CLINICAL THYROIDOLOGY **FOR PATIENTS**

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GOITER

Increasing rates of total thyroidectomy for non-cancerous thyroid disorders

BACKGROUND

Surgery is often needed to remove benign non-cancerous thyroid growths (nodules) or enlarged thyroids (goiters). Removing the entire thyroid gland is called a total thyroidectomy. When less than all of the thyroid gland is removed, the surgery is a called a partial thyroidectomy. The amount of thyroid gland removed often depends on whether the problem involves both sides thyroid. The balance between the risk of surgical complications and eliminating the need for further surgery if nodules occur in the remaining gland are important to consider. The authors of this study examined a database including information about 119,885 thyroid operations in the United States from 1993 to 2007 to discover trends related to thyroid surgery during that time period.

THE FULL ARTICLE TITLE:

Ho TW et al. Utilization of thyroidectomy for benign disease in the United States: a 15-year population-based study. Am J Surg 2011;201:570-4.

SUMMARY OF THE STUDY

The authors found that the percentage of patients having total thyroidectomy increased from 17.6% (from 1993-1997) to 39.4% (from 2003-2007) for benign, non-cancerous, thyroid disease. While there was very little variation across different regions of the United States, patients were more likely to undergo total thyroidectomy at an urban teaching hospital than in urban non-teaching or rural hospitals. The authors also found that the length of time spent in the hospital and the hospital charges were significantly more for total thyroidectomy. The data also demonstrated a higher rate of post-operative complications with total thyroidectomy, such as low calcium levels, bleeding and hoarseness due to vocal cord problems. Hospitals that performed a higher number of thyroid operations were found to have lower complication rates.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study clearly shows an increase in the rate of total thyroidectomy for benign non-cancerous thyroid disease relative to partial thyroidectomy over a period of fifteen years. It is not clear from the database why the rate of total thyroidectomy is increasing. Regardless, every patient with benign thyroid disease should have an individualized approach based on multiple factors, including risk of surgical complicaitons, type of thyroid disease and patient preference.

— Ronald Kuppersmith, MD

ATA THYROID BROCHURE LINKS

Thyroid Surgery: http://thyroid.org/patients/patient_brochures/surgery.html

Thyroid Nodules: http://thyroid.org/patients/patient_brochures/nodules.html

Goiter: http://thyroid.org/patients/patient_brochures/goiter.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.

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

Near-total thyroidectomy: removal of nearly all of each thyroid lobe, leaving only a small portion of the thyroid gland.

Goiter: a thyroid gland that is enlarged for any reason is called a goiter. A goiter can be seen when the thyroid is overactive, underactive or functioning normally. If there are nodules in the goiter it is called a nodular goiter; if there is more than one nodule it is called a multinodular goiter.

Thyroid nodule: an abnormal growth of thyroid cells that forms a lump within the thyroid. While most thyroid nodules are non-cancerous (benign), ~5% are cancerous.