THYROID SURGERY

Ambulatory thyroid surgery

BACKGROUND
Most patients are admitted to the hospital for at least one night following thyroid surgery. Ambulatory thyroid surgery, defined as patient discharge to home on the same day as surgery, has become more common in the past decade. For highly selected patients, ambulatory thyroid surgery is believed to be safe when the risk of complications is low and the patient can obtain additional medical care when necessary. This study examined ambulatory surgery databases in various states to determine complication and readmission rates for ambulatory thyroidectomy.

THE FULL ARTICLE TITLE

SUMMARY OF THE STUDY
Databases from California, Florida, New York, and Iowa were searched for ambulatory thyroidectomy cases in patients 18 years of age or older that were performed in the years 2010 and 2011. Cases were divided into two groups for comparison, broadly defined as either partial or total thyroidectomy. Any revisit to the hospital, emergency department, or ambulatory surgery center within 30 days was identified. A total of 25,634 ambulatory thyroidectomy cases were identified in the four databases during the study period; 44% of cases were total thyroidectomy and 56% were partial thyroidectomy. Overall, 24% of all surgeries were for thyroid cancer.

The authors identified 1858 revisits, representing 7.2% of the total; 1148 revisits were to the emergency department, and 22% of all revisits led to an admission. Revisits were most common on the second and third postoperative days, but the median number of days between surgery and revisit was 7. A total of 21% of revisits were for hypocalcemia (low calcium levels) and 7% of revisits were for bleeding, bruising/hematoma formation or seroma (lymphatic drainage). There was a significantly higher revisit rate in patients who had undergone total thyroidectomy as compared with those who had undergone partial thyroidectomy. Revisit due to hypocalcemia and hemorrhage were also significantly higher in the total thyroidectomy than in the partial thyroidectomy group. Three deaths were reported.

Revisit rates are higher for total thyroidectomy as compared with partial thyroidectomy and are mostly due to hypocalcemia. Hypocalcemia, hematoma, and bleeding usually develop within the first few days, but several patients presented at or beyond 7 days.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?
As this study was based on a database search, it is likely that complications were underreported. While the study showed 7.2% of the patients revisited the care facility (emergency department, ambulatory surgical facility, or hospital) within 30 days after the procedure, other complications where patients presented to a clinic or a facility not included in the database were not reported. Three deaths were identified, but it is not known whether the deaths were due to the outpatient status of the patients.

While the authors concluded that ambulatory thyroid surgery has an acceptable safety profile, well-defined criteria and validated indicators for safe discharge are needed to ensure the safety of same-day discharge.

— Ronald B. Kuppersmith, MD, FACS

ATA THYROID BROCHURE LINKS
Thyroid Surgery: http://thyroid.org/patients/patient_brochures/surgery.html

ABBREVIATIONS & DEFINITIONS

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).
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.

Hematoma: collection of blood under the skin from bleeding

Seroma: collection of lymphatic fluid under the skin