Post-operative Instructions and Information for Parathyroidectomy

The Parathyroid Glands: Most people have 4 parathyroid glands that rest adjacent to the thyroid gland or in the gland itself. These are the size of a pea. Parathyroid glands help maintain a normal level of calcium in your body. Occasionally, one or more of the glands may secrete an excessive amount of Parathyroid Hormone (PTH). The excessive PTH can cause early bone resorption and kidney stones. The majority of the time, only one gland needs to be removed. Other times, 3-4 glands may be removed to achieve a lowering of the PTH level. Sometimes gland tissue is transplanted into adjacent tissue in the neck or forearm (parathyroid autotransplantation) in an effort to maintain normal PTH levels in the future. This transplanted tissue may take a few months to work properly. Some patients may need to take a synthetic Vitamin D and calcium supplement after surgery. Calcium levels may be monitored after surgery by your primary doctor or endocrinologist. A few percent of cases have either 5 glands or a gland is a very unusual location. A second operation is sometimes needed to find these glands.

The Thyroid Gland: The thyroid gland is shaped like a bow tie; i.e. a larger lobe on each side of your windpipe (trachea) joined by a narrower isthmus. The thyroid gland commonly develops nodules that may resemble a parathyroid gland. The thyroid gland secretes thyroid hormone that is essential for the body. Sometimes an abnormal parathyroid gland is inside of a thyroid lobe or otherwise difficult to separate from the lobe. In these cases, one or both thyroid lobes are removed during surgery. Many of these patients will need to take a thyroid hormone supplement after surgery. Thyroid hormone levels are usually monitored annually by your primary care doctor or endocrinologist.

The Recurrent Laryngeal Nerve: The nerve that controls much of the voicebox (larynx) runs adjacent to the thyroid gland. The nerve may not work well after surgery. This will lead to a hoarse, breathy voice and sometimes trouble swallowing. Most mild hoarseness after surgery is due to swelling of the vocal cords from the breathing tube (endotracheal tube) placed by the anesthesiologist during the procedure. If both lobes are removed, rarely both the left and right recurrent laryngeal nerves may not work, and the patient may have trouble breathing. This may require a breathing tube to be placed through the skin and below the voice box (TRACHEOTOMY).

Parathyroidectomy: The removal of a parathyroid gland starts with a skin incision in the lower neck, above the patient's breastbone. The abnormal gland is searched for carefully. This may require dissection of and around the recurrent laryngeal nerve. Lymph nodes and thyroid nodules may resemble parathyroid glands, and thus slow the dissection. Both sides of the neck may need to be explored. One or both of the lobes of the thyroid may be removed. The goal is to reduce the preoperative PTH level to < 50% of the preoperative value.

Sometimes residual parathyroid tissue is transplanted into adjacent neck tissue or a distant site such as the forearm. A small drain tube may be placed to exit the skin near the incision. The final pathology report may not be available until one week after surgery.

Hypocalcemia: The patient may experience a low calcium level after surgery. Symptoms could include: numbness (especially around the mouth) or abnormal muscle cramping. You may need to take vitamin D and calcium carbonate (e.g. Oscal D) or calcium carbonate (e.g. TUMS) along with a synthetic Vitamin D (e.g. calcitriol) tablet after surgery. If you have numbness of face, hands, or feet,
then take 2 OsCal D tablets. If the symptoms do not resolve in 2 hours then call either our office or your endocrinologist. If no response, go Salem Emergency room and ask for an ionized calcium level and have the ER MD call us with the result. Call our office (503-581-1567) or your endocrinologist if you have questions.

**Hypercalcemia:** May cause constipation, abdominal cramping, muscle weakness, or extreme fatigue. If these occur, stop all calcium tablets, Vitamin D (Oscal D), calcitriol (e.g. Tums), then call the office or go to the Salem Hospital Emergency Room for an ionized calcium check.

**Fever:** A low-grade temperature (100 degrees) and even an occasional elevated temperature above 101.5 degrees or higher are not uncommon. Should you have a temperature of 101 degrees or higher, take a deep breath and cough (once or twice) every 15-30 minutes and increase your fluid intake. Deep breathing and coughing opens the lungs and reverses a common cause of elevated temperature. If your elevated temperature persists 1-2 hours, call our office for further instructions. Please measure your temperature. Patients will often think they have an increased temperature because they feel warm.

**Nausea and Vomiting:** Nausea and vomiting are common during the first 24 hours after surgery. Narcotic medication may increase the nausea and vomiting. Please try to reduce the narcotic pain medicine as much as possible, either by reducing the amount given or lengthening the time between doses. One may try to skip one dose of narcotic and use just a full dose of plain acetaminophen (e.g. Tylenol) or ibuprofen (e.g. Motrin). The patient may also try to eat some simple, non-fatty food with the next dose of narcotics. If nausea and vomiting is excessive or persistent, call our office for further instructions.

**Bleeding and Bruising:** Oozing from the skin may occur that causes a slow drip of blood. Simply apply 15-20 lbs. of gentle pressure to the wound with a clean paper towel or wash cloth for 15-20 min. If the swelling is raised over 1 inch higher than the surrounding area, then call (503) 581-1567 for instructions. You may change any dressing as needed.

**Constipation:** Isolated constipation may be caused by narcotics, lack of fiber in your diet or high calcium levels. If you experience constipation or abdominal cramping, then try to reduce the narcotics, increase fiber in your diet, stop any calcium supplements or calcitriol and call our office in the morning for an order for a calcium blood level check.

**Post-operative Care:**

1. **Incision:** Please keep the incision dry for until the stitches are removed, then gently wash the incision with soap and water 2-3 times a day as needed. After washing, please apply a thin film of an antibacterial ointment (e.g. Polysporin). Please avoid any activity that pulls across the incision such as shaving across the incision for at least 2 weeks. (The rest of the face may be shaved.) The stitches will be removed 1-2 weeks after surgery.

2. **Drain:** Some patients are discharged with a thin drain tube and oval collecting reservoir called a grenade. Please empty the grenade and record the amount of fluid whenever the grenade looks half full or at least 2 times a day. Discard the fluid down a sink or toilet, do not save it.

3. **Head of Bed:** Please elevate the head of your bed 30-45 degrees or sleep in a recliner at 30-45 degrees for the first 3-4 days to decrease swelling. The skin above the incision may look swollen after lying down for a few hours. Elevating the head is crucial when both sides of the neck have been dissected to avoid a “swollen, puffy neck”.

4. **Activity:** Please avoid any activity that raises your blood pressure for one week, e.g. heavy lifting, strenuous exercise, etc. Please walk every 2 hours while awake to avoid leg clots.
5. Diet: Please start with a non-fatty, soft diet after surgery. You can gradually advance to your normal diet over a week.

INSTRUCTIONS REGARDING POST-OP CALCIUM AND VITAMIN D

1. Six (6) months after surgery, you should have a blood draw to check ionized calcium, 25-OH Vitamin D levels then annually with your Primary Care Provider (PCP). Please have these results sent to your surgeon. There is no need to check your PTH unless the calcium level is elevated.
2. Maintaining normal levels of Vitamin D and Calcium after surgery will decrease the chance of recurrent hyperthyroidism.
3. You should start Vitamin D 2000 IU daily and Oscal D2 daily after surgery.
4. Ask your PCP to adjust your daily intake of Vitamin D and Calcium according to your blood levels.

Pain Management: A realistic goal is to reduce the patient’s pain to a manageable level, not to eliminate the pain. One cannot predict a patient’s pain level or the necessary dose of pain medicine. One must approach each patient in a stepwise fashion for pain management. Specifically, when acetaminophen and/or ibuprofen do not lower the pain enough, then start with a lower dose of narcotic, and increase the dose if pain remains uncontrolled, or decrease the dose if the medication’s side effects are too severe. Close monitoring of each patient for side effects of each medication is essential.

1. Try to use plain acetaminophen or plain ibuprofen before using the narcotics.
2. Always strive to either avoid the narcotics or give the lowest dose possible to control the patient’s pain.
3. Give the narcotic AS NEEDED but not more often than it states on the bottle.
4. Do not give the narcotics “automatically around the clock” if the patient has minimal pain.
5. Never wake up a sleeping patient to give them narcotics.
6. Avoid combining narcotics with another sedating drug: e.g. alcohol, sleeping pills, MUSCLE RELAXANTS or anti-anxiety pills (e.g. Valium and Xanax), antihistamines (e.g. Benadryl) unless instructed by your doctor.
7. Start with the lower dose that is prescribed, and take additional medication only if the pain is still not adequately controlled 45 minutes after taking the first dose. For example, if the prescription reads “1-2 tablet every 4 – 6 hours as needed for pain”, then start with 1 narcotic capsule on the first dose. If the pain is not adequately controlled in 45 minutes, then add a second narcotic tablet.
8. Every day try to decrease the total amount of narcotic medication given, by:
   a. increasing the time between doses, or
   b. decreasing the amount used each time, or
   c. substituting plain acetaminophen or ibuprofen for the narcotic
9. Observe for unusual sleepiness, confusion, difficult or noisy breathing. If these occur, then stop all narcotics, call WENT MD on call at 503-581-1567 or go to Salem Emergency Room if the office is closed.
10. Always measure the amount of liquid narcotic with a syringe or a marked medicine cup. Spoon sizes are not reliable.
11. Record the medication given with the date and time on the same piece of paper. This helps reduce medication errors.

TO AVOID RUNNING OUT OF A NARCOTIC MEDICATION:

1. Please fill your narcotic prescriptions at a pharmacy that is open after hours and on weekends.
2. Call our office by 2 pm the day BEFORE you will need a refill to give us time to process your request. A FAMILY MEMBER MAY NEED TO DRIVE TO THE OFFICE TO PICK UP THE NARCOTIC PRESCRIPTION (DEA RULES). IF YOU ARE TAKING NARCOTICS, YOU CANNOT DRIVE. YOU COULD BE CITED FOR “DRIVING UNDER THE INFLUENCE”.

Other Questions: For non-emergent questions, please call our office (503-581-1567) between 9:00 am and 3:00 pm. Monday through Friday. For emergent question, please call our office (503-581-1567), and our answering service will page the doctor on call. We have a doctor on call 7 days a week.