body considers harmful, such as infections and cancer cells.

Papillary thyroid cancer: the most common type of thyroid cancer.