Your child’s endocrinologist or primary care doctor has referred you to a surgeon at Boston Children’s Hospital to talk about removing part or all of your child’s thyroid gland. This sheet explains what the thyroid is and why this surgery may be needed. It describes where and how the surgery is done and how to care for your child afterward.

What is the thyroid gland?
The thyroid gland is found in the middle of the neck (see Figure). It is made up of 2 parts called lobes (right and left), which are joined in the middle by the isthmus. The thyroid is connected to the front of the trachea (windpipe) below the vocal cords.

What does the thyroid gland do?
The thyroid gland is one of the largest endocrine glands in the body. Endocrine glands make hormones that the body needs and put them into the bloodstream.

- The thyroid gland makes hormones that affect all tissue and organ systems in the body. These hormones help the thyroid act as the body’s “thermostat.”
- It controls how quickly the body burns energy and makes proteins.
- It manages the body’s sensitivity to other hormones.

What is a thyroidectomy?
- A thyroidectomy is the removal of part or all of the thyroid gland.
- A thyroid lobectomy is the removal of 1 lobe.
- A total thyroidectomy is removal of the entire thyroid gland.

Why does my child need a thyroidectomy?
Your child’s endocrinologist and/or surgeon may recommend a thyroidectomy because your child has:

- A nodule: A “lump” in the thyroid gland that may be a tumor
- Hyperthyroidism: An overactive thyroid gland that causes symptoms that aren’t well controlled
- A goiter: A large thyroid that causes symptoms because of its size and/or the hormones it releases.
- Thyroid cancer: If a biopsy showed cancer cells in the thyroid, the whole thyroid gland may need to be removed. The surgeon may also remove some lymph nodes.
- Genetic risk for developing thyroid cancer (medullary carcinoma): Some families have an inherited risk for thyroid cancer that is passed from parent to child. In children who are at risk, the thyroid gland may be removed in childhood to lower the risk of tumors.
What are the risks of a thyroidectomy?

A thyroidectomy is a common and safe operation. Rare complications from the operation include:

- Injury to the nerves leading to the larynx (voice box) can lead to a “hoarse” voice or trouble swallowing.
- The parathyroid gland is close to the thyroid gland. It makes parathyroid hormone, which controls calcium levels in the body. Damage to the parathyroid can lead to problems with blood calcium levels. If this happens, then your child may need to take additional medicine to keep calcium levels normal.
- Injury to the trachea (windpipe)
- Bleeding
- Infection

How do I prepare my child for the surgery?

2 weeks before surgery: Your child should not take these medications in the 2 weeks before surgery because they can increase bleeding risk:

- Ibuprofen (Advil®, Motrin®, Pediaprofen®, etc.)
- Aspirin or medications that have aspirin in them
- Herbal medications

Your child can take acetaminophen (Tylenol®) before the surgery if needed.

Call your surgeon’s office your child has any signs of an infection before the day of the operation. This includes:

- A productive cough
- Cold
- A fever of 101.5°F / 38.6°C or higher

Your child will be given eating and drinking guidelines to follow before surgery.

If your child takes daily prescription medications, you may continue to give them on the morning of the operation unless you’re told differently by your surgeon or anesthesiologist.

What happens on the day of the operation?

- Please go to the surgical area on the Main Building, 3rd Floor of our Longwood campus at the time your child’s surgeon has set.
- You will meet with the anesthesiologist and surgeon in the Pre-Operative area.
- The anesthesiologist will talk about the plan for giving your child anesthesia (a medicine to make them sleepy) before the surgery.
- Your family will then be taken to the Family Waiting Area. Our nurses will keep you updated on the progress of the surgery while you are there.
- The surgery usually takes 2-4 hours.

What happens after the surgery?

Recovery in the PACU and inpatient admission

- We will take your child to the recovery room after the surgery. This area is called the Post-Anesthesia Care Unit (PACU).
  - A nurse liaison will bring you to the PACU.
  - Your child will spend 1-2 hours in the PACU and then be admitted and brought to an inpatient floor in the hospital.

Blood draw

- If your child has had a total thyroidectomy, blood will be drawn at different times after surgery to check calcium levels. Your child will be given calcium and vitamin D to take after surgery and at home after you leave the hospital. The amounts of these will be slowly lowered and then stopped over 2-3 weeks. During this time, your child will get blood tests at a center near your home to check calcium levels.

Home care

- You will be given a written instruction sheet before you go home telling you how to care for your child. Your nurse will go through this with you. If your child had a total thyroidectomy, they will take a medication to help replace the hormone that the thyroid gland was making. This medication will be checked and adjusted from time to time by the endocrinologist.

Incision and dressing care

- Your child will have a small incision (wound from surgery) in the front of the neck. This is usually covered by a “liquid” bandage.
- We do not need to remove the stitches. They are under the skin and they will dissolve on their own.
- The “liquid” bandage will stay on for about 14 days. Once the “liquid” bandage is off, use sunscreen on the area to keep the incision from getting darker than the rest of the neck skin.

Bathing

- Your child may shower or have a sponge bath after the surgery.
- Pat the neck incision dry with a towel.
- Do not let the wound be covered by water for 7 days after surgery.

Activity

- Normal activities, including exercise, are usually allowed after surgery. Your child’s ability to bend or twist their neck might be limited for a couple of weeks. Ask your surgeon if you have questions about any activities are safe.

Pain

- Most children have some discomfort after the operation. In most cases, acetaminophen (Tylenol®) and ibuprofen (Advil®, Motrin®, Pediaprofen®, etc.) are all that is needed to help with this pain.
When giving these medicines be sure to follow the directions on the package. Ask your doctor, nurse, nurse practitioner or pharmacist to explain any instructions that you do not understand.

- Talk with your doctor or nurse about any allergies your child may have before giving over-the-counter medicine.

- Always ask the doctor about any allergies your child may have before giving over-the-counter medication.

What happens after we leave the hospital?

- Your child will probably be discharged (sent home) the day after surgery.
- They may keep taking any of their usual prescription medications.
- If your child has had a total thyroidectomy, you will have other medications (such as calcitriol, calcium carbonate and levothyroxine). You must understand the dosing of these medications before going home.
- Please call your child’s surgeon’s office to arrange for a follow-up visit in about 2-3 weeks. Your child’s endocrinologist will usually want to see your child 4-6 weeks after surgery.

When should I call my child’s doctor or nurse?

Call the doctor or nurse practitioner if your child has:

- Higher amount of redness, swelling or tenderness around the incision
- Trouble breathing
- Bleeding or drainage from the incision
- A fever higher than 101.5°F / 38.6°C
- Pain that is not helped with prescribed medication

Contact us

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<tr>
<th>Monday – Friday from 8:30 a.m. – 5:00 p.m.</th>
<th>Nurse Practitioners’ line (617) 355-7716</th>
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<td>Evenings, nights, weekends and holidays</td>
<td>Call (617) 355-7800 and ask for the surgeon on call.</td>
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