

# Thyroidectomy

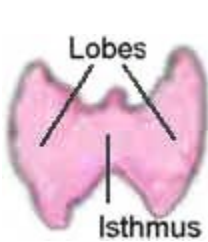
## Surgical Information



ENT Bowling Green

## Thyroid Information

Your thyroid gland is a small gland, normally weighing less than one ounce, located in the front of the neck. It is made up of two halves, called lobes, that lie along the windpipe (trachea) and are joined together by a narrow band of thyroid tissue, known as the isthmus.



The thyroid is situated just below your "Adams apple" or larynx. During development (inside the womb) the thyroid gland originates in the back of the tongue, but it normally migrates to the front of the neck before birth. Sometimes it fails to migrate properly and is located high in the neck or even in the back of the tongue (lingual thyroid). This is very rare. At other times it may migrate too far and ends up in the chest (this is also rare).

The function of the thyroid gland is to take iodine, found in many foods, and convert it into thyroid hormones: thyroxine (T4) and triiodothyronine (T3). Thyroid cells are the only cells in the body, which can absorb iodine. These cells combine iodine and the amino acid tyrosine to make T3 and T4. T3 and T4 are then released into the blood stream and are transported throughout the body where they control metabolism (conversion of oxygen and calories to energy). Every cell in the body depends upon thyroid hormones for regulation of their metabolism. The normal thyroid gland produces about 80% T4 and about 20% T3, however, T3 possesses about four times the hormone "strength" as T4.

## **Common Thyroid Problems**

The thyroid gland is prone to several very distinct problems, some of which are extremely common. These problems can be broken down into [1] those concerning the production of hormone (too much, or too little), [2] those due to increased growth of the thyroid causing compression of important neck structures or simply appearing as a mass in the neck, [3] the formation of nodules or lumps within the thyroid which are worrisome for the presence of thyroid cancer, and [4] those which are cancerous.

**Goiters** ~ A thyroid goiter is a dramatic enlargement of the thyroid gland. Goiters are often removed because of cosmetic reasons or, more commonly, because they compress other vital structures of the neck including the trachea and the esophagus making breathing and swallowing difficult. Sometimes goiters will actually grow into the chest where they can cause trouble as well.

**Thyroid Cancer** ~ Thyroid cancer is a fairly common malignancy, however, the vast majority have excellent long-term survival.

**Solitary Thyroid Nodules** ~ There are several characteristics of solitary nodules of the thyroid which make them suspicious for malignancy. Although as many as 50% of the population will have a nodule somewhere in their thyroid, the overwhelming majority of these are benign. Occasionally, thyroid nodules can take on characteristics of malignancy and require either a needle biopsy or surgical excision.

**Hyperthyroidism** ~ Hyperthyroidism means too much thyroid hormone. Current methods used for treating a hyperthyroid patient are radioactive iodine, anti-thyroid drugs, or surgery. Each method has advantages and disadvantages and is selected for individual patients. Many times the situation will suggest that all three methods are appropriate, while other circumstances will dictate a single best therapeutic option. Surgery is the least common treatment selected for hyperthyroidism.

**Hypothyroidism** ~ Hypothyroidism means too little thyroid hormone and is a common problem. In fact, hypothyroidism is often present for a number of years before it is recognized and treated. Hypothyroidism can even be associated with pregnancy. Treatment for all types of hypothyroidism is usually straightforward. Surgery is not often a treatment for hypothyroidism.

**Thyroiditis** ~ Thyroiditis is an inflammatory process ongoing within the thyroid gland. Thyroiditis can present with a number of symptoms such as fever and pain, but it can also present as subtle findings of hypo or hyper-thyroidism.

## **Surgical Procedure**

A two- to three-inch horizontal incision is made across the front of the neck, approximately one inch above the collar bone. The skin and fatty tissue covering the neck muscles is then mobilized and spread apart with retractors, and the muscles in front of the neck covering the thyroid gland (called the strap muscles) are separated in the midline and retracted to the side of the gland that needs to be removed, exposing it.

The blood supply to the upper pole of the gland is usually controlled by tying off the blood vessels with fine sutures and transecting them. The gland is then rotated toward the middle and the recurrent laryngeal nerve, which usually lies in a groove along the trachea, is identified and traced to its insertion in the voice box (larynx). The parathyroid glands are also identified and carefully preserved.

The thyroid gland is then separated from the trachea, the tissue between the two thyroid lobes is transected, and the gland is removed.

The whole procedure is repeated on the opposite side if the entire gland needs to be removed.

Removal of one lobe of the thyroid gland usually takes 60 to 90 minutes and requires a hospital stay of one to two days; an uncomplicated removal can also be performed as an outpatient procedure.

Most patients return to work in one to two weeks. Many complain about some neck stiffness, numbness of the skin in front of the neck and mild difficulty swallowing, which usually subside after four to six weeks. The operation leaves no permanent physical disability, and, after healing is complete, the scar is barely noticeable.

## **Complications**

Recurrent laryngeal nerve damage, causing hoarseness and possible difficulty breathing, occurs in one to two percent of all thyroid operations, although it can be more frequent when the operation is performed for treatment of cancer.

The risk of permanent damage to the parathyroid glands following complete removal of the thyroid is between five and 10 percent, and this damage requires the patient to take calcium supplements for life. The body needs only one-half of one parathyroid gland to maintain a normal calcium blood level, so the loss of several parathyroids is usually well tolerated.

**If we can help you at all, please do not hesitate to contact us.**

Dr Sims Cell Phone: 270.791.1006  
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Office: 270.782.7768  
Med Center: 270.745.1000

## **Post-Op Instructions for Thyroidectomy**

### **Diet**

Patients who have received general anesthesia may experience some nausea and occasionally, vomiting. It is therefore preferable to eat a bland light meal or a liquid diet on the first day after the surgery. Regular diet may be resumed the next day. Also, pain pills cause some nausea if taken on an empty stomach. It is preferable to take those pills with a piece of toast or some food. Mild difficulty swallowing is expected for the first few days following surgery.

### **Activity and Wound Care**

Elevate the head as much as possible. Sit in a recliner or use two or three pillows when sleeping. Head elevation reduces bruising and swelling. Occasionally, you may notice that the bruises or swelling have migrated to other places (usually lower regions). No heavy lifting for two weeks. Driving should be performed only when your neck has regained mobility without discomfort.

### ***For exposed wounds:***

Keep the exposed wound dry. Avoid showers for 48 hours. You may take a bath with lukewarm (not hot) water. If accidentally, water reaches the wound, dry it immediately with a clean towel. Make sure you have someone with you in the house in case you feel drowsy or faint from taking pain killers. Clean the wound once a day. This is best done with a cotton swab dipped in 3% hydrogen peroxide. If you have not received a prescription for antibiotic ointment, use over-the-counter triple antibiotic. Apply a scanty amount on the suture line. At times, you may not see the sutures because they have been placed inside the wound. On other occasions, there may be metallic staples instead of sutures. Occasionally, a thin film of clear adhesive is placed over the wound to protect it and allow you to take a shower.

### ***Wounds with dressings or drains:***

Unless specifically instructed, do not remove drains or dressings. Avoid shower and keep the dressing dry. Some dressings may be sutured to the skin. Do not attempt to remove them. Drainage is expected for two to three days after surgery. Just kink the drain tube before detaching the bulb and emptying it. By kinking the tubing, you prevent air and old drainage from being sucked back into the wound.

### ***Wounds sealed with Dermabond acrylic coating or steri-strips:***

Occasionally, the wound is sealed with a clear acrylic coat (Dermabond) or steri-strip bandages. Do not apply antibiotic ointment over the acrylic or steri-strips. This acrylic coat will peel off in 10 - 15 days. The steri-strips will be removed at your first post-op visit.

### **Medications**

An antibiotic is usually prescribed for seven to ten days following the surgery. You may also receive a prescription for painkillers in the form of codeine or hydrocodone. These products cause somnolence, drowsiness and constipation. Occasionally, Phenergan suppositories may be necessary for nausea or vomiting. Some patients may require calcium and vitamin D replacement. Do not take aspirin, NSAIDS or other blood thinners until discussed with your physician. Thyroid medications will be addressed specifically with the physician. Restart all other normal medications.

### **Notify MD for any of the following:**

Breathing problems, bleeding, swelling, excess drainage from wound or drain, fever > 101, heart palpitations, numbness or tingling of lips or extremities, vocal changes, urinary problems or nausea.

### **Follow-up**

Please schedule an appointment to be seen in the office in one week: