PATIENT & CAREGIVER EDUCATION

Radiation Therapy to the Abdomen

This information will help you prepare for radiation therapy to your abdomen (belly) at Memorial Sloan Kettering (MSK). It will help you know what to expect before, during, and after your treatment. It will also help you learn about side effects and how to care for yourself during treatment.

Read through this resource before you start radiation therapy. Use it as a reference in the days leading up to your treatments so you can prepare as much as possible. Bring this resource to your simulation appointment and all future appointments with your radiation oncologist. You and your healthcare team will refer to it throughout your treatment.

About Radiation Therapy

Radiation therapy uses high-energy beams to treat cancer. It works by damaging the cancer cells and making it hard for them to reproduce. Your body is then naturally able to get rid of the damaged cancer cells. Radiation therapy also affects normal cells. However, your normal cells are able to repair themselves in a way that cancer cells can’t.

You will have a type of radiation therapy called external beam radiation. During your treatments, a machine will aim beams of radiation directly to the tumor. The beam passes through your body and destroys cancer cells in its path. You won’t see or feel the radiation.

Radiation therapy takes time to work. It takes days or weeks of treatment before cancer cells start to die. They will keep dying for weeks or months after treatment ends.

You can have radiation therapy before, during, or after surgery or chemotherapy.
Your Role on Your Radiation Therapy Team

You will have a team of healthcare providers working together to provide the right care for you. You’re part of that team, and your role includes:

- Arriving on time for all of your radiation therapy appointments.
- Asking questions and talking about your concerns. We have included a list of possible questions at the end of this resource.
- Telling someone on your radiation therapy team when you have side effects.
- Telling your doctor or nurse if you’re in pain.
- Caring for yourself at home, including:
  - Quitting smoking, if you smoke. If you want to quit, call our Tobacco Treatment Program at 212-610-0507.
  - Following your healthcare team’s instructions to care for your skin.
  - Drinking liquids as instructed by your healthcare team.
  - Eating the foods suggested by your healthcare team.
  - Maintaining your weight.

Simulation

Before you start radiation therapy, you will have a treatment planning procedure called a simulation. This is done to make sure that:

- Your treatment area is mapped out.
- You get the right dose of radiation.
- The radiation dose to nearby tissue is as small as possible.

During your simulation, you will have imaging scans and your skin will be marked with little tattoo dots. These marks help your team make sure you’re in the correct position for your radiation treatments.

Your simulation will take 2 to 4 hours.
Preparation for your simulation

- **During your simulation, you will be lying in one position for a long time.** If you think you will be uncomfortable lying still, you can take acetaminophen (Tylenol®) or your usual pain medication before your simulation.

- If you think you may get anxious during your procedure, ask your doctor if medication may be helpful.

- Wear comfortable clothes that are easy to take off. You will need to change into a hospital gown.

- Don’t wear jewelry, powder, or lotion.

To help pass the time during your simulation, your radiation therapists can play music for you.

Depending on the area being treated, you may not be able to eat or drink before your simulation. Your doctor or nurse will talk with you about this.

Day of your simulation

**Once you arrive**

A member of your radiation therapy team will check you in. You will be asked to state and spell your full name and birth date many times. This is for your safety. People with the same or a similar name may be having care on the same day as you.

Your radiation therapist will greet you. They will take a photograph of your face. This picture will be used to identify you throughout your treatment.

Your radiation therapist will then explain what to expect during your simulation. If you haven’t already signed a consent form, your radiation oncologist will review everything with you and ask for your signature.

You may be asked to drink about 1 cup (8 ounces) of barium. This is a contrast liquid. It will help us see your small intestine on the imaging scans that will be taken later.
During your simulation

You will need to change into a hospital gown for your simulation. You should keep your shoes on. If you wear a head covering (such as a wig, turban, or cap), you may need to remove it.

After you change, your radiation therapists will bring you to the simulation room and help you lie down on the table. They will do everything they can to make sure you’re comfortable and have privacy.

The table will have a sheet on it, but it’s hard and has no cushion. Also, the room is usually cool. If you feel uncomfortable at any time, tell your radiation therapists. If you haven’t taken pain medication and think you may need it, tell your radiation therapists before your simulation starts.

Once your simulation starts, don’t move. Moving may change your position. However, if you’re uncomfortable or need help, tell your radiation therapists.

During your simulation, you will feel the table move into different positions. The lights in the room will be turned on and off and you will see red laser lights on each wall. Your radiation therapists use these laser lights as a guide to help position you on the table. Don’t look directly into the laser lights, because they may damage your eyes.

There will be an intercom (microphone and speaker) and a camera inside the simulation room. Your radiation therapists will walk in and out of the room during your simulation, but there will always be someone who can see and hear you. You will hear your radiation therapists talking to each other as they work, and they will talk to you and explain what they’re doing.

Positioning

You will be lying on your back or on your side. If you’re laying on your back, your arms will be raised above your head. You will be in the same position during your simulation and each treatment. To help you stay in the correct position, a mold may be made of your upper body. Your radiation therapists will make this for you.

To make the mold, your radiation therapists will pour warm liquid into a large plastic bag. They will seal the bag and place it on the table. You will lie on top of
the bag, either on your back with your arms raised above your head or on your side.

The liquid will feel warm at first, but it will cool as it hardens. While it’s cooling, your radiation therapists will tape the bag to your skin so it takes the shape of your upper body and arms. This takes about 15 minutes.

You will lie in this mold during your simulation and each of your treatments. This helps make sure you’re in the correct position during each treatment.

**Imaging**

You will have imaging scans while you’re in your treatment position. These may be done on a machine called a simulator or on a computed tomography (CT) scan machine. The scans will be used only to map your treatment area. They aren’t used for diagnosis or to find tumors.

If you’re having a CT scan, your nurse may place an intravenous (IV) line in one of your veins. The IV line will be used to give you contrast (dye) before the scan. This helps your team get clear images of the area to be treated.

You may need to hold your breath during the CT scan. Your radiation therapists will tell you how and when to do it.

During the scan(s), you will hear the machine turn on and off. Even if the noise seems loud, your radiation therapists will be able to hear you if you talk to them.

The imaging scan(s) will take about 45 minutes.

**Skin markings (tattoos)**

While you’re lying in your treatment position, your radiation therapists will draw on your skin with a felt marker. You can wash off the felt markings after your simulation.

You will also need permanent skin markings called tattoos. The tattoo marks are no bigger than the head of a pin. Your radiation therapists will use a sterile needle and a drop of ink to make each tattoo. Getting them will feel like a pinprick. **The tattoos are permanent and won’t wash off.** If you’re concerned about having tattoos as part of your radiation treatment, talk with your radiation oncologist.
You will get 5 to 7 tattoos in the area being treated. After the tattoos are made, your radiation therapists will take photographs of you in your treatment position. The photographs and tattoo marks will be used to position you correctly on the table each day of your treatment.

**After Your Simulation**

At the end of your simulation appointment, we will schedule an appointment for your set-up procedure. This is the final appointment before your treatment starts. You will also be assigned to a machine for your daily treatment.

**Scheduling your treatment**

Radiation treatments are given daily, Monday through Friday, for about ________ weeks.

You may have chemotherapy and radiation treatments on the same day. It’s safe to get chemotherapy either before or after your radiation treatment.

You must come in every day that you’re scheduled for treatment. Your radiation therapy may not work as well if you skip or miss treatments. If you need to miss a treatment for any reason, you must call your radiation oncologist’s office to tell your team. If you need to change your schedule for any reason, speak with the scheduler or call your doctor’s office.

**Planning your treatment**

During the time between your simulation and your set-up procedure, your radiation oncologist will work with a team to plan your treatment. They will use the images taken during your simulation to plan the angles and shapes of your radiation beams. They will also determine the dose of radiation that you will receive. These details are carefully planned and checked. This takes between 5 days and 2 weeks.

**Set-up Procedure**

Before your first treatment, you will have a set-up procedure. This procedure usually takes about 1 hour. If pain or anxiety medication was helpful during your simulation, you may want to take it before this procedure.
When you arrive for your set-up procedure, you will be shown to the dressing room and asked to change into a hospital gown.

Your radiation therapists will bring you to the room where you will receive your treatment each day. They will position you on the table. You will lie exactly as you did on the day of your simulation.

Special x-rays called beam films will be taken to make sure that your position and the area being treated are correct. Beam films may also be taken before some of your other treatments. They aren’t used to see how your tumor responds to the treatment.

Depending on your treatment plan, you may start treatment on the same day as your set-up procedure or 1 to 2 days later.

**During Your Treatment**

For each of your treatments, check in at the reception desk and have a seat in the waiting room. When your radiation therapists are ready for you, you will be shown to the dressing room and asked to change into a hospital gown. Keep your shoes on during your treatment.

Your radiation therapists will bring you into the treatment room. They will help you lie on the table. You will be positioned exactly how you were lying during your set-up procedure.

Once you’re positioned correctly, your radiation therapists will leave the room, close the door, and start your treatment. You won’t see or feel the radiation, but you may hear the machine as it moves around you and is turned on and off. You will be in the treatment room for about 30 minutes, depending on your treatment plan. Most of this time will be spent putting you in the correct position. The actual treatment only takes a few minutes.

You will be alone in the room during your treatment, but your radiation therapists will be able to see you on a monitor and hear you through an intercom at all times. They will make sure you’re comfortable during your treatment.

Breathe normally during your treatment, but don’t move. However, if you’re
uncomfortable or need help, tell your radiation therapists. They can turn off the machine and come in to see you at any time, if needed.

Neither you nor your clothes will become radioactive during or after treatment. It’s safe for you to be around other people.

**Weekly visits during your treatment**

Your radiation oncologist and nurse will see you each week to ask you about any side effects you’re having, talk with you about your concerns, and answer your questions. This visit will be before or after your treatments each ________________. You should plan to be at your appointment for about 1 extra hour on those days.

If you need to speak with your radiation oncologist or radiation nurse between these weekly visits, call your radiation oncologist’s office. You can also ask the support staff or your radiation therapists to contact your radiation oncologist or nurse when you come in for treatment.

**Vitamins and dietary supplements**

Many people ask about taking vitamins during treatment. You may take a daily multivitamin, if you wish. Don’t take more than the recommended daily allowance of any vitamin. Don’t take any other vitamins or any supplements without talking to your doctor. This includes both nutritional and herbal supplements.

**Side Effects of Treatment**

You may have side effects from radiation therapy. The type and how severe they are depends on many things. These include the dose of radiation, the number of treatments, and your overall health. The side effects may be worse if you’re also getting chemotherapy.

Below are the most common side effects of radiation therapy to the abdomen. You may have all, some, or none of these. Your nurse will talk with you about the side effects you’re most likely to have.
Appetite loss

Your appetite may decrease while you’re receiving treatment. However, your body needs protein and calories. They help repair the normal cells injured from radiation. Also, if you use a mold during your treatments, it may not fit correctly if your weight changes. Try not to lose weight during your treatment.

- Be selective about what you eat to be sure you increase your calories and protein. We will give you the resource *Eating Well During and After Your Cancer Treatment* ([www.mskcc.org/pe/eating_cancer_treatment](http://www.mskcc.org/pe/eating_cancer_treatment)). It contains many suggestions. Try the foods that are recommended.
- Try to eat small meals often throughout the day.
- If you never seem to feel hungry, set up a schedule to make sure you eat regularly. For example, set a schedule to eat every 2 hours.
- Eat your meals in a calm place. Take your time eating. Eat with family or friends whenever you can.
- Choose foods with different colors and textures to make your meals more appealing.
- Bring snacks and drinks to your treatment appointments. You can have while while you’re waiting or while you’re coming to and from your appointments.
- Drink liquid nutritional supplements if you’re not eating enough food. There are many products available, and they come in many flavors. Ask your doctor or nurse which product is best for you.

Nausea or vomiting

Nausea is when your stomach is upset and you feel like you may vomit (throw up). You may have nausea, vomiting, or both during your treatment. This may happen as early as your first treatment.

If you have nausea or vomiting, tell your doctor or nurse. They can prescribe medication to help. Take the anti-nausea medication 1 hour before each treatment appointment. It may also help to change your diet while you’re getting treatment.

Below are suggestions to help manage your nausea and make sure you’re getting enough food and liquids.
• Eat a light meal before each treatment appointment.
• Drink only a small amount of liquids with your meals to keep from feeling too full or bloated.
• Sip liquids between your meals throughout the day. Using a straw may help. Try freezing your favorite drinks in ice cube trays and sucking on these during the day.
• Choose foods that won’t cause nausea, such as:
  ○ Foods at room temperature or cooler
  ○ Liquids that are cooled or chilled
  ○ Dry, starchy foods such as toast, soda crackers, melba toast, dry cereal, pretzels, and angel food cake
  ○ Yogurt, sherbet, and clear liquids (such as apple juice, Jell-O®, and ginger ale)
  ○ Cold chicken or turkey, baked or broiled, with the skin removed
  ○ Soft fruits and vegetables
• Avoid foods and liquids that may make nausea worse, such as:
  ○ Hot foods with strong odors
  ○ Spicy, fatty, greasy, and fried foods
  ○ Very sweet foods
  ○ Acidic or citrus foods and juices (such as orange, grapefruit, pineapple, and tomato)
  ○ Alcohol
• If you feel nauseous, try eating small amounts of dry, starchy foods (such as the examples listed above). You can also try drinking ginger tea, as long as there aren’t any sores in your mouth. If you start feeling better, try having small, frequent meals.
Pain or difficulty swallowing, heartburn, or upset stomach

If your esophagus is in the area being treated, you may have trouble swallowing or pain when you swallow. If your stomach is in the area being treated, you may have heartburn or an upset stomach. These side effects often start during your second or third week of treatment. They can last for up to 2 weeks after you finish treatment.

It’s important to manage these side effects so you can eat, drink, and get enough nutrition during your treatment. You can take liquid supplements if you aren’t eating enough food. There are many products available, and they come in a variety of flavors. Speak with your doctor or nurse about how to select the one that will be best for you. You can also ask to make an appointment with a dietitian if you need help with your diet.

Tell your doctor or nurse if you’re having any of these side effects. They will give you medication to help. You can also follow the guidelines below.

If you’re having pain or trouble swallowing:

- Avoid foods and drinks that may irritate your esophagus, such as:
  - Very hot foods and fluids
  - Dry, hard, and coarse foods (such as chips, pretzels, and crackers)
  - Spices (such as pepper, chili, Tabasco® sauce, and curry)
  - Acidic or citrus foods and juices (such as orange, grapefruit, pineapple, and tomato)
  - Foods and drinks with caffeine (such as coffee, tea, cola, and chocolate)
  - Alcohol
  - Tobacco
- Take small bites of food and chew well before you swallow.
- Eat soft, moist, or puréed foods. These foods may be easier to swallow. You can also try adding sauces and gravies to foods.
- Eat and drink cold foods and liquids to help soothe your throat. Some people find that fruit nectars are particularly soothing.
If you’re having trouble swallowing pills, ask your doctor or nurse if the medication comes in liquid form. If not, many pills can be crushed and taken with a soft food such as applesauce. However, check with your doctor, nurse, or pharmacist before doing this. Crushing some medicines affects how they work.

If you’re having heartburn:

- Don’t eat at bedtime. For most people, it’s best to avoid eating anything for about 30 minutes before bedtime.
- Sit upright for at least 30 minutes after each meal. This helps keep your stomach juices from flowing back into your esophagus.

**Diarrhea**

You may notice changes in your bowel movements during your treatment. These may include having more bowel movements and softer stools than usual. You may also develop diarrhea. These side effects can start during the first few weeks of your treatment and last until 2 to 4 weeks after you finish treatment.

Below are guidelines to help you manage diarrhea and other changes in your bowel movements. Follow these guidelines until your bowel movements return to normal.

- Eat foods that are low in fiber, low in fat, and lactose-free. Your nurse will give you the resource. When your bowel movements return to your normal pattern, you can slowly start adding foods from your usual diet.
- Try to drink 2 to 3 quarts (8 to 12 cups) of liquids throughout the day. This will help replace the water and salts you lose in your bowel movements.
  - Choose drinks such as Gatorade®, juices, and nectars. It’s best to dilute them (add a little bit of water) first so they’re not too strong. Non-fat soup broth and Pedialyte® are also good choices.
  - Limit drinks with caffeine (such as coffee, tea, and colas), because they can make you more dehydrated.
- Eat bananas and potatoes without the skin. They help replace important salts you may lose when you have diarrhea.
- Avoid any food or drink that makes your symptoms worse.
• Take medication for diarrhea, such as loperamide (Imodium®). You can buy it at a pharmacy without a prescription. Your doctor may prescribe other medications.

## Skin and hair reactions

During radiation therapy, your skin and hair in the area being treated may change. This may happen both on your abdomen and on your back where the radiation exits your body. This is normal.

• After 2 to 3 weeks, your skin may become pink or tanned. Later in your treatment, your skin may become bright red or very dark.

• Your skin may feel dry, itchy, and look flaky.

• You may have a rash, especially in areas where your skin has been exposed to the sun. If this happens, tell your doctor or nurse. A rash can also be a sign of infection.

• Skin in sensitive areas may blister, open, and peel. If this happens, tell your doctor or nurse.

• You may lose some or all of the hair in the treatment area. The hair will usually grow back 3 to 6 months after you finish treatment.

Your skin will gradually heal after you finish treatment, but this often takes 3 to 4 weeks. Sometimes, skin reactions get worse during the week after you finish treatment. If this happens, call your doctor or nurse.

Your nurse will teach you how to care for your skin. They will apply special dressings (bandages) or creams, if needed. Your doctor may stop your treatment until your skin heals.

Follow the guidelines below to care for your skin. Keep following them until your skin gets better. **These guidelines refer only to the skin in the treatment area.**
Keep your skin clean

- Bathe or shower every day. Use warm water and a mild, unscented soap (such as Neutrogena®, Dove®, baby soap, Basis®, or Cetaphil®). Rinse your skin well and pat it dry with a soft towel.
- When washing, be gentle with the skin in the treatment area. Don’t use a washcloth, scrubbing cloth, or brush.
- The tattoo marks you received before your treatment are permanent and won’t wash off. You may get other markings during treatment, such as an outline of your treatment area with a felt-tipped marker. You can remove these markings with mineral oil when your radiation therapists say it’s okay.
- Don’t use alcohol or alcohol pads on the skin in the treatment area.

Moisturize your skin often

- Start using a moisturizer when you start treatment. This can help minimize skin reactions. You can use an over-the-counter (not prescription) moisturizer.
  - Use a moisturizer that doesn’t have any fragrances or lanolin. Your nurse may suggest a moisturizer for you to use.
  - Don’t use more than 1 moisturizer at a time, unless your nurse tells you to use more.
- If you’re using a moisturizer, apply it 2 times each day.

Avoid irritating your skin in the area being treated

- If your skin is itchy, don’t scratch it. Apply moisturizer. Ask your nurse for recommendations on how to relieve the itching. They may give you a prescription for medication to treat itchy skin.
- Wear loose-fitting cotton clothing and undergarments over the treatment area. Avoid tight clothing that will rub against your skin.
- Use only the moisturizers, creams, or lotions that you have discussed with your radiation oncologist or nurse.
- Don’t use makeup, perfume, powder, or aftershave on the skin in the
Don’t shave in the treatment area. If you must shave, use only an electric razor. Stop if your skin becomes irritated.

Don’t put tape on the treatment area.

Don’t let the skin in the treatment area come into contact with extreme hot or cold temperatures. This includes hot tubs, water bottles, heating pads, and ice packs.

If you don’t have any skin reactions, you can swim in a chlorinated pool. Shower right after you get out of the pool to rinse off the chlorine.

Avoid tanning or burning your skin. If you’re going to be in the sun:
- Use a PABA-free sunblock with an SPF of 30 or higher.
- Wear loose-fitting clothing that covers as much of the skin in the treatment area as possible.

**Fatigue**

Fatigue is feeling tired or weak, not wanting to do things, not being able to concentrate, or feeling slowed down. You may develop fatigue after 2 to 3 weeks of treatment, and it can range from mild to severe. Fatigue will gradually go away after your treatment is done, but it can last for several months.

There are many reasons you may develop fatigue during treatment, including:

- The effects of radiation on your body.
- Traveling to and from your treatments.
- Not having enough restful sleep at night.
- Not eating enough protein and calories.
- Having pain or other symptoms.
- Feeling anxious or depressed.
- Side effects of certain medications.

You may find that your fatigue is worse at certain times of the day. Below are suggestions to help you manage your fatigue.
Ways to manage fatigue

- If you’re working and are feeling well, keep doing so. However, working less may help you have more energy.

- Plan your daily activities. Think about the things you need to do or that are most important to you. Do these activities when you have the most energy.

- Plan time to rest or take short (10 to 15 minute) naps during the day, especially when you feel more tired. When you nap, try to sleep for less than 1 hour at a time.

- Try to sleep for 8 or more hours every night. This may be more sleep than you needed before you started radiation therapy.
  - Being active during the day can help you sleep better at night. For example, if you’re able to exercise, you can go for a walk, do yoga, or ride a bike.
  - Relaxing before you go to bed can also help you sleep better at night. For example, you can read a book, work on a jigsaw puzzle, listen to music, or do calming hobbies.
  - You may also find it helpful to go to sleep earlier at night and get up later in the morning.

- Ask family and friends to help you with things like shopping, cooking, and cleaning. Check with your insurance company to see if they cover home care services.

- You may have more energy if you exercise. Ask your doctor if you can do light exercise, such as walking, stretching, or yoga.

- Eat foods and drink liquids that are high in protein and calories. For information about eating during your treatment, read the resource Eating Well During and After Your Cancer Treatment (www.mskcc.org/pe/eating_cancer_treatment).

- Ask your radiation oncologist or nurse for help managing any other side effects you have. Pain, nausea, diarrhea, trouble sleeping, or feeling depressed or anxious can increase your fatigue.
Changes to your blood cell counts

Bone marrow is the substance inside your bones that makes blood cells. You have 3 kinds of blood cells:

- White blood cells that fight off infection.
- Platelets that help your blood to clot when you injure yourself.
- Red blood cells that carry the oxygen you need for energy.

You may have lowered blood cell counts when large areas of bone marrow are in the area being treated. Chemotherapy can also impact your blood cell count.

We will keep track of your blood cell counts with a blood test called a complete blood count (CBC). If your counts drop, we may stop your treatment until the level increases. We will discuss this with you if it happens.

Sexual health

You may have concerns about how cancer and your treatment may affect your sexuality. You aren’t radioactive. You can’t pass radiation to anyone else, so it’s safe to be in close contact with other people.

You can be sexually active during radiation treatment, unless your radiation oncologist gives you other instructions. However, if you or your partner are able to have children, you must use birth control (contraception) to prevent pregnancy during your treatment.

The American Cancer Society has resources about sexual health issues during cancer treatment. The one for men is called *Sex and the Man with Cancer*. The one for women is called *Sex and the Woman with Cancer*. You can search for them at [www.cancer.org](http://www.cancer.org) or call 800-227-2345 for a copy.

MSK also has sexual health programs to help you address the impact of your disease and treatment on your sexual health. You can meet with a specialist before, during, or after your treatment.

- **Female Sexual Medicine & Women’s Health Program**: For more information or to make an appointment, call 646-888-5076.
- **Male Sexual & Reproductive Medicine Program**: For more information or to
Emotional health

Cancer diagnosis and treatment can be very stressful and overwhelming.

You may feel:

- Anxious
- Afraid
- Alone
- Ambivalent
- Angry
- Depressed
- Helpless
- Frustrated
- Nervous
- Numb
- Worried

All of these types of feelings are normal if you or someone you love has a serious illness.

You may also worry about telling your employer that you have cancer or about paying your medical bills. You may worry about how your family relationships may change, about the effect of cancer treatment on your body, or if you will continue to be sexually attractive. You may worry that the cancer will come back. We’re here to support you.

Ways to cope with your feelings

- Talk with other people. When people try to protect each other by hiding their feelings, they can feel very alone. Talking can help the people around you know what you’re thinking. It may help to talk about your feelings with someone you trust. You can talk with your spouse or partner, a close friend, family member, chaplain, nurse, social worker, or psychologist. You may also find it helpful to talk to someone who’s going through radiation therapy, or a cancer survivor or caregiver who has been through a similar treatment. Through our Patient-to-Patient Support Program, you have a chance to speak with former patients and caregivers. To learn more about this service, call 212-639-5007.

- Join a support group. Meeting other people with cancer will give you a chance to talk about your feelings and listen to other people who have the same concerns. You will learn how others cope with their cancer and treatment. Your doctor, nurse, or social worker can tell you about the support groups you might be interested in.
Try relaxation and meditation. You might try thinking of yourself in a favorite place while breathing slowly, paying attention to each breath, or listening to a soothing music or sound. For some people, praying is another form of meditation. These kinds of activities can help you feel relaxed and calm.

Exercise. Many people find that light activity like walking, biking, yoga, or water aerobics helps them feel better. Talk with your doctor or nurse about types of exercise you can do.

We all have our own way of dealing with difficult situations. Generally, we use whatever has worked for us in the past. However, sometimes this isn't enough. We encourage you to speak with your doctor, nurse, or social worker about your concerns.

After Your Treatment

Be sure to keep your follow-up appointments with your radiation oncologist. During these appointments, your radiation oncologist will evaluate your response to treatment. You may have blood tests, x-rays, and scans during these visits.

Before each follow-up appointment, write down your questions and concerns. Bring this and a list of all your medications to your appointment. If you’re running low on any medication you need, tell your radiation oncologist before you run out. You can also call your radiation oncologist or nurse at any time if you have any questions or concerns.

Contact Your Radiation Oncologist or Radiation Nurse if You Have:

- A temperature of 100.4 °F (38 °C) or higher
- Chills
- Discomfort in the treated area
- Any new or unusual symptoms
Contact Information

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 the numbers listed below.

- Radiation oncologist: _________________________
  Phone number: _________________________

- Radiation nurse: _________________________
  Phone number: _________________________

After 5:00 PM, during the weekend, and on holidays, call ____________ and ask for the radiation oncologist on call. If there’s no number listed, or you’re not sure, call 212-639-2000.

Resources

Many of the resources listed in this guide can be found on the Internet. If you don’t have a computer or if you don’t know how to use the Internet, check with your local public library or community center.

**MSK support services**

**Counseling Center**
646-888-0200
Many people find that counseling helps them. We provide counseling for individuals, couples, families, and groups, as well as medications to help if you feel anxious or depressed.

**Female Sexual Medicine & Women’s Health Program**
646-888-5076
This program helps female patients who are dealing with cancer-related sexual health challenges, including premature menopause and fertility issues.
Integrative Medicine Service
646-888-0800
MSK’s Integrative Medicine Service offers patients many services to complement traditional medical care. These include music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy.

Male Sexual & Reproductive Medicine Program
646-888-6024
This program helps male patients who are dealing with cancer-related sexual health challenges, including erectile dysfunction.

Nutrition Services
212-639-7312
MSK’s Nutrition Service offers nutritional counseling with one of our certified dietitians. Your dietitian will review your current eating habits and give advice on what to eat during and after treatment.

Patient and Caregiver Support Program
212-639-5007
You may find it comforting to talk with a cancer survivor or caregiver who has been through a similar treatment. Through our Patient and Caregiver Support Program, we’re able to offer you a chance to talk with former patients and caregivers.

Resources for Life After Cancer (RLAC) Program
646-888-8106
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.

Tobacco Treatment Program
212-610-0507
If you want to quit smoking, MSK has specialists who can help. Call for more information.
External resources

**American Cancer Society (ACS)**

www.cancer.org
800-ACS-2345 (800-227-2345)
Offers a variety of information and services, including Hope Lodge, a free place for patients and caregivers to stay during cancer treatment.

**American Society for Therapeutic Radiology and Oncology**

www.rtanswers.org
800-962-7876
A group of radiation oncology professionals that specializes in treating patients with radiation therapy. Provides detailed information on treating cancer with radiation and contact information for radiation oncologists in your area.

**CancerCare**

www.cancercare.org
800-813-HOPE (800-813-4673)
275 Seventh Avenue (Between West 25<sup>th</sup> & 26<sup>th</sup> Streets)
New York, NY 10001
Provides counseling, support groups, educational workshops, publications, and financial assistance.

**Cancer Support Community**

www.cancersupportcommunity.org
Provides support and education to people affected by cancer.

**National Cancer Institute (NCI) Cancer Information Service**

www.cancer.gov
800-4-CANCER (800-422-6237)
Provides education and support to people with cancer and their families. Publications are available online and in print.
Questions to Ask Your Doctor or Nurse

We recommend that you write down the questions to ask during your visit with your doctor or nurse. Write down the answers during your appointment so that you can review them again later.

What kind of radiation therapy will I get?

How many treatments will I get?

What side effects should I expect during radiation therapy?

Will these side effects go away after radiation therapy is finished?

What kind of late side effects should I expect after radiation treatment?

For more resources, visit www.mskcc.org/pe to search our virtual library.