Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About MSK Precise® Radiation Therapy for Prostate Cancer on the MR-Linac Machine

This information will help you get ready for your MSK Precise radiation therapy to your prostate on the MR-Linac machine. It explains what to expect. It also explains how to care for yourself before, during, and after your radiation therapy.

This resource has a lot of information. Different sections may be helpful at different times. We suggest reading through this resource once before you start radiation therapy, so you know what to expect. Then, refer back to it during your radiation therapy.

This information is general. Your radiation therapy team will design a treatment and care plan just for you. Because of that, some parts of your treatment may be different than what's described here. Your radiation therapy team will talk with you about what to expect.

About radiation therapy

Radiation therapy uses high-energy radiation to treat cancer. It works by damaging the cancer cells, making it hard for them to multiply. Your body can then naturally get rid of the damaged cancer cells. Radiation therapy also affects normal cells, but they can fix themselves in a way cancer cells can't.

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

radiation therapy ends.

Most people have a treatment planning procedure called a simulation before their first radiation treatment. If you don't need a simulation, your healthcare provider will talk with you and explain why. During a simulation, your radiation therapists will take imaging scans. They may also mark your skin with little tattoo dots. These things are done to:

- Map your treatment site.
- Make sure you get the right dose (amount) of radiation.
- Limit the amount of radiation that gets to your nearby healthy tissues.

About MSK Precise on the MR-Linac machine

MSK Precise is different from traditional radiation therapy. It uses a precise form of radiation therapy called stereotactic body radiotherapy (SBRT) to accurately deliver high doses of radiation to tumors. The radiation beams will pass through your body and damage cancer cells in their path. You will not see or feel the radiation.

You'll get your MSK Precise radiation treatments on an MR-Linac machine. An MR-Linac machine is a radiation treatment machine that combines a linear accelerator and a magnetic resonance imaging (MRI) scanner.

- The linear accelerator part of the MR-Linac delivers the radiation beams. Linear accelerators are the normal machines used for radiation therapy.
- The MRI scanner part of the MR-Linac lets your radiation oncologist watch the tumor and nearby tissues during your radiation treatments. They can adjust your radiation beams in real time based on what the MRI images show them.

It's normal for your prostate and other organs to shift slightly as you move and breathe. This can happen between and during your treatments. Using the MR-Linac machine helps your radiation oncologist target the radiation beams directly to the tumor. This helps the radiation therapy work better and lessens side effects.

You'll get your MSK Precise radiation therapy in 5 treatments on the MR-Linac machine. This is fewer treatments than other types of radiation therapy because the treatment doses are stronger.

You might get MSK Precise on its own or along with other treatments for prostate cancer, such as brachytherapy or hormonal therapy.

Your role on your radiation therapy team

Your radiation therapy care team will work together to care for you. You're a part of that team, and your role includes:

- Getting to your appointments on time.
- Asking questions and talking about your concerns.
- Telling us when you have side effects.
- Telling us if you're in pain.
- Caring for yourself at home by:
  - Quitting smoking if you smoke. MSK has specialists who can help. To learn more about our Tobacco Treatment Program, call 212-610-0507. You can also ask your nurse about the program.
  - Taking your bowel prep medicines based on our instructions.
  - Drinking liquids based on our instructions.
  - Eating or avoiding the foods and drinks we suggest.
  - Staying around the same weight.

What happens before MSK Precise radiation therapy on the MR-Linac machine

Rectal spacer placement

Before you start MSK Precise, you might have a procedure to place a rectal spacer. A rectal spacer is a gel called SpaceOAR® hydrogel. It's placed between your prostate and rectum (the lower end of your colon) to move them apart. This helps protect your rectum from radiation and can lessen some side effects of radiation therapy. The rectal spacer will stay in place for about 3 months. Then, it'll be absorbed by your body and come out in your urine (pee).

Whether you get a rectal spacer depends on the tumor and where it is in your prostate. Not everyone gets a rectal spacer. If you're getting one, your nurse will talk with you and explain what to expect. They will also give you the resource *About Your Prostate Fiducial Marker and Rectal Spacer Placement in the Operating Room* (www.mskcc.org/pe/fiducial-markers-rectal-spacer).

You don't need to worry if you're not getting a rectal spacer. MSK Precise and the MR-Linac machine are very accurate. Your radiation therapy team carefully plans your radiation treatments to protect your bowel and reduce side effects.

Sperm banking

Your testicles (testes) will be exposed to radiation during your radiation therapy. This can affect your sperm and your ability to have biological children after radiation therapy.

We recommend banking your sperm before you start treatment if you think you may want to have biological children. To learn more, read *Sperm Banking* (www.mskcc.org/pe/sperm-banking) and *Building Your Family After Cancer Treatment: For People Born With Testicles* (www.mskcc.org/pe/building-family-born-testicles).

Bowel preparation

You'll need to clear extra stool (poop) from your body for your simulation and radiation treatments. This is called bowel preparation, or bowel prep. Bowel prep helps lower your risk of side effects.

It is very important to follow your bowel prep instructions. You may need an extra enema if your bowel is not empty before your simulation and treatments. It can also delay your simulation or treatment.

How bowel prep lowers risk of side effects

Your bowels are your small intestine, large intestine (colon), and rectum. Your rectum is where poop is stored before it leaves your body.

Your bowels get bigger or smaller based on how full they are. When they change size, they also move the tissue and organs around them, including your prostate and bladder.

Bowel prep empties your bowels. It helps the tumor and nearby healthy tissues be in the same place for your simulation and treatments. This helps keep healthy tissues safe from too much radiation and lowers your risk of side effects.

Bowel prep supplies

Buy these supplies at your local pharmacy. You do not need a prescription.

- Simethicone 125 milligram (mg) tablets, such as Gas-X® Extra Strength.
- Bisacodyl 5 mg tablets, such as Dulcolax®

Bowel prep instructions

Starting 3 days before your simulation:

- Take 2 (125 mg) simethicone (Gas-X) tablets after breakfast and after dinner every day. This will help prevent gas and bloating.
- Take 1 (5 mg) bisacodyl (Dulcolax) tablet every night. This will help you have regular bowel movements.

If your care team gives you different instructions, follow those instead.

Bisacodyl is a laxative (medicine that makes you poop). Tell your care team if you start to have diarrhea (loose, watery poop). We will help you adjust the dose (amount) you take.

Diet guidelines to limit bloating

Gas or liquid can build up in your bowels and cause bloating. When your bowels are bloated, they can expand into the treatment area and be exposed to radiation. This can cause side effects or make your side effects worse.

Follow these guidelines to lower your risk of bloating during radiation therapy. It's best to start 2 to 3 days before your simulation and keep following them until you finish radiation therapy.

- Eat slowly and chew your food well. This will help you avoid swallowing air.
- Avoid using drinking straws and drinking directly from bottles and cans. This will also help you avoid swallowing air.
- Limit or avoid foods that release gas when they're digested, such as:

◦ Asparagus ◦ Beer ◦ Broccoli ◦ Brussels sprouts ◦ Cabbage ◦ Cauliflower ◦ Corn	◦ Dried beans, peas, and other legumes ◦ Garlic ◦ Leeks ◦ Milk and other dairy products with lactose, if you're lactose-intolerant ◦ Onions ◦ Prunes

- Avoid carbonated (fizzy) drinks, such as sodas and sparkling waters.
- Limit or avoid sugar alcohols, such as xylitol, sorbitol, and mannitol. Sugar-free foods often have sugar alcohols. Check the ingredients list on the food's Nutrition Facts label if you're not sure.
- Choose cooked vegetables instead of raw vegetables.
- Your healthcare provider may tell you to eat more or less fiber, depending

on your symptoms. Follow their instructions.

If you're bloated or feel gassy, keeping a food journal can help you see which foods may be causing it. Write down your foods and drinks, the time you have them, and the time you start feeling bloated. Bring your food journal to your appointments. Your healthcare provider will use it to help you manage the bloating.

A clinical dietitian nutritionist can talk with you about your diet and help you design an eating plan that meets your needs. Ask your radiation oncologist or nurse for a referral if you want to meet with a clinical dietitian nutritionist.

Drink water to stay well-hydrated

Most people need to have a comfortably full bladder during their simulation and radiation treatments. Having a full bladder can help push your small intestine out of the treatment area. This helps keep side effects from starting or getting worse.

Your care team will tell you how much water to drink before each of your appointments. They will also tell you when to start drinking it.

Stay well-hydrated in the days before and the day of your appointments. Aim to drink about 64 ounces (8 cups) of water throughout the day, unless your care team told you to limit how much you drink. This helps the water your care team told you to drink before your appointment fill your bladder more quickly. It takes about 30 to 60 minutes for a bladder to fill when your body is properly hydrated. It takes longer if you're dehydrated.

It's important to drink water to stay hydrated. Other liquids (such as coffee, hot chocolate, and tea) don't fill your bladder as well as water does.

Simulation appointment

During your simulation, your radiation therapists will take imaging scans and may mark your skin with little tattoo dots. These help your care team plan your radiation treatments.

Your simulation appointment will take about 3 hours but can be shorter or longer depending on your treatment plan.

Medicines to take

Take your usual medicines, including simethicone (Gas-X).

You'll be lying still in one position during your simulation. If you think you'll be uncomfortable, take an over-the-counter pain medicine or your usual pain medicine 1 hour before your simulation. Talk with your healthcare provider ahead of time.

If you think you may get anxious during your simulation, talk with your healthcare provider ahead of time. They may suggest medicines to help.

What to eat and drink

It's OK to have a light meal the day of your simulation, unless your healthcare provider tells you otherwise.

If your care team gave you instructions for drinking water before your appointment, follow their instructions.

What to wear

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

Take devices off your skin

You may wear certain devices on your skin. Before your simulation or treatment, some device makers recommend you take off your:

- Continuous glucose monitor (CGM)
- Insulin pump

If you use one of these, ask your radiation oncologist if you need to take it off. If you do, make sure to bring an extra device to put on after your simulation or treatment.

You may not be sure how to manage your glucose (blood sugar) while your device is off. If so, before your appointment, talk with the healthcare provider who manages your diabetes care.

What to expect when you arrive

A member of your radiation therapy team will check you in when you arrive. They'll give you an identification (ID) wristband with your name and date of birth. During your appointment, many staff members will check your ID wristband and ask you to say and spell your name and date of birth. This is for your safety. People with the same or a similar name may be getting care on the same day.

Your radiation therapists will review what to expect during the simulation. If you haven't already signed a consent form, they will go over the form with you. They will answer any questions you have and ask for your signature.

What to expect during your simulation

Your radiation therapists will help you onto the simulation table. The table will have a sheet on it, but it's hard and doesn't have a cushion. If you haven't taken pain medicine and think you may need it, tell your radiation therapists before your simulation starts.

Your radiation therapists will help you get into position for your simulation. You will lie on your back with your head on a headrest. Your radiation therapists will move your legs and feet into lower body immobilization cushions (see Figure 1). These are hard cushions that keep your legs and feet in place. You'll use them for your simulation and all your treatments so you're in the exact same position every time. If you need a higher headrest or knee cushion to be comfortable, ask your radiation therapists before your simulation starts.

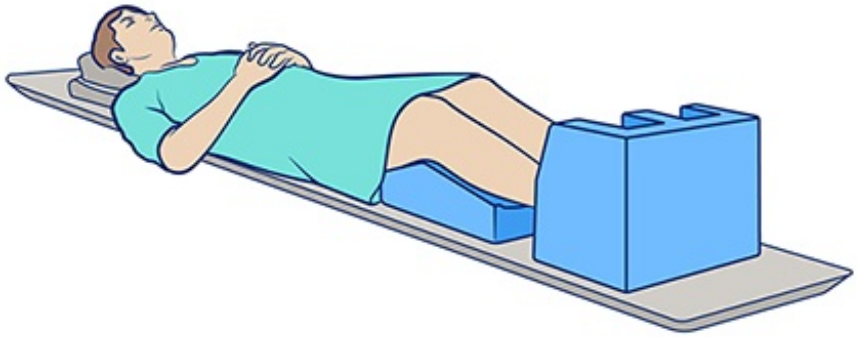

Figure 1. Lower body immobilization cushions

Do not move once your simulation starts. It's important that you stay in the same position. Your radiation therapists can play music for you to help pass the time. Tell your radiation therapists if you're uncomfortable or need help.

Saline enema

A radiation nurse will give you a saline enema during your simulation appointment. This is to make sure your bowel is empty during your simulation. Having a comfortably full bladder and empty bowel helps move your healthy tissue away from the radiation beams. This helps lower your risk of side effects.

Imaging scans and positioning

Your radiation therapists will use imaging scans to check and adjust your positioning throughout your simulation. They will also check that your bladder is full and your bowels are empty.

- If your bladder is not full or your bowels are not empty, your radiation therapists will pause your simulation. They will help you off the simulation table and give you time to fill your bladder or empty your bowels. They'll bring you back to the simulation room later.
- Your radiation therapists may be able to help if there's gas in your bowels that you can't release yourself. They can place a small, lubricated rubber tube into your rectum to remove the gas if it's easy to reach.

The imaging scans will be done on an MRI machine. You may also have a CT (computed tomography) scan. **These scans are only used to plan your treatments. They are not used for diagnosis or to find tumors.** For that reason,

you will not see any scan results in MSK MyChart (your patient portal).

You'll feel the simulation table move into and out of the scanner and hear the scanner turn on and off. You will see red or green laser lights on the walls. Your radiation therapists use the lasers to help position you on the table.

Even if it seems loud, your radiation therapists will be able to hear you if you need to speak with them. They will walk in and out of the room during the scans, but the room has a microphone, speaker, and camera. Someone will always be able to see and hear you.

Skin markings and photographs

Your radiation therapists will use a felt marker to draw on your skin in the treatment area. Once they're sure you're in the right position, they may make a few tiny tattoos using a clean needle and a drop of ink. Each tattoo will feel like a pinprick. The tattoos will not be bigger than the head of a pin.

Your radiation therapists will also take several photos of you in your simulation position. They'll use the photos and markings to position you correctly on the table each day of your treatment.

You can wash off the felt markings after your simulation. **If you got tattoos, they are permanent and will not wash off.** If you're concerned about having tattoos as part of your radiation treatment, talk with your radiation oncologist.

Scheduling your radiation treatments

We will schedule your set-up procedure and the rest of your radiation treatment appointments within a few days after you leave your simulation appointment. Read the section "Set-up procedure and first treatment" to learn about the set-up procedure.

MSK Precise radiation treatments are given daily or every other day from Monday through Friday. Your treatment can start any day of the week. You'll have a total of 5 treatments.

Each treatment appointment usually takes about 45 to 60 minutes. Your

appointments will be longer if you need to fill your bladder or empty your bowels. They will also take longer if you have a planned status check visit with your radiation oncologist.

If you can't come in for a treatment, call your radiation oncologist's office to tell your radiation therapy team. Talk with your radiation therapists if you need to change your treatment schedule for any reason.

Checking your treatment schedule

You can see your treatment schedule in your patient portal, MSK MyChart. If you do not have a MSK MyChart account, you can sign up at mskmychart.mskcc.org. You can also ask a member of your care team to send you an invitation.

It's very helpful to use MSK MyChart to keep track of your appointment times. We will call you if we need to reschedule any of your treatment appointments.

Treatment planning

Between your simulation and first treatment, your radiation oncologist will work with a team to plan your treatments. They will use your simulation scans to carefully plan the angles and shapes of your radiation beams. They'll also figure out the dose of radiation you'll get. These details are carefully planned and checked. This can take up to 2 weeks.

It's OK to stop taking the simethicone (Gas-X) and bisacodyl (Dulcolax) between your simulation appointment and first treatment. Remember to start taking them again 3 days before your first treatment.

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 (2.3 to 4.5 kilograms) of your usual weight. This helps make sure your radiation treatment plan stays accurate.

What happens during MSK Precise radiation therapy on the MR-Linac machine

If you stopped taking simethicone (Gas-X) and bisacodyl (Dulcolax) tablets after your simulation, start taking them again 3 days before your first radiation treatment. Keep taking them every day until you finish radiation therapy.

Keep following the diet guidelines to minimize bloating until you finish your radiation therapy.

Radiation treatment appointments

Try to poop within 1 hour before your radiation treatment appointments. For example, if your appointment is at 9 a.m., try to poop between 8 a.m. and when you leave for your appointment. Ask your care team what to do if you travel more than 1 hour to your appointments.

If you have not pooped within 1 to 2 hours before your appointment, a radiation nurse will give you a saline enema during your appointment.

Your treatment appointments will take about 2 hours but can be shorter or longer depending on your treatment plan. Most of that time will be spent adjusting your treatment position. The treatment itself only takes about 5 to 15 minutes.

Medicines to take

Take your usual medicines, including simethicone (Gas-X).

You'll be in the same position for your radiation treatments as you were for your simulation. If pain or anxiety medicine was helpful for your simulation, you may want to take it before your radiation treatments. Take it about 1 hour before your appointment.

What to wear

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

What to eat and drink

It's OK to have a light meal, unless your healthcare provider tells you otherwise.

If your care team gave you instructions for drinking water before your appointment, follow their instructions.

What to expect when you arrive

Check in at the reception desk and have a seat in the waiting room. Your radiation therapist will tell you how much water to drink and when to start drinking it.

A staff member will bring you to the dressing room when your radiation therapists are ready for you. They will give you a hospital gown to change into. Keep your shoes on.

Your radiation therapists will bring you into the treatment room and help you onto the treatment table.

Set-up procedure and first treatment

When you come in for your first treatment appointment, you'll have special imaging scans before your treatment starts. This is called a set-up procedure. This appointment will take slightly longer than your other treatment appointments.

Radiation treatments

Your radiation therapists will help you get into your treatment position. Then, they will leave the room, close the door, and start taking MRI scans.

You will have MRI scans daily throughout your treatment. Your radiation oncologist and radiation therapists will use them to:

- Check and adjust your position.

- Check that your bladder is full and your bowels are empty.
- Adjust your treatment plan, if needed.

These MRI scans are not used to see how your tumor is responding to treatment.

Breathe normally during your treatment, but do not move. You will not see or feel the radiation. You may hear the MR Linac machine as it moves around you and is turned on and off. If you're uncomfortable and need help, tell your radiation therapists. They will be able to see and hear you. They can turn off the machine and come in to see you at any time, if needed.

You'll be in the treatment room for about 45 to 60 minutes, depending on your treatment plan. Some of this time will be spent putting you in the correct position. The treatment takes about 30 to 45 minutes.

You will not be radioactive during or after treatment. It's safe for you to be around people, including children and babies, and pets.

Status check visits

Your radiation oncologist or radiation nurse will check in with you at least once during your radiation therapy. They'll talk with you about any concerns, ask about any side effects you may be having, and answer your questions. This status check visit may be a video visit or an in-person visit before or after one of your treatments.

If you need to speak with your radiation oncologist or nurse outside your status check visits, call your radiation oncologist's office. You can also ask another member of your care team to contact them when you come in for treatment.

Vitamins and dietary supplements during radiation therapy

Vitamins, minerals, and herbal or botanical (plant-based) supplements are examples of dietary supplements.

It's OK to take a multivitamin during your radiation therapy. Do not take any other dietary supplements without talking with a member of your care team.

Side effects of MSK Precise radiation therapy on the MR-Linac machine

Some people have side effects from radiation therapy. Which side effects and how severe (strong) they are is different from person to person. Your healthcare provider will talk with you about what to expect based on your medical history and specific treatment plan.

This section explains the most common side effects of MSK Precise radiation therapy. **You may have all, some, or none of these**. Most of these side effects will go away several weeks to months after you finish radiation therapy. If you have any of these side effects, your healthcare provider will give you more information and help you manage them.

Urinary changes

Your prostate gland might swell and the lining of your bladder might become irritated. Because of this, you may:

- Have trouble starting to urinate (pee).
- Need to pee more often than usual.
- Need to pee at night more often than usual.
- Have sudden urges to pee.
- Feel burning when you pee.

Tell your radiation oncologist or nurse if you have any urinary changes. They can recommend a change in your diet or prescribe medicine that can help. You can also follow the guidelines below.

- Drink 6 to 8 (8-ounce) cups of water throughout the day.
- Avoid drinking after 8 p.m.
- Avoid foods and drinks that may irritate your bladder, such as:
    - Drinks with caffeine, such as coffee, tea, and soda.

- Alcohol.
- Acidic foods and drinks, such as tomatoes, citrus fruits and juices, and carbonated (fizzy) drinks.
- Spicy foods, especially if you feel burning when you urinate.

- Do pelvic floor muscle (Kegel) exercises. Read *Pelvic Floor Muscle (Kegel) Exercises for Males* (www.mskcc.org/pe/kegels-males) to learn how. A member of your care team will tell you how many to do and how often to do them.

To learn more about managing urinary changes, read Improving Your Urinary Continence.

Bowel changes

The wall of your rectum can become irritated. After a few treatments, you may:

- Poop more often than usual.
- Have softer poop than usual.
- Feel discomfort in your rectum.
- Have mucous discharge from your anus. Your anus is the opening of your rectum where poop leaves your body.
- Have a small amount of bleeding from your rectum. For example, you may see bright red blood on your toilet paper or poop.
- Pass more gas than usual.
- Feel like you need to poop more urgently than usual.

If you have hemorrhoids, radiation therapy can make your hemorrhoid symptoms worse.

These bowel changes are usually mild.

Tell your radiation nurse if you have any urinary or bowel side effects. They can talk with you about how you can change your diet to manage them. If you're still

uncomfortable after adjusting your diet, tell your radiation oncologist or nurse. Your radiation oncologist can prescribe medicine to help.

Urinary or bowel side effects can last for about 1 to 2 months after you finish radiation therapy. Some people keep taking medicine to treat urinary changes after they finish radiation therapy. It's important to tell us if you develop side effects and keep us informed on how you're doing.

Sexual and reproductive health

You can be sexually active during radiation treatment, unless your radiation oncologist gives you other instructions. You will not be radioactive or pass radiation to anyone else. It's safe to be in close contact with others.

You may have discomfort or feel a burning sensation when you ejaculate. For most people, this goes away 1 to 2 months after finishing radiation therapy.

If you're sexually active with someone who can get pregnant, it's very important to use birth control (contraception) during and for 1 year after your treatment. During your radiation therapy, the radiation may damage your sperm. If you get someone pregnant with this sperm, the baby might have birth defects. Using birth control helps prevent this.

Read *Sex and Your Cancer Treatment* (www.mskcc.org/pe/sex-cancer-treatment) to learn more about sexual health during cancer treatment. The American Cancer Society also has resources about sexual health issues during cancer treatment. The one for males is called *Sex and the Adult Male with Cancer*. You can search for it at www.cancer.org or call 800-227-2345 for a copy.

Male Sexual and Reproductive Medicine Program

MSK's Male Sexual and Reproductive Medicine Program helps people address sexual health changes caused by cancer and cancer treatment. You can meet with a specialist before, during, or after your treatment. We can give you a referral, or you can call 646-888-6024 for an appointment.

Skin and hair reactions

You probably will not notice any changes in your skin in the treatment area. You might lose some or all of the hair in your pubic area. The hair usually grows back 3 to 6 months after you finish radiation therapy. The color and texture might be different.

Fatigue

Fatigue is feeling very tired or weak. When you feel fatigued, you may not want to do things. You may have trouble focusing, feel slowed down, or have less energy than usual. Fatigue can range from mild (not bad) to severe (very bad). It may be worse at certain times of day.

You may start to feel fatigued after 2 to 3 weeks of treatments. You may still feel fatigued for a few weeks to several months after finishing radiation therapy. Fatigue usually gets better over time.

There are lots of reasons you may feel fatigued during your radiation therapy. They include:

- The radiation's effects on your body.
- Traveling to and from your treatment appointments.
- Not getting enough restful sleep at night.
- Not getting enough protein and calories.
- Having pain or other symptoms.
- Feeling anxious (nervous) or depressed (unhappy).
- Side effects of some medicines.

Ways to manage fatigue

- If you're working and are feeling well, it's OK to keep working. But working less may help you have more energy.
- Plan your daily activities. Pick the things you need or really want to do. Do

them when you have the most energy. For example, you may choose to go to work but not do housework. You may choose to watch your child's after-school event but not go out to dinner.

- Plan time to rest or take short (10- to 15-minute) naps during the day, especially when you feel more tired.
- Try to sleep at least 8 hours every night. This may be more sleep than you needed before you started radiation therapy. You may find it helpful to:
  - Go to sleep earlier and get up later.
  - Be active during the day. For example, if you're able to exercise, you could go for a walk or do yoga.
  - Relax before going to bed. For example, read a book, work on a puzzle, listen to music, or do another calming hobby.
- Ask family and friends to help with chores and errands. Check with your health insurance company to see if they cover home care services.
- You might have more energy when you exercise. Ask your radiation oncologist if you can do light exercise, such as walking, biking, stretching, or yoga. Read *Managing Cancer-Related Fatigue with Exercise* (www.mskcc.org/pe/fatigue-exercise) to learn more.
- Eat foods that are high in protein and calories. Read *Eating Well During Your Cancer Treatment* (www.mskcc.org/pe/eating-cancer-treatment) to learn more.

Some things can make your fatigue worse. Examples are:

- Pain
- Nausea (feeling like you're going to throw up)
- Diarrhea (loose or watery poop)
- Trouble sleeping
- Feeling depressed or anxious

Ask your radiation oncologist or nurse for help if you have these or any other

symptoms or side effects.

Emotional health

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

• Anxious or nervous • Afraid • Alone • Angry	• Depressed • Helpless • Frustrated	• Numb • Uncertain • Worried

You might also worry about telling your employer you have cancer or about paying your medical bills. You may worry about how your family relationships may change, or that the cancer will come back. You may worry about how cancer treatment will affect your body, or if you will still be sexually attractive.

It's normal and OK to worry about all these things. All these kinds of feelings are normal when you or someone you love has a serious illness. We're here to support you.

Ways to cope with your feelings

Talk with others. 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. For example, you can talk with your spouse or partner, close friend, or family member. You can also talk with a chaplain (spiritual advisor), nurse, social worker, or psychologist.

Join a support group. Meeting other people with cancer will give you a chance to talk about your feelings and learn from others. You can learn how other people cope with their cancer and treatment and be reminded you're not alone.

We know that all cancer diagnoses and people with cancer are not the same. We offer support groups for people who share similar diagnoses or identities. For example, you can join a support group for people with breast cancer or for LGBTQ+ people with cancer. Visit www.msk.org/vp to learn about MSK's

support groups. You can also talk with your radiation oncologist, nurse, or social worker.

Try relaxation and meditation. These kinds of activities can help you feel relaxed and calm. You might try thinking of yourself in a favorite place. While you do, breathe slowly. Pay attention to each breath or listen to soothing music or sounds. For some people, praying is another way of meditation. Visit www.msk.org/meditations to find guided meditations lead by our Integrative Medicine and Wellness providers.

Exercise. Many people find that light movement, such as walking, biking, yoga, or water aerobics, helps them feel better. Talk with your healthcare provider about types of exercise you can do.

We all have our own way of dealing with tough situations. Often, we do what worked for us in the past. But sometimes that's not enough. We encourage you to talk with your doctor, nurse, or social worker about your concerns.

What happens after MSK Precise radiation therapy on the MR-Linac machine

Follow-up appointments

It's important to come to all your follow-up appointments with your radiation oncologist. During these appointments, they will check how you're recovering after your radiation therapy.

Write down your questions and concerns before your follow-up appointments. Bring this and a list of all your medicines with you. You can also call your radiation oncologist or nurse any time after you finish radiation therapy or between follow-up appointments.

Vitamins and dietary supplements after radiation therapy

- You might be getting other cancer treatments along with your radiation therapy. If you are, ask the doctor managing that treatment when it's safe to start taking dietary supplements again. Some dietary supplements are not safe to take before surgery or during chemotherapy.
- If you are not getting other cancer treatments, you can start taking dietary supplements again 1 month after your last radiation treatment.

Tell your radiation nurse if you want to talk with a clinical dietitian nutritionist about your diet or supplements.

Urinary and bowel changes

Some people start having side effects 4 months or more after treatment. These side effects are called delayed side effects or late side effects.

Late side effects may be similar to the ones you had during treatment. There's a very small chance you may start having other side effects. For example:

- The opening of your bladder may become more narrow.
- You may have blood in your urine.

- You may have bleeding from your rectum.

These side effects are rare. They may come and go over time. Or, they may be persistent and chronic (long-lasting). Your care team will help you manage them.

Even if you don't develop any late side effects, remember that your radiation therapy affected the tissues in your bladder and rectum t. Call your radiation oncologist if you:

- Have any new urinary, bladder, or bowel problems.
- Need to have a colonoscopy. Avoid having a colonoscopy for the first year after treatment.
- Need any type of urological or rectal procedure.

Sexual changes

Some people develop sexual changes after finishing treatment. For example:

- It might be more difficult or not possible to get or keep an erection. This is called erectile dysfunction (ED).
- Your orgasms may feel different.
- When you ejaculate, the amount or thickness of your semen may be different.

These changes may happen many months or even years after radiation therapy. If you notice any of them, tell your healthcare provider. They can give you a referral to a healthcare provider who treats these problems.

Support services

MSK support services

Counseling Center

www.msk.org/counseling
646-888-0200
Many people find that counseling helps them. Our counseling center offers counseling for individuals, couples, families, and groups. We can also prescribe medicines to help if you feel anxious or depressed. Ask your healthcare provider for a referral or call the number above to make an appointment.

Integrative Medicine and Wellness Service

www.msk.org/integrativemedicine
Our Integrative Medicine and Wellness Service offers many services to complement (go along with) traditional medical care, including music therapy, mind/body therapies, dance and movement therapy, yoga, and touch therapy. Call 646-449-1010 to schedule an appointment for these services.

You can also schedule a consultation with a healthcare provider in the Integrative Medicine and Wellness Service. They will work with you to come up with a plan for creating a healthy lifestyle and managing side effects. Call 646-608-8550 to make an appointment.

Nutrition Services

www.msk.org/nutrition
212-639-7312
Our Nutrition Service offers nutritional counseling with one of our clinical dietitian nutritionists. Your clinical dietitian nutritionist will talk with you about your eating habits. They can also give advice on what to eat during and after treatment. Ask a member of your care team for a referral or call the number above to make an appointment.

Rehabilitation Services

www.msk.org/rehabilitation

Cancers and cancer treatments can make your body feel weak, stiff, or tight. Some can cause lymphedema (swelling). Our physiatrists (rehabilitation medicine doctors), occupational therapists (OTs), and physical therapists (PTs) can help you get back to your usual activities.

- **Rehabilitation medicine doctors** diagnose and treat problems that affect how you move and do activities. They can design and help coordinate your rehabilitation therapy program, either at MSK or somewhere closer to home. call Rehabilitation Medicine (Physiatry) at 646-888-1929 to learn more.
- An **OT** can help if you're having trouble doing usual daily activities. For example, they can recommend tools to help make daily tasks easier. A **PT** can teach you exercises to help build strength and flexibility. Call Rehabilitation Therapy at 646-888-1900 to learn more.

Resources for Life After Cancer (RLAC) Program

646-888-8106

At MSK, care does not end after your treatment. The RLAC Program is for patients and their families who have finished treatment.

This program has many services. We offer seminars, workshops, support groups, and counseling on life after treatment. We can also help with insurance and employment issues.

Sexual Health Programs

Cancer and cancer treatments can affect your sexual health, fertility, or both. MSK's sexual health programs can help you before, during, or after your treatment.

- Our Female Sexual Medicine & Women's Health Program can help with sexual health problems such as premature menopause or fertility issues. Ask a member of your MSK care team for a referral or call 646-888-5076 to learn more.
- Our Male Sexual & Reproductive Medicine Program can help with sexual health problems such as erectile dysfunction (ED). Ask a member of your care team for a referral or call 646-888-6024 to learn more.

Tobacco Treatment Program

www.msk.org/tobacco
212-610-0507
MSK has specialists who can help you quit smoking. Visit our website or call the number above to learn more. You can also ask your nurse about the program.

Virtual Programs

www.msk.org/vp
Our Virtual Programs offer online education and support for patients and caregivers. These are live sessions where you can talk or just listen. You can learn about your diagnosis, what to expect during treatment, and how to prepare for your cancer care.

Sessions are private, free, and led by experts. Visit our website for more information about Virtual Programs or to register.

Radiation therapy support services

American Society for Therapeutic Radiology and Oncology

www.rtanswers.org
800-962-7876
This website has detailed information about treating cancer with radiation. It also has contact information for radiation oncologists in your area.

External support services

There are many other support services to help you before, during, and after your cancer treatment. Some offer support groups and information, while others can help with transportation, lodging (a place to stay), and treatment costs.

For a list of these support services, read *External Support Services* (www.mskcc.org/pe/external-support-services). You can also talk with an MSK social worker by calling 212-639-7020.

Questions to ask your radiation oncologist

Before your appointment, it's helpful to write down questions you want to ask. Examples are listed below. Write down the answers during your appointment so you can review them later.

What kind of radiation therapy will I get?

How many radiation treatments will I get?

What side effects should I expect during my radiation therapy?

Will these side effects go away after I finish my radiation therapy?

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

Bowel prep quick guide

3 days before your simulation

- Start taking 2 (125 mg) simethicone (Gas-X) tablets after breakfast and after dinner. Take them every day.
- Start taking 1 (5 mg) bisacodyl (Dulcolax) tablet at night. Take it every night.

A nurse will give you a saline enema during your simulation appointment.

It's OK to stop taking the simethicone and bisacodyl tablets after your simulation while your care team plans your treatments.

3 days before your first radiation treatment

- Restart taking 2 (125 mg) simethicone (Gas-X) tablets after breakfast and after dinner every day.
- Restart taking 1 (5 mg) bisacodyl (Dulcolax) tablet every night.

Keep taking simethicone (Gas-X) and bisacodyl (Dulcolax) every day until you finish radiation therapy. If your care team gives you other instructions, follow those instead.

During your radiation therapy

Try to poop within 1 hour before your radiation treatment appointments. For example, if your appointment is at 9 a.m., try to poop between 8 a.m. and when you leave for your appointment. Ask your care team what to do if you travel more than 1 hour to your appointments.

If you have not pooped within 1 to 2 hours before your appointment, a radiation nurse will give you a saline enema during your appointment.

Tell your care team if you start to have diarrhea. We can help you adjust your bisacodyl dose.

Tell your care team if you're following these instructions but still can't poop before each treatment. We can adjust your bowel prep to find something that works better for you.

Helpful reminders

To reduce gas and bloating:

- Eat slowly, chew your food well, and avoid using drinking straws or drinking from bottles and cans. This will help you avoid swallowing air.
- Avoid carbonated drinks, such as seltzer, soda, and beer.
- Limit foods and drinks that produce gas when they're digested. Examples include broccoli, Brussels sprouts, cabbage, cauliflower, kale, onions, garlic, dried fruits, and milk and dairy if you're lactose intolerant. Read the section "Diet guidelines to limit bloating" for the full list.
- Choose cooked vegetables instead of raw vegetables.

To help fill your bladder:

- It's important to stay well hydrated. Most people need to have a comfortably full bladder for their simulation and radiation treatments.
- We suggest you drink about 64 ounces (8 cups) of water each day leading up to your appointments, unless another healthcare provider has told you to limit the amount you drink.
- Your radiation therapist will give you more instructions during your simulation appointment.

Contact information

If you have questions or concerns, contact a member of your radiation therapy team. You can reach them Monday through Friday from 9 a.m. to 5 p.m. at these numbers.

Radiation oncologist: _____
Phone number: _____

Radiation nurse: _____
Phone number: _____

Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

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

About MSK Precise® Radiation Therapy for Prostate Cancer on the MR-Linac Machine - Last updated on March 12, 2026
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