

# About Your Thyroid Surgery

<b>Before Your Surgery</b> .....	<b>5</b>
Information for Family and Friends for the Day of Surgery.....	13
<b>After Your Surgery</b> .....	<b>15</b>
Survivorship.....	19
<b>Medications</b> .....	<b>21</b>
Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs).....	22
Herbal Remedies and Cancer Treatment.....	25
Levothyroxine .....	27
<b>Resources</b> .....	<b>33</b>
How to Use Your Incentive Spirometer .....	34
MSK Support Services .....	35
External Resources.....	37
.....	
.....	
.....	



This guide will help you prepare for your thyroid surgery at Memorial Sloan Kettering Cancer Center (MSK).

During your thyroid surgery, all or part of your thyroid gland will be removed. The surgery is done through an incision in the lower part of the front of your neck. Your surgeon will examine the whole thyroid gland. He or she will decide how much of the gland needs to be removed and will check the lymph nodes that lie next to your thyroid.

- If half of the gland is removed, it is called a lobectomy or hemi-thyroidectomy.
- If the entire gland is removed, it is called a total thyroidectomy.

Your surgery will take 2 to 3 hours. You will stay in the hospital overnight after your surgery. Most patients are discharged in the morning.

---

The thyroid gland is a small, butterfly shaped gland in the lower part of the front of your neck. It produces hormones that control the way your body turns oxygen and calories into energy.

---

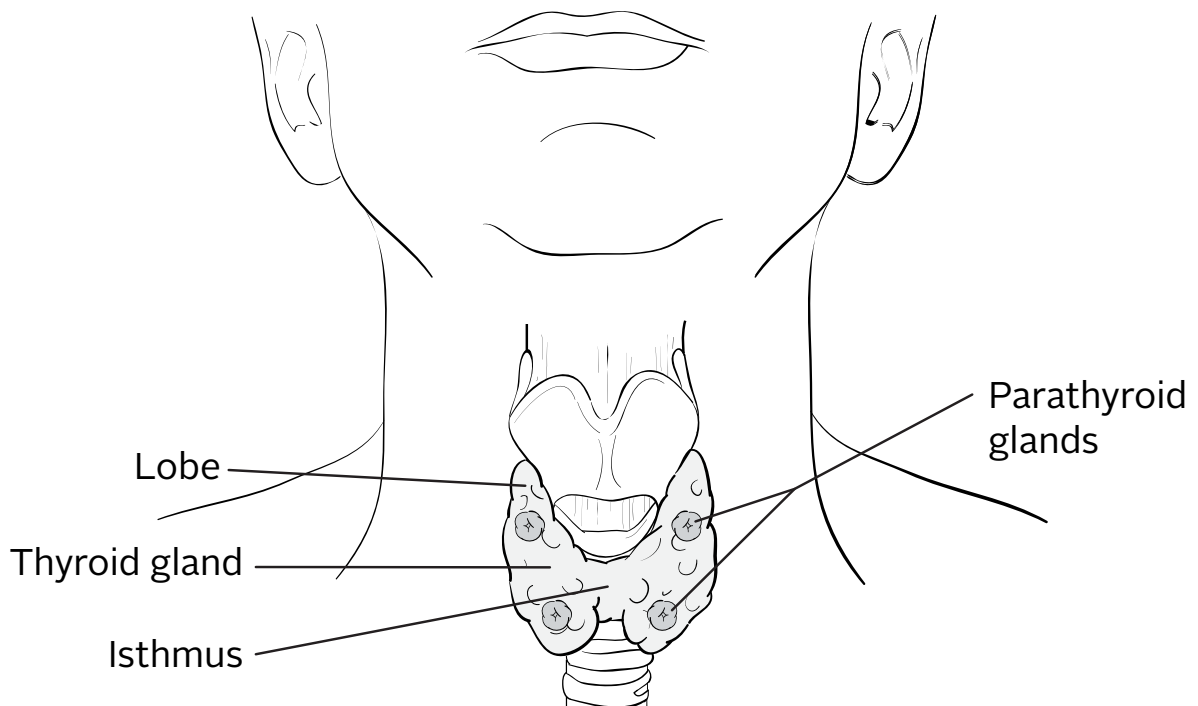
Incisions are cuts made under sterile conditions.

---

Lymph nodes are small oval or round structures found throughout the body. They make and store cells that fight infection.

---

The parathyroid glands lie behind the thyroid. They produce a hormone that helps to maintain the level of calcium in your blood.



Notes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The information in this section will help you prepare for your surgery. Read through this section when your surgery is scheduled and refer to it as your surgery date gets closer. It contains important information about what you need to do before your surgery. Write down any questions you have and be sure to ask your doctor or nurse.

# Preparing for Your Surgery

You and your healthcare team will work together to prepare for your surgery.

## About Sleep Apnea

Sleep apnea is a common breathing disorder that causes a person to stop breathing for short periods while sleeping. The most common type is obstructive sleep apnea (OSA). This means that the airway becomes completely blocked during sleep, so no air can get through. OSA can cause serious problems after surgery. Please tell us if you have sleep apnea or if you think you may have it. If you use a breathing machine (CPAP) for sleep apnea, bring it with you the day of your surgery.

## About Drinking Alcohol

The amount of alcohol you drink can affect you during and after your surgery. It is important that you talk with your healthcare providers about your alcohol intake so that we can plan your care.

- Stopping alcohol suddenly can cause seizures, delirium, and death. If we know you are at risk for these complications, we can prescribe medications to help prevent them.
- If you use alcohol regularly, you may be at risk for other complications during and after your surgery. These include bleeding, infections, heart problems, greater dependence on nursing care, and longer hospital stay.

Help us keep you safe during your surgery by telling us if any of the following statements apply to you, even if you aren't sure.

- I take a blood thinner. Some examples are aspirin, heparin, warfarin (Coumadin®), clopidogrel (Plavix®), and tinzaparin (Innohep®). There are others, so be sure your doctor knows all the medications you're taking.
- I take prescription medications, including patches and creams.
- I take over-the-counter medications, herbs, vitamins, minerals, or natural or home remedies.
- I have a pacemaker, automatic implantable cardioverter-defibrillator (AICD), or other heart device.
- I have sleep apnea.
- I have had a problem with anesthesia in the past.
- I have allergies, including latex.
- I am not willing to receive a blood transfusion.
- I drink alcohol.
- I smoke.
- I use recreational drugs.

Here are things you can do to prevent problems before your surgery:

- Be honest with your healthcare provider about how much alcohol you drink.
- Try to stop drinking alcohol once your surgery is planned. If you develop a headache, nausea, increased anxiety, or cannot sleep after you stop drinking, tell your doctor right away. These are early signs of alcohol withdrawal and can be treated.
- Tell your healthcare provider if you cannot stop drinking.
- Ask us any questions you have about drinking and surgery. As always, all of your treatment information will be kept confidential.

## About Smoking

People who smoke can have breathing problems and a higher risk of getting pneumonia when they have surgery. Quitting smoking is one of the most important things you can do to decrease your risk of complications after surgery. Stopping even for a few days before surgery can help. If you want to quit, call our Tobacco Cessation Program at (212) 610-0507. You can also ask your nurse about the program.

## Within **30** Days of Your Surgery

### Presurgical Testing (PST)

Before your surgery, you will have an appointment for presurgical testing (PST). The date, time, and location of your PST appointment will be printed on the appointment reminder from your surgeon's office.

You can eat and take your usual medications the day of your PST appointment. During your appointment, you will meet with a nurse practitioner who works closely with anesthesiology staff (doctors and specialized nurses who will be giving you medication to put you to sleep during your surgery). He or she will review your medical and surgical history with you. You will have tests, including an electrocardiogram (EKG) to check your heart rhythm, a chest x-ray, blood tests, and any other tests necessary to plan your care. Your nurse practitioner may also recommend you see other healthcare providers.

Your nurse practitioner will talk with you about which medications you should take the morning of your surgery. To help you remember, we've left space for you to write these medications down on page 10 of this guide. It is very helpful if you bring the following with you to your PST appointment:

- A list of all the medications you are taking, including patches and creams
- Results of any tests done outside of MSK, such as a cardiac stress test, echocardiogram (ECG), or carotid doppler study
- The name(s) and telephone number(s) of your doctor(s)

### Health Care Proxy

If you haven't already completed a Health Care Proxy Form, we recommend you complete one now. A health care proxy is a legal document that identifies the person who will speak for you if you are unable to communicate for yourself. This person is known as your health care agent. If you are interested in completing a Health Care Proxy Form, talk with your nurse. If you have completed a Health Care Proxy Form or if you have any other advanced directive, bring it with you to your next appointment.

## 10 Days Before Your Surgery

### Medications

Stop taking aspirin, medications that contain aspirin, and vitamin E. If you take aspirin because you've had a problem with your heart, be sure to talk with your doctor if you haven't already. These medications can cause bleeding. More information is located in the "Medications" section of this guide.

### Travel Arrangements

If you will be going home the day after your surgery, someone who is 18 years or older must come to the hospital to take you home. If you don't have someone who can do this, one of the agencies listed below can help you find someone to take you home.

Partners in Care: (888) 735-8913

Caring People: (877) 227-4649

### Breathing and Coughing Exercises

Practice taking deep breaths and coughing before your surgery. If your nurse gave you an incentive spirometer, start using it now. It will help expand your lungs. Information about how to use your incentive spirometer can be found in the "After Your Surgery" section of this guide. If you have any questions, ask your nurse or respiratory therapist.

### Purchase Supplies

You will need to have the following medications when you leave the hospital:

Tums Ultra® (for calcium supplement)

\_\_\_\_\_

\_\_\_\_\_

## 7 Days Before Your Surgery

### Herbal Remedies

Stop taking herbal remedies. More information is located in the "Medications" section of this guide.



## 2 Days Before Your Surgery

### Medications

Stop taking nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (e.g., Advil®, Motrin®) or naproxen (e.g., Aleve®). These medications can cause bleeding. More information is located in the “Medications” section of this guide.

## 1 Day Before Your Surgery

### Presurgical Phone Call

A clerk from the Admitting Office will call you after 2:00 pm the day before your surgery. He or she will tell you what time you should arrive at the hospital for your surgery. If you are scheduled for surgery on a Monday, you will be called on Friday.

The Admitting clerk will tell you where to go on the day of your surgery. This will be either the Surgical Day Hospital (SDH) or the Presurgical Center (PSC). If you do not receive a call by 7:00 pm the evening before your surgery, please call (212) 639-5014.

Use this area to write in information when the clerk calls:

Date \_\_\_\_\_ Time \_\_\_\_\_

Both locations are at 1275 York Avenue between East 67<sup>th</sup> and East 68<sup>th</sup> streets.

- Surgical Day Hospital (SDH)  
M elevator to 2<sup>nd</sup> Floor
- Presurgical Center (PSC)  
B elevator to 6<sup>th</sup> Floor

## Night before your surgery

### Sleep

Go to bed early and get a full night’s sleep.



**Do not eat or drink anything after midnight the night before your surgery. This includes water, hard candy, and gum.**

# The Morning of Your Surgery

## Medications

Your doctor or nurse practitioner may have told you to take certain medications on the morning of your surgery. If so, list them below. Take only these medications with a small sip of water the morning of your surgery.

---

Medication	Dose	Doctor/Nurse
------------	------	--------------

---


Medication	Dose	Doctor/Nurse
------------	------	--------------

---

Medication	Dose	Doctor/Nurse
------------	------	--------------

---

Medication	Dose	Doctor/Nurse
------------	------	--------------

 **Do not eat or drink anything the morning of your surgery. This includes water, hard candy, and gum. Take any medication as instructed with a small sip of water.**

## Things to remember

- Do not put on any lotion, cream, deodorant, make-up, powder, or perfume.
- Do not wear any metal objects. Remove jewelry, including body piercings. The equipment used during your surgery can cause burns if it touches metal.
- Leave valuables, such as credit cards, jewelry, or your checkbook at home.
- Before you are taken into the operating room, you will need to remove your hearing aids, dentures, prosthetic device(s), wig, and religious articles such as a rosary.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## What to bring

- Sneakers that lace up. You may have some swelling in your feet; lace-up sneakers can accommodate this swelling.
- Only the money you may need for a newspaper, bus, taxi, or parking.
- A CD player and CDs or an iPod, if you choose. However someone will need to hold it for you when you go into surgery.
- Your incentive spirometer, if you have one.
- If you usually wear contact lenses, wear your glasses instead. Remember to bring a case for them.
- Your Health Care Proxy form, if you have completed one.
- This guide.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Parking When You Arrive

Parking at MSK is available in the garage on East 66<sup>th</sup> Street between York and First Avenues. To reach the garage, turn onto East 66<sup>th</sup> Street from York Avenue. The garage is located about a quarter of a block in from York Avenue, on the right-hand (north) side of the street. There is a tunnel that connects the garage to the hospital. There are also other garages nearby: four on East 69<sup>th</sup> Street between First and Second Avenues, one on East 67<sup>th</sup> Street between York and First Avenues, and three on East 65<sup>th</sup> Street between First and Second Avenues. If you have questions about prices, call (212) 639-2338.



P = Parking  
M = Memorial Sloan Kettering

## What to Expect

### Tell us who you are

You will be asked to say and spell your name and birth date many times. This is for your safety. Patients with the same or similar names may be having surgery on the same day.

### Tell your nurse about medications you've taken

A nurse will meet with you before your surgery. Tell him or her the dose of any medications you took after midnight and the time you took them.





# Information for Family and Friends for the Day of Surgery

This information explains to your family and friends what will happen on the day of surgery at Memorial Sloan Kettering Cancer Center (MSK).

## Before the Surgery

Upon arrival to the hospital, the patient will be asked to provide contact information for the person who will be speaking to the surgeon after the surgery. If the patient is having an outpatient procedure, he or she will also be asked to provide contact information for the person who will be taking the patient home.

Once the patient is checked in, he or she will go to the Presurgical Center (PSC) to be examined before surgery. One person may come along, but others should wait in the concierge waiting area. If the patient wishes, other people may join him or her when the nurse has finished the examination.

When the operating room (OR) is ready, the surgical team will take the patient there. They will prepare the patient for surgery, which usually takes 30 to 90 minutes, then the surgery will begin.

Please remember the following:

- Do not bring food or drinks to the waiting area or the PSC. Patients are not allowed to eat or drink before their surgery or procedure.
- If the patient brought any valuables, such as a cell phone, iPod, iPad, etc., please keep it safe for them.
- Children under the age of 11 are not allowed to go into the PSC. They must wait in the main lobby on the 1<sup>st</sup> floor with a responsible adult.

## During the Surgery

After the patient is taken to the OR, all visitors should go to the main lobby on the 1<sup>st</sup> floor.

- Food and drinks are available on the 1<sup>st</sup> floor in the cafeteria and in the gift shop. You can also bring your own food and eat it in the cafeteria.
- The coat-check room is at the bottom of the escalator on the ground level. It is open Monday through Friday from 11:00 am to 4:00 pm.
- Wireless Internet access is available in most areas of the hospital. You may also use the computers in the rooms off the main lobby.
- Please use the designated cell phone area to accept and make calls. It may be useful to bring your phone charger to the hospital. Please be courteous and mindful of others while using your cell phone.
- The Mary French Rockefeller Chapel, an interfaith chapel near the main lobby on the 1<sup>st</sup> floor, is open at all times for meditation and prayer.
- The Patient Recreation Pavilion is open daily from 9:00 am to 8:00 pm for patients and their visitors over the age of 11. Arts and crafts, a library, an outdoor terrace, and scheduled entertainment events are available in this area. To get there, take the M elevators to the 15<sup>th</sup> floor.

A clinical nurse specialist (CNS) will make rounds in the main lobby about every 2 hours to:

- Give you information about the patient
- Prepare you for your meeting with the surgeon
- Prepare you for visiting the patient in the Post-Anesthesia Care Unit (PACU)



You can contact the CNS between his or her regular visits in the lobby.

- From inside the hospital, use a hospital courtesy phone. Dial 2000 and ask for beeper 9000. Please be patient; this can take up to 2 minutes.
- From outside of the hospital, call (212) 639-2000. Ask for beeper 9000.
- You may also ask the information desk staff to contact the CNS for you.

## After the Surgery

When the patient's surgery is done, we will call you to come back to the concierge desk. Please take the B elevator to the 6<sup>th</sup> floor and check in at the concierge desk. The concierge staff will bring you to a private consultation room to speak with the surgeon.

After you have met with the surgeon, you should return to the concierge desk and tell them that you have finished your consultation.

After surgery, the patient will be taken to the PACU. It can take up to 90 minutes before the patient is ready to have visitors. You can use this time to take a walk or just relax in the waiting area until the patient is ready to see you.

Once the patient is ready for visitors, a nurse will take you to the PACU. Please remember that a limited number of visitors can go into the PACU. This is to keep the area quiet and avoid crowding.

## While visiting in the PACU

- Silence your cell phone.
- Apply hand sanitizer before entering.
- Keep noise to a minimum. All patients in the room need to rest.
- Do not wander away from the patient's bedside. It's important to respect each patient's right to privacy.
- Do not bring food or flowers into the PACU.
- Limit the time of your visit so that the patient can rest and recover.
- You may be asked to leave if there is an emergency, x-rays need to be done nearby, or patient care is being interrupted.

The nurse will update you on the patient's condition. He or she will also explain the plan of care for the patient, such as whether the patient is staying overnight and when he or she will be moved to an inpatient room. You should feel assured that you can leave the hospital after your visit. We will give you a card with the PACU phone number. Please appoint one person to call for updates.



The information in this section will tell you what to expect after your surgery, both during your hospital stay and after you leave the hospital. You will learn how to safely recover from your surgery. Write down any questions you have and be sure to ask your doctor or nurse.

# After Your Surgery

When you wake up after your surgery, you will be in the Post-Anesthesia Care Unit (PACU). Once your anesthesia has worn off, you will be taken to your hospital room. There, your nurse will tell you what you can do to recover from your surgery. Below are examples of ways you can help yourself recover safely.

- It is important to walk around after surgery. Walking every 2 hours is a good goal. This will help prevent blood clots in your legs.
- Use your incentive spirometer. This will help your lungs expand, which prevents pneumonia. Instructions on how to use your incentive spirometer are included in the “After Your Surgery” section of this guide.

## Commonly Asked Questions

Here are some commonly asked questions patients ask after surgery. Ask your doctor or nurse to explain anything you don’t understand or if you have additional questions.

### **Will I have pain?**

You will have some pain after your surgery. Your doctor and nurse will ask you about your pain often. You will be given medication to treat your pain as needed. If your pain is not relieved, please tell your doctor or nurse. It is important to control your pain so you can cough, breathe deeply, use your incentive spirometer, and get out of bed and walk.

You will be given pain medication through your intravenous (IV) catheter at first. When you can swallow liquids, you will get your pain medication by mouth. You will be given a prescription for a mild pain medication before you go home. You may want to take Extra Strength Tylenol® instead. Ask your nurse or doctor when to take other over-the-counter pain medication.

### **What can I eat after surgery?**

You can begin to take ice chips and liquids several hours after your surgery. It is normal to feel some discomfort while you are swallowing. You will slowly progress to a regular diet. There will be no dietary restrictions after the first night.

### **When can I shower?**

You can shower 48 hours after your surgical drain is removed. If you did not have a drain, you can shower 48 hours after your surgery. Do not tilt your head upwards during your shower for 4 weeks after your surgery. Let the water run over your incision line. Gently pat your incision line dry with a clean towel or wash cloth.

### **How do I care for my incision?**

While you are in the hospital, your nurse will teach you how to care for your incision. These instructions will be written in the paperwork you will receive when you leave the hospital. In most cases, your staples or stitches will be removed during your first appointment with your doctor after your surgery.



## **What medications will I need to take?**

If your entire thyroid gland was removed, you will need to replace the hormone it produces. There are many thyroid hormone drugs; whichever one you take, you must take it every day for the rest of your life. Your doctor will prescribe it for you and tell you how much to take. You will likely need blood tests every so often. This is to make sure you are getting enough, but not too much of the drug. Your doctor will change the dose as needed.

Your doctor will tell you if you also need to take calcium supplements. You can buy them at your local pharmacy without a prescription. Ask your doctor how much you should take. If you are taking calcium, your doctor may also want you to take vitamin D to help your body absorb it.

Calcium can cause constipation, especially while you're also taking pain medication. If you think this might be a problem for you, talk with your nurse. A stool softener or laxative may be recommended. There is more information about the medications commonly used after thyroid surgery in the "Medications" section of this guide.

## **When can I resume my normal activities?**

You can resume most activities right after your surgery. Here are some things you should not do:

- Do not drive for at least 1 week after your surgery. Once you feel comfortable turning your neck to look for traffic, you can resume driving.
- Do not lift objects heavier than 10 pounds for at least 2 weeks after your surgery.

For at least 4 weeks after your surgery:

- Do not tilt your head backward (as in looking up at the ceiling). This pulls on your incision. You can move your neck from side to side and downward.
- Do not use weights or machines on your upper body. Limit all upper body exercises, but you can do lower body exercises.

Avoid having the sun on your incision site for a year after your surgery. Your doctor or nurse will tell you when it's safe to use sunscreen, but it's usually when your incision has closed completely.

## **How long will it take for me to recover?**

You will notice a gradual return of energy in the weeks after surgery. Some people find that their energy level varies for a month or two.

## **My incision feels tight, is that normal?**

You may feel tightness along your incision as it heals. This feeling can come and go. It can last from a week to more than several months. It is normal and you do not need to worry about it. You may also have numbness at your incision site and in the surrounding area. This is also normal and will improve with time.



### **Call your doctor immediately if:**

- You have a temperature of 101° F (38.3° C) or higher
- You have drainage from your incision
- You have shortness of breath
- You have warmer than normal skin around your incision
- You have increased discomfort in the area around your incision
- You have increased redness around your incision
- You have new or increased swelling around your incision
- You have numbness, twitching, or tingling around your mouth, fingertips, or toes

### **When should I see my surgeon?**

You should see your surgeon 7 to 10 days after your surgery. Call the office to make the appointment. Your surgeon will check your incision. Your pathology report should be ready and your surgeon will discuss it with you. You will also talk about whether you need more treatment.

### **Will I need more treatment?**

Many patients will not need more treatment. However, if you have papillary thyroid cancer, you might need radioactive iodine therapy. Your healthcare team will talk with you to decide if this is the best treatment for you. Your team will include your surgeon, an endocrinologist, and a doctor from nuclear medicine. If you need radioactive iodine, your endocrinologist will talk to you about how the treatment is given.

### **Will I need special blood tests after my surgery?**

You will have thyroid function tests beginning 6 to 8 weeks after your surgery. There are two tests: thyroid stimulating hormone (TSH) and free thyroxine (FT4). These tests will show whether you have the right amount of thyroid hormone in your blood. Your doctor or nurse practitioner will use the results of these tests to adjust the amount of thyroid medication you take.

If you had your entire thyroid removed (called a total thyroidectomy) for papillary cancer, you will need to have a blood test called thyroglobulin 6 weeks after your surgery. You will have this blood test every year so that your doctor can look out for patterns in your results.

If you have medullary thyroid cancer, you will need to have blood tests called carcinoembryonic antigen (CEA) and calcitonin 6 weeks after your surgery. You will have these blood tests every year so that your doctor can look out for patterns in your results.

### **What if I have other questions?**

If you have any questions or concerns, please talk with your doctor or nurse. You can reach them Monday through Friday from 9:00 am to 5:00 pm. Call the office directly at \_\_\_\_\_.

After 5:00 pm, during the weekend, and on holidays, please call (212) 639-2000 and ask for the doctor on call.

# Survivorship

## What kind of follow-up care will I receive?

After your initial treatment for thyroid cancer, you will continue to see your surgeon, endocrinologist, and/or nuclear medicine specialist. Over time, you will probably need to see only one of these specialists. You and your doctor will decide when that time is right for you.

Once your initial treatments are completed, you may be eligible to join the Thyroid Cancer Survivorship Program. Your doctor will help you decide when you are ready for this step. The program will help support you as you recover from the physical and emotional effects of thyroid cancer. The Thyroid Cancer Survivorship Program is located in the Endocrine Clinic at MSK. A nurse practitioner, who will work closely with your doctor, will be responsible for your care. The nurse practitioner is a member of the thyroid cancer team at MSK and an expert in the care of cancer survivors. He or she will:

- Look for signs of the cancer returning
- Manage any effects of treatment, such as pain and fatigue
- Recommend screening tests for other cancers
- Provide counseling about living a healthy lifestyle, such as diet, exercise, and quitting smoking

During visits with your nurse practitioner, he or she will:

- Talk with you about your medical history
- Perform a physical exam
- Order tests, such as x-rays, scans, and blood tests
- Make referrals to other healthcare providers, if needed
- Prescribe medication, if needed

If you would like more information about our Survivorship Program, talk with your doctor or nurse.

## When can I transition my follow-up care outside of MSK?

As your needs decrease, your follow-up care may be transferred from MSK to an endocrinologist in your community. We will assist you in finding an endocrinologist if you don't already have one.

The timing of this depends on your particular thyroid cancer and your response to treatment. It often occurs about 2 to 5 years after treatment. Your MSK doctor or nurse practitioner will send your local doctor a detailed summary of your care at MSK and copies of your test results. This report will also include our recommendations for future management based on the thyroid cancer treatment you received.

Your MSK doctor and nurse practitioner are available to you and your local doctor if there are any questions about your care, or if you develop a new thyroid cancer problem.

Notes \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

The information in this section contains important information about what medications, herbal remedies, and other dietary supplements you will need to stop taking before your surgery. Read through this section before your surgery so that you are prepared. Write down any questions you have and be sure to ask your doctor or nurse.

# Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs)

This information will help you identify medications that contain aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs). It's important to stop these medications before many cancer treatments.

Medications such as aspirin and other NSAIDs, vitamin E, and COX-2 inhibitors can increase your risk of bleeding during cancer treatment. These medications affect your platelets, which are blood cells that clot to prevent bleeding. If you take aspirin or other NSAIDs, vitamin E, or a COX-2 inhibitor such as celecoxib (Celebrex<sup>®</sup>), tell your doctor or nurse. He or she will tell you if you need to stop taking these medications before your treatment. You will also find instructions in the information about the treatment you're having.

## **If you're having surgery:**

- Stop taking medications that contain aspirin or vitamin E 10 days before your surgery or as directed by your doctor. If you take aspirin because you've had a problem with your heart or you've had a stroke, be sure to talk with your doctor before you stop taking it.
- Stop taking NSAIDs 48 hours before your surgery.
- Ask your doctor if you should continue taking a COX-2 inhibitor.

## **If you're having a procedure in Radiology (including Interventional Radiology, Interventional Mammography, and General Radiology):**

- If you take aspirin because you've had a problem with your heart or you've had a stroke, be sure to talk with your doctor before you stop taking it. If your doctor instructs you to stop taking aspirin, you should stop 5 days before your procedure or as directed by your doctor.
- Stop taking NSAIDs 24 hours before your procedure.
- Stop taking medications that contain vitamin E 10 days before your procedure, or as directed by your doctor.

**Chemotherapy can decrease your platelet count, which can increase your risk of bleeding. Whether you're just starting chemotherapy or you've been receiving it, talk with your doctor or nurse before taking aspirin or NSAIDs.**

Medications are often called by their brand name, which can make it difficult to know their ingredients. To help you identify medications that contain aspirin, other NSAIDs, and vitamin E, please review the list of common medications in this leaflet. While this list includes the most common products, there are others. Please check with your healthcare provider if you aren't sure. Always be sure your doctor knows all the medications you're taking, both prescription and over-the-counter.

**The following common medications contain aspirin:**

Alka Seltzer®	Cama® Arthritis Pain Reliever	Genprin®	Roxiprin®
Anacin®	COPE®	Gensan®	Saleto®
Arthritis Pain Formula	Dasin®	Heartline®	Salocol®
Arthritis Foundation Pain Reliever®	Easprin®	Headrin®	Sodol®
ASA Enseals®	Ecotrin (most formulations)	Isollyl®	Soma® Compound Tablets
ASA Suppositories®	Empirin® Aspirin (most formulations)	Lanorinal®	Soma® Compound with Codeine Tablets
Ascriptin® and Ascriptin A/D®	Epromate®	Lortab® ASA Tablets	St. Joseph® Adult Chewable Aspirin
Aspergum®	Equagesic Tablets	Magnaprin®	Supac®
Asprimox®	Equazine®	Marnal®	Synalgos® DC Capsules
Axotal®	Excedrin® Extra-Strength Analgesic Tablets and Caplets	Micrainin®	Tenol-Plus®
Azdone®	Excedrin® Migraine	Momentum®	Trigesic®
Bayer® (most formulations)	Fiorgen®	Norgesic Forte® (most formulations)	Talwin® Compound
BC® Powder and Cold Formulations	Fiorinal®	Norwich® Aspirin	Vanquish® Analgesic Caplets
Bufferin® (most formulations)	Fiortal®	PAC® Analgesic Tablets	Wesprin® Buffered
Buffets II®	Gelpirin®	Orphengesic®	Zee-Seltzer®
Buffex®		Painaid®	ZORprin®
		Panasal®	
		Percodan® Tablets	
		Persistin®	
		Robaxisal® Tablets	

**The following common medications are NSAIDs that do not contain aspirin:**

Advil®	Children's Motrin®	Indomethacin	Mobic®	Piroxicam
Advil Migraine®	Clinoril®	Indocin®	Motrin®	Ponstel®
Aleve®	Daypro®	Ketoprofen	Nabumetone	Relafen®
Anaprox DS®	Diclofenac	Ketorolac	Nalfon®	Saleto 200®
Ansaid®	Etodolac®	Lodine®	Naproxen	Sulindac
Arthrotec®	Feldene®	Meclofenamate	Naprosyn®	Toradol®
Bayer® Select Pain Relief Formula Caplets	Fenoprofen	Mefenamic Acid	Nuprin®	Voltaren®
Celebrex®	Flurbiprofen	Meloxicam	Orudis®	
	Genpril®	Menadol®	Oxaprozin	
	Ibuprofen	Midol®	PediaCare Fever®	

**Most multivitamins contain vitamin E, so if you take a multivitamin be sure to check the label. The following products contain vitamin E:**

Amino-Opt-E	Aquavit	E-400 IU	E complex-600
Aquasol E	D'alpha E	E-1000 IU Softgels	Vita-Plus E

**Acetaminophen (Tylenol®) is generally safe to take during your cancer treatment. It doesn't affect platelets, so it will not increase your chance of bleeding. The following common medications contain acetaminophen; those in bold require a prescription:**

Acephen®	Datril®	Norco®	Tylenol® with Codeine No. 3
<b>Aceta® with Codeine</b>	<b>Di-Gesic®</b>	Panadol®	Vanquish®
<b>Acetaminophen with Codeine</b>	Esgic®	<b>Percocet®</b>	<b>Vicodin®</b>
Aspirin-Free Anacin®	Excedrin P.M.®	<b>Repan</b>	<b>Wygesic®</b>
Arthritis Pain Formula®	<b>Fiorcet®</b>	<b>Roxicet®</b>	<b>Zydone®</b>
Aspirin-Free	<b>Lorcet®</b>	Talacen®	
<b>Darvocet-N 100®</b>	<b>Lortab®</b>	Tempra®	
	Naldegesic®	Tylenol®	

 **Read the labels on all your medications.**

- Acetaminophen (Tylenol<sup>®</sup>) is a very common ingredient found in over-the-counter and prescription medications. It's often an ingredient in pain relievers, fever reducers, sleep aids, and cough, cold, and allergy medications. The full name acetaminophen is not always written out, so look for these common abbreviations, especially on prescription pain relievers: APAP, AC, Acetaminoph, Acetaminop, Acetamin, and Acetam.

Acetaminophen is safe when used as directed, but there is a limit to how much you can take in 1 day. It's possible to take too much acetaminophen without knowing because it's in many different medications, so always read and follow the label on the product you are taking. Do not take more than 1 medication at a time that contains acetaminophen without talking with a member of your healthcare team.

If you have any questions or concerns, talk with a member of your healthcare team. You can reach them Monday through Friday from 9:00 am to 5:00 pm at \_\_\_\_\_. After 5:00 pm, during the weekend, and on holidays, please call \_\_\_\_\_. If there's no number listed, or you're not sure, call (212) 639-2000.



# Herbal Remedies and Cancer Treatment

One week before you have surgery or start chemotherapy or radiation therapy, you must stop taking any herbal or botanical home remedies or other dietary supplements because they can:

- Interact with other drugs
- Increase or lower blood pressure
- Thin the blood and increase the risk of bleeding
- Make radiation therapy less effective
- Lower the effects of medications that suppress the immune system
- Increase the effects of sedation or anesthesia

■ **Below are examples of common herbs and a description of their effects.**

## **Echinacea**

- Can cause an allergic reaction such as a rash or difficulty breathing
- Can lower the effect of drugs used to suppress the immune system

## **Garlic**

- Can lower blood pressure, fat, and cholesterol levels
- Can prevent platelets (the blood cells that help stop bleeding) from sticking together, which increases the risk of bleeding

## **Gingko (also known as ginkgo biloba)**

- Can change how platelets function, which can increase the risk of bleeding

## **Ginseng**

- Can act as a stimulant, which can decrease the effects of anesthesia or sedation
- Can interfere with platelet function, which can increase the risk of bleeding
- Can lower blood glucose (sugar) level

## **Turmeric**

- Can reduce the antitumor action of chemotherapy drugs

## **St. John's Wort**

- Can interact with medications given during surgery
- Can make the skin more sensitive to laser treatment

## **Valerian**

- Can have a sedative effect, which can increase the effects of anesthesia or sedation

## Herbal formulas

- Many herbal formulas contain different herbs. We don't know their side effects. You must also stop taking these products 1 week before and during treatment

For more information about herbs and botanicals, visit the About Herbs, Botanicals & Other Products website at [mskcc.org/aboutherbs](http://mskcc.org/aboutherbs).

You can also download the Memorial Sloan Kettering About Herbs app from the Apple App Store at [itunes.apple.com/us/app/about-herbs/id554267162?mt=8](https://itunes.apple.com/us/app/about-herbs/id554267162?mt=8).

This information does not cover all possible side effects. Please share any questions or concerns with your doctor or nurse.

If you have any questions or concerns, talk with a member of your healthcare team. You can reach them Monday through Friday from 9:00 am to 5:00 pm at \_\_\_\_\_. After 5:00 pm, during the weekend, and on holidays, please call \_\_\_\_\_. If there's no number listed, or you're not sure, call (212) 639-2000.

# Levothyroxine

## Brand Names: U.S.

Levoxyl; Synthroid; Tirosint; Unithroid; Unithroid Direct

## Brand Names: Canada

Eltroxin; Levothyroxine Sodium; Levothyroxine Sodium for Injection; Synthroid

### Warning

- Do not use this drug to treat obesity or for weight loss. Very bad and sometimes deadly side effects may happen with this drug if it is taken in large doses or with other drugs for weight loss. Talk with your doctor.

### What is this drug used for?

- It is used to add thyroid hormone to the body.
- It is used to treat or prevent an enlarged thyroid gland.
- It is used to manage thyroid cancer.
- It may be given to you for other reasons. Talk with the doctor.

### What do I need to tell my doctor BEFORE I take this drug?

#### ***All products:***

- If you have an allergy to levothyroxine or any other part of this drug.
- If you are allergic to any drugs like this one, any other drugs, foods, or other substances. Tell your doctor about the allergy and what signs you had, like rash; hives; itching; shortness of breath; wheezing; cough; swelling of face, lips, tongue, or throat; or any other signs.
- If you have any of these health problems: Overactive thyroid gland, recent heart attack, or weak adrenal gland.

#### ***Capsule:***

- If you have trouble swallowing.

*This is not a list of all drugs or health problems that interact with this drug.*

*Tell your doctor and pharmacist about all of your drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe for you to take this drug with all of your drugs and health problems. Do not start, stop, or change the dose of any drug without checking with your doctor.*

### **What are some things I need to know or do while I take this drug?**

- Tell dentists, surgeons, and other doctors that you use this drug.
- Do not run out of this drug.
- It may take several weeks to see the full effects.
- If you have high blood sugar (diabetes), you will need to watch your blood sugar closely.
- Have your blood work checked often. Talk with your doctor.
- This drug may cause weak bones (osteoporosis) with long-term use. Talk with your doctor to see if you have a higher chance of weak bones or if you have any questions.
- If you are 65 or older, use this drug with care. You could have more side effects.
- Tell your doctor if you are pregnant or plan on getting pregnant. You will need to talk about the benefits and risks of using this drug while you are pregnant.
- Tell your doctor if you are breast-feeding. You will need to talk about any risks to your baby.

### **What are some side effects that I need to call my doctor about right away?**

**WARNING/CAUTION:** *Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your doctor or get medical help right away if you have any of the following signs or symptoms that may be related to a very bad side effect:*

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Chest pain or pressure or a fast heartbeat.
- A heartbeat that does not feel normal.
- Headache.
- Shortness of breath.
- Feeling more or less hungry.
- A big weight gain or loss.
- Loose stools (diarrhea).
- Belly cramps.
- Throwing up.
- Grouchy or touchy.
- Feeling nervous and excitable.
- Shakiness.
- Not able to sleep.
- Seizures.
- Bothered by heat.
- Sweating a lot.

- Fever.
- Leg cramps.
- Muscle weakness.
- Period (menstrual) changes. These include spotting between cycles or very light periods.

**What are some other side effects of this drug?**

*All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your doctor or get medical help if any of these side effects or any other side effects bother you or do not go away:*

- Hair loss may happen in some people in the first few months of using this drug. This most often goes back to normal.

*These are not all of the side effects that may occur. If you have questions about side effects, call your doctor. Call your doctor for medical advice about side effects.*

*You may report side effects to your national health agency.*

**How is this drug best taken?**

*Use this drug as ordered by your doctor. Read and follow the dosing on the label closely.*

**All products:**

- Follow how to take this drug as you have been told by your doctor. Do not use more than you were told to use.
- Take as you have been told, even if you feel well.
- To gain the most benefit, do not miss doses.

**Tablets and capsules:**

- There is more than 1 brand of this drug. One brand cannot safely be used for the other. Your doctor will tell you about any needed change.
- Take on an empty stomach 30 minutes before breakfast.
- Do not take iron products, antacids that have aluminum and magnesium, calcium carbonate, simethicone, sucralfate, Kayexalate®, colestipol, or cholestyramine within 4 hours of this drug.
- Some foods like soybean flour (infant formula) may change how this drug works in your body. Talk with your doctor.

**Capsule:**

- Swallow capsule whole. Do not chew, break, or crush.

**Tablet:**

- Some products may cause choking, gagging, or trouble swallowing. These products must be taken with a full glass of water. Ask your pharmacist if you need to take your product with a full glass of water.

- You may crush tablet and mix with 1 or 2 teaspoons (5 or 10 mL) of water.

**Shot:**

- It is given as a shot into a vein.

**What do I do if I miss a dose?**

**Tablets and capsules:**

- Take a missed dose as soon as you think about it.
- If it is close to the time for your next dose, skip the missed dose and go back to your normal time.
- Do not take 2 doses at the same time or extra doses.

**Shot:**

- Call the doctor to find out what to do.

**How do I store and/or throw out this drug?**

**Tablets and capsules:**

- Store at room temperature.
- Protect from light.
- Store in a dry place. Do not store in a bathroom.

**Shot:**

- This drug will be given to you in a hospital or doctor's office. You will not store it at home.

**All products:**

- Keep all drugs out of the reach of children and pets.
- Check with your pharmacist about how to throw out unused drugs.

**General drug facts**

- If your symptoms or health problems do not get better or if they become worse, call your doctor.
- Do not share your drugs with others and do not take anyone else's drugs.
- Keep a list of all your drugs (prescription, natural products, vitamins, OTC) with you. Give this list to your doctor.
- Talk with the doctor before starting any new drug, including prescription or OTC, natural products, or vitamins.
- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your doctor, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

**Consumer Information Use and Disclaimer**

*This information should not be used to decide whether or not to take this medicine or any other medicine. Only the healthcare provider has the knowledge and training to decide which medicines are right for a*

*specific patient. This information does not endorse any medicine as safe, effective, or approved for treating any patient or health condition. This is only a brief summary of general information about this medicine. It does NOT include all information about the possible uses, directions, warnings, precautions, interactions, adverse effects, or risks that may apply to this medicine. This information is not specific medical advice and does not replace information you receive from the healthcare provider. You must talk with the healthcare provider for complete information about the risks and benefits of using this medicine.*

**Copyright**

*All content copyright © 1978-2014 Lexi-Comp Inc. or its respective owners. All Rights Reserved.*

If you have any questions or concerns, talk with a member of your healthcare team. You can reach them Monday through Friday from 9:00 am to 5:00 pm at \_\_\_\_\_. After 5:00 pm, during the weekend, and on holidays, please call \_\_\_\_\_. If there's no number listed, or you're not sure, call (212) 639-2000.

---

Printed on October 3, 2014

Notes \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---



This section contains a list of MSK support services, as well as the resources that were referred to throughout this guide. These resources will help you prepare for your surgery and recover safely. Write down any questions you have and be sure to ask your doctor or nurse.

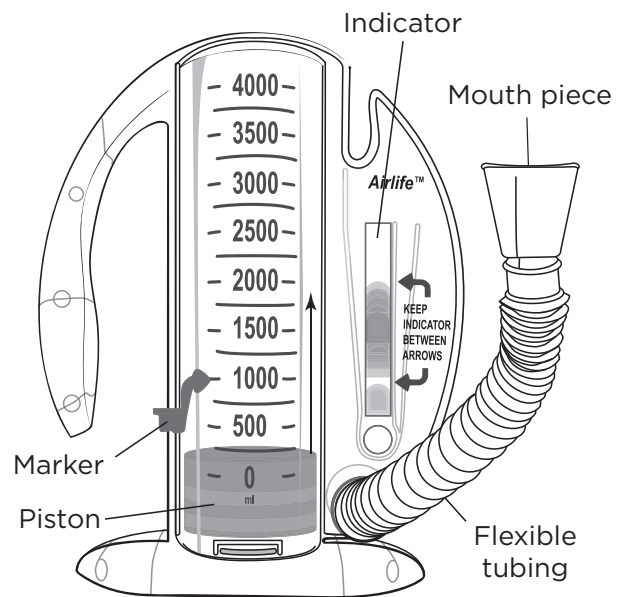
# How to Use Your Incentive Spirometer

An incentive spirometer will help you expand your lungs by encouraging you to breathe more deeply and fully. Using your incentive spirometer along with deep breathing and coughing exercises will help prevent complications such as pneumonia.



A video demonstrating how to use your incentive spirometer can be found on MSK's website at: <http://www.mskcc.org/videos/how-use-your-incentive-spirometer>.

The first time you use it, you will need to take the flexible tubing with the mouthpiece out of the bag. Expand the tubing and connect it to the outlet on the right side of the base (see figure). The mouthpiece will be attached to the other end of the tubing.



- 1 Sit upright in a chair or in bed. Hold the incentive spirometer upright at eye level.
- 2 Breathe out (exhale) once slowly. Put the mouthpiece in your mouth and close your lips tightly around it.
- 3 Take a slow, deep breath in through your mouth. As you take a deep breath, you will see the piston rise on the left side of the device. While the piston rises, the indicator on the right should move upwards. It should stay in between the 2 arrows (see figure). If the indicator does not stay between the arrows, you are breathing either too fast or too slowly.
- 4 Try to get the piston as high as you can, while keeping the indicator between the arrows.
- 5 When you get it as high as you can, try to keep it at that level for as long as possible.
- 6 Exhale normally, allowing the piston to fall all the way back to the bottom. Rest for a few seconds. Take 10 to 12 breaths every hour with your incentive spirometer while you are awake. Try to get the piston to the same level with each breath.
- 7 After each set of breaths, cough 3 times. This will help loosen or clear any secretions in your lungs.

## Special Points

- If you feel dizzy at any time, stop and rest. Try again at a later time.
- Hug or hold a pillow to help splint your incision if you had surgery on your chest or abdomen. This will help decrease pain at your incision.
- Breathe through your mouth. If you breathe through your nose the incentive spirometer will not work properly. You can plug your nose if you have trouble.
- Keep the incentive spirometer clean by covering the mouthpiece when it is not in use.



# MSK Support Services

The following are MSK resources that you may find helpful.

## **Admitting**

(212) 639-5014

Call the Admitting office to discuss private room or luxury suite options. If you want to change your room choice after your Presurgical Testing visit, call (212) 639-7873 or 7874.

## **Anesthesia**

(212) 639-6840

Call with questions about anesthesia, the medications used to make you sleepy for your surgery.

## **Blood Donor Room**

(212) 639-7643

If you are interested in donating blood or platelets, call for more information.

## **Bobst International Center**

(888) 675-7722

MSK welcomes patients from around the world. If you are an international patient, call the International Center for help coordinating your care.

## **Chaplaincy Service**

(212) 639-5982

Spiritual and religious resources provide comfort and strength for many patients. The chaplains at MSK are available to help you access those resources. They can provide spiritual support for anyone. If you have a specific religious need, please call the number above. The interfaith chapel is located near the main lobby of 1275 York Avenue. It is open 24 hours a day. If there is an emergency, please call the hospital operator and ask for the chaplain on call.

## **Counseling Services**

(646) 888-0100

Many people find counseling helpful. We provide counseling for individuals, couples, families, and groups, as well as medications to help if you feel anxious or depressed.

## **Integrative Medicine Service**

(646) 888-0800 (outpatient)

(646) 888-0888 (inpatient)

Integrative Medicine Service offers patients many services to complement traditional medical care, including music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy.

## **Patient-to-Patient Support Program**

(212) 639-5007

You may find it comforting to speak with a cancer survivor or caregiver who has been through a similar treatment. Through our Patient-to-Patient Support Program, we are able to offer you a chance to speak with former patients and caregivers.

**Patient Financial Services**

(212) 639-8242

Call Patient Financial Services with any questions regarding preauthorization with your insurance company. This is also called preapproval. Patient Financial Services can also help you with your billing or other insurance questions.

(646) 497-9176

Call the number above for general information about your insurance coverage. Remember, you must call your insurance company for preauthorization.

**Patient Representatives**

(212) 639-7202

Call the Patient Representatives office if you have any questions about the Health Care Proxy Form or if you have any concerns about your care.

**Perioperative Clinical Nurse Specialist**

(212) 639-5935

If you have any questions about MSK releasing any information while you are having surgery, call the clinical nurse specialist.

**Private Nursing Options**

(212) 639-6892

Patients may request private nurses or companions. For more information, call the Private Duty Nursing Office.

**Resources for Life After Cancer (RLAC) Program**

(646) 888-4740

At MSK, care doesn't end after active treatment. The RLAC Program is for patients and their families who have finished treatment. This program has many services, including seminars, workshops, support groups, counseling on life after treatment, and help with insurance and employment issues.

**Social Work**

(212) 639-7020

Social workers help patients, family, and friends deal with issues that are common for cancer patients. They provide counseling on getting used to a serious illness, advice on how to communicate with family, friends, and young children, and help with employment issues.

**Tobacco Cessation Program**

(212) 610-0507

If you want to quit smoking, MSK has specialists who can help. Call for more information.

The following are resources outside of MSK that you may find helpful:

**American Cancer Society**

[www.cancer.org](http://www.cancer.org)

**National Cancer Institute**

[www.cancer.gov](http://www.cancer.gov)

**Light of Life Foundation**

[checkyourneck.com](http://checkyourneck.com)

**Thyroid Cancer Survivors' Association**

<http://www.thyca.org/>

For additional web based information visit LIBGUIDES on MSKCC's library website at <http://library.mskcc.org> or the Thyroid Cancer section of [MSKCC.org](http://MSKCC.org). You can also contact the library reference staff at (212) 639-7439 for assistance.