



Endocrine Surgery

PARATHYROIDECTOMY

MICHAEL E. DeBAKEY DEPARTMENT OF SURGERY

In spite of their name, the parathyroid glands are only related to the thyroid by their location in the neck, next to and behind the thyroid. The parathyroids are four small glands only 1/4 of an inch in size, which produce parathyroid hormone. This hormone regulates calcium and phosphate levels in the blood, keeping them in healthy balance. However, if one or more of these glands grow too big, they can produce too much parathyroid hormone and create serious problems.

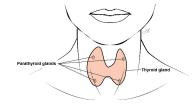
What are Parathyroid Glands?

Parathyroid hormone increases calcium in the blood by:

- Taking calcium out of the bone
- Changing the way calcium is processed by the kidneys
- Increasing uptake of calcium by the intestines

Too much parathyroid hormone results in:

- Thin, weak bones
- Kidney stones
- Abdominal cramping, pain and/or constipation



What is Parathyroid Surgery?

Parathyroidectomy is surgery to remove parathyroid tumors or the parathyroid glands through a small 1- to 2-inch surgical cut on your neck. You will receive general anesthesia (asleep and pain-free) for this surgery, which may last from one to three hours.

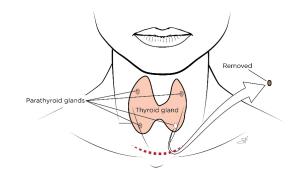
Types of Parathyroid Surgery

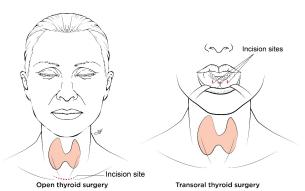
Open

Open parathyroidectomy is the standard removal of one or more of the four parathyroid glands in the neck.

Scarless

Transoral thyroidectomy or transoral vestibular approach (TOVA) allows for the safe and total removal of the thyroid or parathyroid glands with no external scarring to the neck. Of all "scarless" thyroid surgeries, the transoral technique is the only one that is truly scarless. Although other types of thyroid and parathyroid techniques may not leave a scar on the neck, they do leave a scar at the alternative incision point, the armpit, hairline or nipple.





Advantages of Transoral Surgery

Benefits of the TOVA are three-fold: It preserves the natural appearance of the neck, leaves no external reminder of the operation and provides a quick and easy recovery.

After Surgery

Recovery - What to Expect

- After surgery you will wake up in the recovery room. You will have an IV for hydration and an
 oxygen mask to deliver humidified oxygen. Your surgical incision will be covered with either a
 surgical glue sealant or with small bandage tape. It is common for there to be a small amount of
 blood on the outside of the dressing.
- Pain medication is delivered through an IV until you are able to take liquids by mouth.
- When you are fully awake and not experiencing nausea, you will be allowed to eat.
- Most patients go home the same day, about three to four hours following the completion of surgery. Otherwise, you will be discharged the next morning after your lab results are available and you have had breakfast. The overnight stay is still considered an outpatient service.

Now that You're Home

- Before discharge from the hospital, you will be given instructions for your post-operative appointment with your surgeon. If you don't receive an appointment, please call your surgeon's office at 832-957-6500 to schedule one or send them a message on MyChart.
- On average, expect a one to two week recovery period. Occasionally, some patients report
 even longer periods to completely recover. This depends on the type of surgery and your
 overall health and activity level before surgery. Remember that recovering from surgery
 takes a lot of your body's protein and energy to do so. You may tire easily during your
 recovery, but proper nutrition and exercise will help you to get stronger.

What can I eat?

- You may eat your normal diet when you get home
- If your throat is still sore, try cold, soft foods

When can I drive?

- You can drive when you can easily turn your head both ways
- DO NOT DRIVE while taking prescription pain medicine

When can I exercise?

- Start stretching slowly and gently the day after surgery
- Begin with these stretching exercises the day after your surgery. You will not hurt the incision.
- Move slowly, gently and fully. Do each exercise three times and repeat this during the day in the morning, lunch and evening. Do this until you come to the clinic for your post-op visit.

What is normal after surgery?

- Having a sore throat
- Having a stiff neck
- It may feel different to swallow
- Having small swelling or "puffiness" at the incision

How do I care for my wound?

If you have Steri-strips (pieces of tape) covering the incision:

- Wait to take a shower or a bath until 36 hours after surgery
- Take the tape off when you bathe. Wash gently with soap & water
- Pat the wound dry
- Cover the incision with the recommended bandage

If you have Dermabond (skin glue/sealant):

- You may shower the next morning following surgery
- Wash gently with soap & water
- Pat the wound clean and dry
- Do not take off Dermabond for 2 weeks
- If the Dermabond has not fallen off after two weeks you may peel the rest off and wash incision with soap and water. The incision will be fully healed.

What about pain?

- It is normal to have some pain and mild swelling at the surgery site
- The doctor may give you a prescription for a small amount of pain medicine to use when your pain is severe
- Non-prescription medicines, such as naproxen (Aleve®) and acetaminophen (Tylenol®), help when pain is mild and when taken together work almost as well as prescription medication.
- The table below shows you how to take these.
- If the pain gets worse, let your doctor know.

	10 12 1 10 2 9 3 8 7 6 5	10 12 1 9 3 8 4 7 6 5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 12 1 9 3 8 7 6 5	11 12 1 2 9 3 8 4 7 6 5
	Before Breakfast 6:00 am	After Breeakfast 9:00 am	With Lunch 12:00 pm	With Dinner 6:00 pm	Evening 9:00 pm
acetaminophen (Tylenol) 500 mg tablet	Take 1		Take 1	Take 1	
naproxen (Aleve) 220 mg tablet		Take 2			Take 2

What other medications will I take?

- Calcium replacement is important for many patients after thyroid surgery.
- We measure your blood in the recovery room to check how much calcium you will need to take following surgery.
- If your doctor directs you to take calcium, you will be able to buy calcium citrate at any drug or grocery store. No prescription is needed.

Calcium Citrate Max D3 or Citracal® Max Plus D3

 You can buy Calcium Citrate Max D3 from any drug store or grocery store. No prescription is needed.

What other medicines will I take besides calcium?

- Some patients may require two types of calcium for around a month after surgery. We determine this based on your calcium testing in the recovery room after surgery.
- If you need to be on both prescription calcitriol AND citrical max after surgery your doctor will give you a prescription for the calcitriol.

		10 2 2 3 8 4 4 7 6 5	10 1 2 2 3 8 4 7 6 5	10 2 2 3 8 4 7 6 5
C	alcium Citrate (Citracal)	Morning Breakfast 6:00 am	Noon Lunch 12:00 pm	Evening Dinner 6:00 pm
_	Week 1	Take 2	Take 2	Take 2
_	Week 2	Take 1	Take 1	Take 1
	Week 3	Take 1		Take 1
•	For 6 months	Take 1		

11 12 1

11 12 1

11 12 1

Blood Thinners/Anti Platelet Medication

Antiplatelet Medication - Aspirin, Plavix, Brilinta, Effient:

• If you stopped taking this medication before surgery, you may start taking the medication again 24 hours after surgery.

Anticoagulant Medication - Warfarin, Eliquis, Pradaxa, Xarelto, Lixiana

 You will have stopped this for surgery. Resume taking this medication on the 3rd day after your surgery.

When do I see the doctor after surgery?

- Call 832-957-6500 to make an appointment to with your surgeon one to three weeks after surgery. We are happy to see post-op check patients in person or virtually. For your safety and convenience, we strongly recommend a telehealth visit for your post-op care.
- Make an appointment to see your endocrinologist two to six weeks after surgery.
- If you do not have an endocrinologist, we are happy to give you a referral.

Warning Signs to Watch Out for

Call your healthcare team at 832-957-6500 if you see or feel:

- Increasing pain, redness or pus coming from your incision
- A fever of more than 101°F
- Lots of coughing each time you swallow
- You start having numbness or tingling in both of your legs or hands and arms or around your lips. This may mean you have low blood calcium. After calling, you will need to take the following steps:
 - 1. Take 3 extra calcium citrate pills now
 - 2. Add one extra calcium citrate pill to each dose you take. For example, during week one, you would take three tablets instead of two with your breakfast, lunch and dinner.
 - 3. Take three calcium citrate pills before you go to bed.
 - 4. If the numbness or tingling does not go away one hour after taking your calcium, take three more calcium citrate pills every 30 minutes until it does go away.

When should I get help right away?

- When the numbness or tingling does not go away one hour after taking calcium
- If you are having trouble breathing, or feel like you are breathing through a small straw
- You have swelling or puffiness at the wound site that:
 - Is bigger than an apple or orange
 - Is getting bigger
 - Puts pressure on your throat

If you experience any of these, contact your surgeon or return to the emergency room at Baylor St. Luke's Medical Center and call your surgeon's office at 832-957-6500 to let them know.

Contact your surgeon directly by text or email

Dr. Grogan 650-353-8612 or rgrogan@bcm.edu Dr. Suliburk 832-724-6382 or suliburk@bcm.edu

How do I contact the doctor if I do not have an emergency?

- Send a message to our team on MyChart with your question or concern (fastest)
- Call the clinic at 832-957-6500 (expected response time generally within 24 hrs)
- Send an email to Dr. Suliburk at suliburk@bcm.edu
- Send an email to Dr. Grogan at rgrogan@bcm.edu
- Medical Issues Chanda Sou (PAC) at 832-957-6500 (M-F 8a-4p)
- Non-Medical Issues Medical Assistant at 832-957-6500 (M-F 8a-4p)

All images are copyright Baylor College of Medicine



We Are
Houston
Medicine

bcm.edu/endocrinesurgery



Follow us on @/baylormedicine