



THYROID SURGERY

Thyroid surgery is usually a safe operation and associated with a low rate of complications

BACKGROUND

Thyroid surgery is a common operation and may be recommended for several disorders, including thyroid enlargement, hyperthyroidism and thyroid cancer. Complications can include injury to the parathyroid glands (located close to the thyroid gland) and/or the nerves that are associated with voice, and as is the case with all medical procedures, rarely death. Reassuringly, all of these are usually very rare in patients undergoing thyroid surgery. This study was done to analyze the rates of various complications and death in all patients who underwent thyroid surgery within a hospitalized setting in California (U.S.) over a 15-year period.

THE FULL ARTICLE TITLE

Weiss A et al. Outcomes of thyroidectomy from a large California state database. *Am J Surg*. 2015 Sep 28 (ePub ahead of print)

SUMMARY OF THE STUDY

This study analyzed the data captured in the California Office of Statewide Planning and Development Patient Discharge Database which records information regarding all hospitalized patients in the state, for the period between 1995-2010. The researchers studied the 106,773 patients who had undergone a thyroid surgery in this timeframe. This group had an average age of 50 years and were 61% women and 44% non-Hispanic Whites. The entire thyroid was removed (total thyroidectomy) in 40% of the patients, with the remaining patients undergoing thyroid procedures that removed less than the whole thyroid gland (partial thyroidectomy). One-third of the patients had received thyroid surgery for a thyroid cancer. Patients tended to have other common medical conditions, such as high blood pressure, obesity, chronic obstructive pulmonary disease, and cigarette smoking.

Approximately 9% of patients experienced some complication of thyroid surgery, which included both temporary and permanent types of complications. Specifically, low blood calcium levels (hypocalcemia), usually resulting from injury to the nearby parathyroid glands, occurred in 4.5% of patients, vocal cord problems in 1.1%, requirement for a blood transfusion in 0.9%, wound infection in 0.4%, and death in 0.3%. Although the average length hospitalization was one day among all patients, 41% needed to stay hospitalized for more than two days. Patients who were older tended to have a higher risk of complications, while patients who had thyroid surgery done at hospitals that perform more than 100 thyroid surgeries per year and patients who had less than their entire thyroid removed (partial thyroidectomy) were at the lowest risk.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study confirms other data from studies of patients across the U.S. Using a large group of patient data collected over 15 years, the findings overall show that thyroid surgery is usually a safe procedure and associated with only rare complications, including death. The database includes all patients who were hospitalized for thyroid surgery in California during this time period, thus represents a very rigorous type of data analysis. The findings from this study will be helpful in the joint decision between patients and their physicians in discussing the pros and cons of thyroid surgery.

— Angela M. Leung, MD, MSc

ATA THYROID BROCHURE LINKS

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

ABBREVIATIONS & DEFINITIONS

Hyperthyroidism: a condition where the thyroid gland is overactive and produces too much thyroid hormone. Hyperthyroidism may be treated with

antithyroid meds (Methimazole, Propylthiouracil), radioactive iodine or surgery.

**THYROID SURGERY, continued**

Hypocalcemia: low calcium levels in the blood, a complication from thyroid surgery that is usually short-term and relatively easily treated with calcium pills. If left untreated, low calcium may be associated with muscle twitching or cramping and, if severe, can cause seizures and/or heart problems.

Parathyroid glands: usually four small glands located around the thyroid that secrete parathyroid hormone (PTH) which regulates the body's calcium levels.

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.

Thyroid Awareness Monthly Campaigns

The ATA will be highlighting a distinct thyroid disorder each month and a portion of the sales for Bravelets™ will be donated to the ATA. The month of December is **Thyroid and Development Awareness Month** and a bracelet is available through the [ATA Marketplace](#) to support thyroid cancer awareness and education related to thyroid disease.

