PATIENT & CAREGIVER EDUCATION

Image-Guided, Intensity-Modulated Radiation Therapy (IG-IMRT) to the Prostate

This information will help you prepare for image-guided, intensity-modulated radiation therapy (IG-IMRT) to the prostate, including what to expect before, during, and after your treatment. You will also learn about side effects and how to care for yourself during your treatment.

We suggest you read through this resource at least once before you start radiation therapy, and then use it as a reference in the days leading up to your treatments to help you prepare. Bring it with you for your simulation appointment and all future appointments with your radiation oncologist so that you and your healthcare team can refer to it.

About IG-IMRT

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

IG-IMRT is a type of targeted external beam radiation therapy. During external beam radiation, a treatment machine will aim beams of radiation directly to the tumor. The beam passes through your body and destroys cancer cells in its path. You will not see or feel the radiation.

IG-IMRT uses images that are taken in real time to mold the radiation beams to your tumor. Because the normal movements of your body can cause your prostate to move slightly during or between treatments, your healthcare team will insert markers into your prostate. These allow your doctors to have a better
view of your prostate during your treatments. The radiation machine moves around your body so the beams can be aimed from many angles. In addition, the shape of the beam changes while the treatment is being given. This changes the intensity of the beam, which allows your doctor to target your tumor and avoid your healthy tissue.

You may receive radiation therapy either alone or in combination with hormone therapy. Depending on the stage of the cancer, your doctor may recommend hormonal therapy. The goal of hormonal therapy is to shrink the prostate gland and stop the cancer from growing to help make the treatment more effective. For more information, read *Hormonal Therapy for People with Prostate Cancer* ([www.mskcc.org/pe/hormonal_therapy_prostate_cancer](www.mskcc.org/pe/hormonal_therapy_prostate_cancer)).

**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 are a part of that team, and your role includes:

- Arriving on time for all your radiation therapy sessions.
- Asking questions and talking about your concerns.
- Letting someone on your radiation therapy team know when you have side effects.
- Telling your doctor or nurse if you are in pain.
- Caring for yourself at home.
- 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.
- Eating the foods suggested by your radiation therapy team.
- Maintaining your weight.

**Marker Placement**

Before you begin IG-IMRT, you will need to have 3 markers placed in your prostate. There are 2 types of markers: fiducial markers or beacon transponders...
Fiducial markers are made of gold. They allow a computed tomography (CT) scanner to identify your prostate gland and tumor. The beacon transponders send signals to a specially designed tracking system, similar to a GPS system. The beacon transponder allows your radiation therapists to precisely check the position of your tumor during each treatment. This helps us to make any necessary adjustments and ensures that the radiation poses the least risk to healthy tissues while maximizing the dose to the tumor.

Your markers will be placed at least 5 days before you begin your simulation, by your healthcare team in the urology department. A nurse will call you to review the procedure with you. You will receive a resource called About Your Prostate Fiducial Marker Placement (www.mskcc.org/pe(fiducial_markers) that has more information about the procedure.

Before your marker placement

- Tell your doctor if you take any medications to thin your blood. We have listed some below, but there are others.
  - Aspirin
  - Clopidogrel (Plavix®)
  - Dalteparin (Fragmin®)
  - Heparin
  - Warfarin (Coumadin®)
  - Enoxaparin sodium (Lovenox®)
  - Rivaroxaban (Xarelto®)

3 days before your marker placement

You may need to stop taking certain medications, including:

- Aspirin
- Products that contain aspirin
- Vitamin E
- Nonsteroidal anti-inflammatory drugs (NSAIDs) such as:
  - Ibuprofen (Advil® or Motrin®)
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. For more information, review the resource *Common Medications Containing Aspirin and Other Nonsteroidal Anti-inflammatory Drugs (NSAIDs)* ([www.mskcc.org/pe/common_meds](http://www.mskcc.org/pe/common_meds)). It includes important information about medications you’ll need to avoid before your procedure and what medications you can take instead.

**The day of your marker placement**

- Do a Fleet® enema 3 hours before your procedure. You can purchase it at your local pharmacy without a prescription. Follow the instructions on the box.

- You will need to take an antibiotic to prevent infection from the procedure. Your doctor or nurse will tell you which antibiotic you will take.

**Simulation**

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

- Your treatment site is mapped out.
- You get the right dose of radiation.
- The amount of radiation that gets to your nearby tissues is as small as possible.

During your simulation, you will have imaging performed (see below) and your skin will be marked with little tattoo dots. These marks help your therapists to line you up correctly for your treatment.

Your simulation will take about 2 hours, but can be shorter or longer depending on the treatment your doctor has planned for you.
Bowel preparation

During your simulation, your bowel must be empty of stool. You will need to do a bowel preparation for your simulation.

You will need to purchase the following supplies before your simulation:

- Psyllium (Metamucil®) powder. You can purchase it at your local pharmacy without a prescription.
- Fleet® enema. You can purchase it at your local pharmacy without a prescription.

7 days before your simulation

- Mix 1 rounded teaspoon of psyllium (Metamucil®) powder in 8 ounces of water and drink. You must do this every day until the day of your simulation.

The day of your simulation

- Do a Fleet® enema 3 hours before your simulation. Follow the instructions on the box.
- Take your usual medications.
- During the simulation, you will stay in one position for a long time. If you think this will be hard for you, take acetaminophen (Tylenol®) or your usual pain medication 1 hour before your appointment.

What to expect

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

When you arrive for your appointment, your radiation therapist will greet you and take a photograph of your face. This picture will be used to identify you throughout your treatment.

Your therapist will review and explain the simulation to you. If you have not already signed a consent form, your radiation oncologist will review everything with you, and ask for your signature.
During your simulation

For your simulation, you will need to get undressed and change into a gown. You should keep your shoes on. You will need to drink about 1 cup of oral contrast. This helps us see your small intestine on the images that will be taken later. You may be asked to drink 1 cup of water before the simulation begins. This is to fill your bladder. You may also need to have a catheter placed into your bladder during the procedure. The catheter will be removed when your simulation is done.

Your therapists will help you lie down on your back on the table and make every effort to ensure your comfort and privacy.

Although the table will have a sheet on it, it is hard and has no cushion. If you have not taken pain medication and think you may need it, tell your therapists before your simulation begins. Also, the room is usually cool. If you feel uncomfortable at any time, let your therapists know.

Throughout 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 therapists use these laser lights as a guide when they position you on the table. **Do not look directly into the red beam because it may damage your eyes.**

Although your therapists will walk in and out of the room during your simulation, there will always be someone who can see and hear you. You will hear your therapists speaking to each other as they work, and they will explain to you what they are doing. Do not move once your simulation begins, because it may change your position. However, if you are uncomfortable or need assistance, tell your therapists.

To help pass the time, your therapists can play music for you. You may bring a CD of your own from home, if you wish.

Positioning (mold)

While you are lying on the table, a mold will be made of your lower body. Your therapists will place a warm, wet sheet of plastic over your abdomen, hips, and thigh areas (pelvic area). They will press on it to shape it to fit around your body. As the mold cools, it hardens. This procedure takes about 15 minutes.
During your simulation, and every day of your treatment, this mold will be placed over you. It will be attached to the table on which you are lying. It helps ensure that you are in the correct position each time you receive your treatment.

![Computed Tomography (CT) scan machine with a plastic mold](image)

**Fig. 1. Computed Tomography (CT) scan machine**

### X-rays and CT scan

While you are lying in your position, you will get x-rays of the area to be treated (see Figure 1). If you had markers placed, they will be seen on these images. These may be done on an x-ray machine called a simulator or on a CT scan machine. These scans are used only to map your treatment. **They are not used for diagnosis or to find tumors.** If you need other imaging, your nurse will explain this to you.

Before the scan is taken, a small rubber catheter will be inserted into your rectum. This catheter is to help us see your rectum on the scans.

It will take about 45 minutes to get your scan. During the scan, you will hear the machine turn on and off. Even if the noise seems loud, your therapists will be able to hear you if you speak with them.

### Magnetic resonance imaging (MRI)

Your doctor may order an MRI to be done on the day of simulation. You will lie on a flat table with the mold made during simulation in place over your pelvis.
Skin markings (tattoos)

Your therapists will draw on your skin in the area being treated with a felt marker and make about 4 to 6 permanent skin markings called tattoos. Your therapists will use a sterile needle and a drop of ink to make the tattoo. The sensation of getting one feels like a pinprick. The tattoo marks are no bigger than the head of a pin. The felt markings can be washed off after your simulation. **The tattoos are permanent and will not wash off.** If you are concerned about receiving tattoos as part of your radiation treatment, talk with your doctor.

After the tattoos are made, your therapists will take several photographs of you in your simulation 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, we will give you an appointment for your set-up procedure. This is the final appointment before your treatment begins.

**Scheduling your treatment**

Radiation treatments may be given Monday through Friday, for 8 to 10 weeks. Your treatment will be given for about _______ days/weeks. You will be in the department about 60 to 90 minutes each day.

You must come in every day that you are scheduled for your treatment. Treatment may not be as effective if you skip or miss appointments. If you for some reason you can’t come in for treatment, you must call your radiation oncologist’s office to let your team know. If you need to change your schedule for any reason, speak with your radiation therapist.

**Treatment planning**

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 the radiation beams. They will also determine the dose of radiation that you will receive. These details are carefully planned and checked. This may take up to 2 weeks.

Your treatment plan is based on your body shape and size at the time of your
simulation. Try to keep your weight within 5 to 10 pounds of your usual weight to ensure that the plan remains accurate.

**Vitamins and dietary supplements**

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

**Set-up Procedure**

Before your first treatment, you will be scheduled for a set-up procedure. This generally takes about 1 hour. If pain medication was helpful during your simulation, you may want to take it before this procedure.

When you come for your set-up procedure, you will be shown to the dressing room and asked to change into a gown. Your therapists will bring you to the room where you will receive your treatment each day. They will position you on the treatment table. You will lie exactly as you did on the day of your simulation.

Special images (x-rays or CT scans) called beam films will be taken to make sure that your position and the area being treated are correct. If you had markers placed, these can be seen on the x-rays and will help us position you correctly. The beam films will be repeated throughout your treatment. **They are not used to see how your tumor is responding to the treatment.**

**During Your Treatment**

Your radiation therapy team will let you know if you need to continue drinking the psyllium and water mixture during your treatment.

After you check in at the reception desk, have a seat in the waiting room. When they are ready for you, your radiation therapists will ask you to undress from the waist down and change into a gown. You should keep your shoes on during the treatment.

Some people will need to have a full bladder for their treatment. If your doctor
tells you this is needed, your therapist will tell you how much water to drink and when to begin drinking it.

Your radiation therapists will bring you into the treatment room and help you lie on the table (see Figure 2). You will be positioned exactly how you were during your set-up procedure.

![Figure 2. During your treatment](image)

Once you are positioned correctly, your therapists will leave the room, close the door, and begin your treatment. If you had gold seeds placed, x-rays will be taken daily. Your radiation oncologist may use these to make adjustments to your treatment.

The beams of radiation are shaped by many small leaves of tungsten (a type of metal) sitting at the opening of the treatment machine. The computer will move the leaves into different positions to block the radiation. The radiation that passes through the opening between the leaves creates the beam that is directed toward your body. The leaves move while the beam is passing through. This varies the intensity of the beam and ensures that you receive the exact doses prescribed by your radiation oncologist.
You will not see or feel the radiation, although you may hear the machine as it moves around you and is turned on and off. You will be in the treatment room for 15 to 45 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.

Although you are alone during your treatment, your therapists can see you on a monitor and hear you through an intercom at all times. Your radiation therapist will make sure that you are comfortable during the treatment. **Breathe normally during your treatment, but do not move.** However, if you are uncomfortable and need help, speak to your radiation therapists. They can turn off the machine and come in to see you at any time, if necessary.

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

**Weekly visits during treatment (status checks)**

Your radiation oncologist and radiation nurse will see you each week to evaluate your response to treatment, ask about any side effects you may be having, and answer your questions. This visit will be before or after your treatments each _________________. You should plan on being in the department about 1 extra hour on those days.

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

**Side Effects**

Some people develop side effects from radiation therapy. The type and severity of side effects varies from person to person. Below are the most common side effects of radiation therapy to the prostate. You may have all, some, or none of these.

**Urinary changes**

Your prostate gland may swell and the lining of your bladder may become irritated during treatment. About 2 weeks after starting treatment you may
have:

- Difficulty starting to urinate.
- Increased frequency of urination.
- Frequent need to urinate at night.
- Sudden urge to urinate.
- Burning with urination.

Below are guidelines to help you manage these symptoms.

- Drink 6 to 8 glasses of water throughout the day.
- Decrease your intake of liquids after 8:00 PM.
- Avoid foods and beverages that may irritate the bladder. Examples are:
  - Caffeine (such as tea, coffee, soda)
  - Alcohol
  - Spicy foods (especially if you have burning with urination)
- Tell your doctor or nurse know if you have any urinary changes. They can recommend a change in your diet or prescribe medication that can help.

**Bowel Changes**

The wall of the rectum may become irritated. About 2 weeks after starting treatment you may have:

- More frequent and softer bowel movements.
- Worsening of hemorrhoidal symptoms.
- Rectal discomfort.
- Mucous discharge.
- A small amount of rectal bleeding.
- Increased gas.
- An increased urge to have a bowel movement.

These symptoms are usually mild. When you begin treatment, there are no
restrictions on your diet. If you develop any of these symptoms, talk with your nurse about how you can change your diet to reduce them. If you are still uncomfortable, let your doctor or nurse know. They can prescribe medication to help.

**Sexual health**

You might have concerns about how cancer and your treatment can 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.

See the resource *Sexual Activity During Cancer Treatment: Information for Men* ([www.mskcc.org/pe/sexual_activity_treatment_men](http://www.mskcc.org/pe/sexual_activity_treatment_men)) for additional information. The American Cancer Society also has resources about sexual health issues during cancer treatment. The one for men is called *Sex and the Man with Cancer*. You can search for it at [www.cancer.org](http://www.cancer.org) or call 800-227-2345 for a copy.

Some men have a burning sensation during ejaculation. In most men, it goes away 1 to 2 months after treatment is done.

Some men develop sexual changes after treatment is done. You may have:

- Erectile dysfunction (difficultly or inability to have or maintain an erection).
- A change in the sensation of orgasm.
- A change in the amount or consistency of your ejaculation.

These sexual changes may occur many months or even years after treatment. There are treatments for erectile dysfunction. We can give you a referral to a doctor who treats these problems.

Memorial Sloan Kettering (MSK) has a Male Sexual and Reproductive Medicine Program to help people address the impact of their disease and treatment on sexual health. You can meet with a specialist before, during, or after your
Reproductive health

Exposure of your testes to radiation may affect sperm production and your ability to have children in the future. If you want to preserve your ability to have biological children, we recommend banking your sperm before treatment begins. This involves collecting, freezing, and storing your sperm. Sperm can be stored for as long as you want, even for many years. See the resources *Sperm Banking* ([www.mskcc.org/pe/sperm_banking](http://www.mskcc.org/pe/sperm_banking)) and *Building Your Family After Cancer Treatment: Information for Men* ([www.mskcc.org/pe/building_family_men](http://www.mskcc.org/pe/building_family_men)) for more information.

If you are sexually active with a woman of reproductive age, it is important to use birth control during treatment and for 1 year after treatment is completed. This is to make sure you don’t conceive with sperm that may have been damaged by exposure to radiation, which could possibly result in birth defects.

Skin and hair reactions

During treatment, you will probably not notice any changes in your skin in the area being treated. However, you may lose some or all of the hair in your pubic area. The hair will usually grow back 3 to 6 months after treatment is done; however, the color and texture may be different.

Below are guidelines to help you care for your skin during treatment. **These guidelines refer only to the skin in the area being treated with radiation.**

Keep your skin clean

- Bathe or shower daily using 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 your skin in the area being treated. Do not use a washcloth, a scrubbing cloth, or brush.
- If you received tattoo marks before your treatment, they are permanent and won’t wash off. You may get other markings during treatment such as an
outline of your treatment area with a purple felt-tipped marker. You can remove these markings with mineral oil when your therapists say it’s okay.

- Do not use alcohol or alcohol pads on your skin in the area being treated. Also, do not use astringents, which are substances that shrink your body tissues. Two examples of astringents are calamine lotion and witch hazel.

**Moisturize your skin often**

- Start using a moisturizer when you begin treatment. This can help to minimize any skin reaction. You can use over-the-counter moisturizers. When choosing a moisturizer pick one that does not have any fragrances or lanolin. There are a number of products that are good to use, and your nurse may suggest one of these to you. Use only one at a time unless your nurse tells you to use more.

- If you are using a moisturizer, apply it 2 times a day.

**Avoid irritating the skin in the area being treated**

- Wear loose-fitting cotton clothing in the area being treated. Do not wear tight clothing that will rub against your skin.

- Use only the moisturizers, creams, or lotions that are recommended by your doctor or nurse.

- If your skin is itchy, do not scratch it. Apply moisturizer. Ask your nurse for recommendations on how to relieve the itching.

- Do not let your treated skin come into contact with extreme hot or cold temperatures. This includes hot tubs, water bottles, heating pads, and ice packs.

- If you have no skin reactions during your treatment, you can swim in a chlorinated pool. However, be sure to rinse off the chlorine right after getting out of the pool.

- Avoid tanning or burning your skin during treatment and for the rest of your life. If you are going to be in the sun, use a PABA-free sunblock with an SPF of 30 or higher. Also, wear loose-fitting clothing that covers you as much as possible.
Fatigue

Fatigue is a feeling of being 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 may last 6 weeks to 12 months after your treatment ends.

There are a lot of reasons why you may develop fatigue during treatment, including:

- The effects of radiation on your body.
- Traveling to and from treatment.
- Not having enough restful sleep at night.
- Not eating enough protein and calories.
- Having pain or other symptoms.
- Feeling anxious or depressed.
- 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 are working and are feeling well, continue to do so. However, working less may help increase your energy.
- Plan your daily activities. Pick those things that are necessary and most important to you and do them when you have the most energy. For example, you may go to work but not do housework, or watch your children’s sports event but not go out to dinner.
- Plan time to rest or take short naps (10 to 15 minutes) during the day, especially when you feel more tired. If you do nap, try to sleep for less than 1 hour at a time.
- Try to sleep at least 8 hours every night. This may be more sleep than you needed before you started radiation therapy. You may also find it helpful to go to sleep earlier at night and get up later in the morning. One way to sleep better at night is to be active during the day. For example, if you are able to
exercise, you could go for a walk or do yoga. Another way to sleep better at night is to relax before going to bed. You might read a book, work on a jigsaw puzzle, listen to music, or do calming hobbies.

- 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.

- Some people have more energy when they exercise. Ask your doctor if you can do light exercise, such as walking, stretching, or yoga. Avoid riding a bicycle during treatment as this may put pressure on your prostate area, but you may use an inclined bike.

- Eat foods that are high in protein and calories. Ask your nurse for 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)).

- Other symptoms, such as pain, nausea, diarrhea, difficulty sleeping, or feeling depressed or anxious, can increase your fatigue. Ask your doctor or nurse for help with any other symptoms you may have.

**Emotional health**

Cancer diagnosis and treatment can be very stressful and overwhelming. You might feel:

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<th>Anxious</th>
<th>Angry</th>
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<tr>
<td>Afraid</td>
<td>Depressed</td>
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<td>Alone</td>
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All of these types of feelings are normal if you or someone you love has a serious illness.

You might also worry about telling your employer that you have cancer or about paying your medical bills. You might worry about how your family relationships might change, about the effect of cancer treatment on your body, or if you will continue to be sexually attractive. You might 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 might 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 might 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 and Caregiver 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

At the end of treatment, you will be told how often to see your doctors for follow-up appointments. Please be sure to keep your follow-up appointments with your radiation oncologist. He or she will evaluate your response to treatment. You may have blood tests, x-rays, scans, and biopsy during these visits. Before coming, write down your questions and concerns. Bring this and a list of all your medications with you. You can also call your doctor or nurse at any time after your treatment is completed, or in between follow-up appointments, if you have any questions or concerns.

Late side effects

Keeping your follow-up appointments will help us identify any late effects of treatment.

Radiation can cause permanent side effects in the bladder and bowel. Many people are not aware of these changes and do not have any symptoms. However, some people will develop symptoms 4 months or more after treatment. These may be similar to the ones you had during treatment. However, there is a very small chance that you may develop others. These are very rare but may include:

- Narrowing of the opening of the bladder
- Loss of urinary control
- Blood in the urine
- Rectal bleeding

These symptoms may come and go over time. They can also be persistent and chronic. Even if you do not develop any late side effects, remember that the tissues in your bladder and rectum have been affected by the treatment. Call your radiation oncologist if you:

- Have any new urinary, bladder, or bowel symptoms.
- Need to have a colonoscopy. Avoid having a colonoscopy for the first year after treatment.
- Need any type of rectal procedure.
If you took vitamins before your treatment, you can re-start taking them 1 month after your treatment is done. If you would like to speak with a dietitian about your diet or supplements, please ask your nurse to arrange this.

**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.

**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 might 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 25th & 26th Streets)
New York, NY 10001
Provides counseling, support groups, educational workshops, publications, and financial assistance.
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.
Questions To Ask Your Doctor or Nurse

We recommend that you write 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.

Examples of questions to ask

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.