



THYROID SURGERY

Depression is associated with having a history of thyroid surgery

BACKGROUND

Thyroid surgery is usually recommended for thyroid cancer and can be to remove one lobe of the thyroid (partial thyroidectomy) or to remove the entire thyroid (total thyroidectomy). Thyroidectomy may also be recommended for certain non-cancerous disorders including hyperthyroidism and large goiters. The results of a total thyroidectomy is hypothyroidism which requires lifelong treatment with a thyroid hormone pill. Several recent reports have highlighted a decrease in the quality of life and an increase in depression in some patients with hypothyroidism due to thyroid surgery. Therefore, the authors have examined if there is an association between thyroid surgery and a new onset of depression.

THE FULL ARTICLE TITLE

Choi KW et al 2019 Increased morbidity of major depressive disorder after thyroidectomy: A nationwide population-based study in South Korea. *Thyroid* 29:1713–1722.

SUMMARY OF THE STUDY

Medical claims data of patients that underwent a partial or total thyroidectomy in South Korea from 2009-2016 was analyzed. They looked for associations between thyroid surgery, the extent of thyroid surgery, and the

development of major depressive disorder either before or after surgery, controlling for other medical conditions.

Of the 187,176 patients who underwent partial or total thyroidectomy during the study period, 16,744 (8.9%) were diagnosed with depression either before or after their surgery. Of these, 77% had a total thyroidectomy (compared to a partial thyroidectomy) and 88% were female. The data show that there was a 68% increased risk of depression before a partial thyroidectomy and an 81% increased risk of depression before a total thyroidectomy. However, at 1 year after thyroid surgery, only patients that had a total thyroidectomy experienced higher rates of depression (11% increased risk). This was regardless of a thyroid cancer diagnosis.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The risk for developing a depression is increased around the time of having thyroid surgery, regardless of the extent of thyroid surgery. The risk can persist up to one year after a patient has a total thyroidectomy. This is important to increase awareness of physicians and patients to identify and treat this illness.

— Melanie Goldfarb, MD

ATA THYROID BROCHURE LINKS

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

Hypothyroidism (Underactive): <https://www.thyroid.org/hypothyroidism/>

ABBREVIATIONS & DEFINITIONS

Hypothyroidism: a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking thyroid hormone pills.

Thyroidectomy: surgery to remove the 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 SURGERY, continued

Thyroid hormone therapy: patients with hypothyroidism are most often treated with Levothyroxine in order to return their thyroid hormone levels to normal. *Replacement therapy* means the goal is a TSH in the normal range and is

the usual therapy. *Suppressive therapy* means that the goal is a TSH below the normal range and is used in thyroid cancer patients to prevent growth of any remaining cancer cells.

www.thyroid.org/donate/

