

Thyroid and/or Parathyroid Surgery

The thyroid gland is butterfly shaped and is located in the middle of the neck, just slightly below the Adam's apple. **The function of the thyroid gland is to help control the body's metabolism.** The exact number and location of the parathyroid glands can be quite variable but most people have four, two on each side of the thyroid. **The parathyroid glands help regulate the body's calcium levels.**

Any surgery involving the thyroid or parathyroid glands involve the following risks:

One of the main concerns during surgery is the **possibility of injury to the nerves of the larynx** (voice box). This occurs in **approximately 1%** of thyroid or parathyroid surgeries. Only the vocal cord on the operative side is at risk (or both sides if the entire thyroid gland needs to be removed).

If one vocal cord becomes weakened or paralyzed, **hoarseness** and/or food or liquid "going down the wrong pipe" (**aspiration**), can occur. If these problems arise, speech therapy and/or surgery can be helpful in remedying the situation.

If both vocal cords become weakened or paralyzed, **breathing difficulty** and aspiration can occur. Bilateral vocal cord paralysis is a very difficult problem to treat and may require the placement of a breathing tube in the neck (tracheostomy).

Removal or injury to all of the parathyroid glands can result in the lifelong need for **calcium supplementation**. Usually, if even one parathyroid gland is left intact, no long term supplementation will be required. It is not uncommon, however, to require calcium supplementation for a short period after thyroid or parathyroid surgery. Symptoms of low calcium levels typically include numbness and tingling of the lips, fingers, or toes and also potentially muscle stiffness and/or weakness.

Removal of part of the thyroid may result in low thyroid hormone levels and require **supplementation of thyroid hormone**. Removal of the entire gland results in a lifelong need for supplementation.

Most patients undergoing parathyroid surgery and those having only half of their thyroid gland removed (hemithyroidectomy) go home the same day. Most patients undergoing a total thyroidectomy require an overnight stay in the hospital. This is necessary to monitor for any breathing problems and check your calcium levels. The vast majority of patients go home the next day. In some cases, a drain will be placed at the time of surgery and will be removed prior to discharge from the hospital.

As with all surgeries, other risks include: **pain, bleeding, infection, poor wound healing and poor cosmetic result**. If the gland is being removed for a tumor, there are always concerns regarding **persistent or recurrent disease after the surgery**.