

Radiation Treatment: Questions and Answers

What is radiation treatment and how does it work?

Radiation treatment, sometimes called radiotherapy, treats cancer by using high-energy rays to pinpoint and destroy cancerous cells in your body. Many forms of radiation are available. The best choice for you depends on the type of cancer you have, the extent of the cancer and its location.

Different types of cancer react to radiation in different ways, so treatments vary. Also, it takes time for the body to get rid of dead cancer cells. After you have completed treatment, months often pass before the tumor is completely gone.

With careful planning, radiation can be directed to the cancer and away from most normal body tissue. This means you may receive treatment on more than one side of your body or from different angles. You may also need more than one type of radiation, which may require using more than one machine.

Will radiation treatment make me radioactive?

You will not be radioactive after receiving external radiation treatment, so don't worry about hurting your family and friends.

If you are hospitalized for insertion of internal radiation sources, you will stay in a protected room until the internal radiation is removed. If you need this type of radiation, your doctor will explain it to you in detail.

Who will give me the radiation treatment?

Your health care team will work together. The team is led by a **radiation oncologist**, a doctor who specializes in radiation treatment. This is the person referred to as "your doctor" throughout this document. A **radiation therapist** delivers the prescribed treatment and will assist you before and after your treatments. A **radiation oncology nurse** will work with the radiation doctor to help you throughout your treatment. Your health care team also may include other doctors and health care professionals.

What can I expect during a visit with a radiation oncologist?

You will see your radiation doctor who can advise you whether you can benefit from radiation treatment. He or she will explain why you may benefit from the treatment and the potential side effects associated with it. You will then be asked to sign a consent form agreeing to treatment.

The process begins with a treatment planning session (simulation). Simulation is done to locate the exact area to be treated. You will be placed in the same position as you will be during the actual treatments. Special devices may be used to help reproduce your positioning during the treatments. X-rays (simulation films) and/or CT (computerized tomography) scans will be taken so that your doctor can map out the areas to treat.

After your doctor approves the films or CT scans, the radiation therapist will mark your exact treatment area, either directly on your skin or on a plastic mask if your head or face will be treated. Because the marking fluid will stain, you may want to wear old clothing or a cotton T-shirt underneath your good clothing.

When you arrive for the simulation:

1. Check in as instructed.
2. You will be directed to the appropriate waiting area, where you will sit and wait for your name to be called.
3. When your name is called, you will be taken to a room where you will change into a hospital gown. You do not need to remove your jewelry or watch unless you wear it on the area being treated.
4. X-rays or CT scans will be taken to locate your treatment area.
5. Marks will be made on your skin or on a mask to ensure that the radiation is aimed at the same area during each treatment. **Do not wash the marks off until a member of your healthcare team says it is okay to do so.**
6. Within the next 7-10 business (working) days you will begin treatments. More x-rays will be taken at that time to verify treatment fields.
7. As the treatment progresses, the treatment area and marks may change as directed by your doctor.

What will happen at my other visits?

Every day when you arrive for treatment:

- Check in as instructed
- Tell the staff any time you have waited more than 30 minutes for your appointment.

At each radiation treatment session:

- You will be asked to put a gown on or remove some clothes to allow the treatment area marks to show.
- Although the actual treatment will last only a few minutes, you may spend 15-20 minutes getting ready.
- You will be helped onto a treatment table. Your position on the table will be the same for each treatment.
- Once you are positioned, **do not move** until the treatment is finished.
- After the radiation therapist has helped position you on the table, he or she will:
 - leave the room;

- monitor you by closed-circuit television
- stay in contact with you through an intercom.

Keep in mind that the treatment machines are large and sometimes noisy while in use. Just relax and breathe normally. You should not feel any pain.

If you need something, tell the radiation therapist. He or she can turn off the machine immediately and come into the room. The radiation stops when the machine is turned off.

How often will I get radiation treatments?

Your treatments will be scheduled every weekday, Monday through Friday, allowing you to rest on Saturday and Sunday. The treatment cycle usually takes from 2-8 weeks. If you need to change your treatment time, please call.

Your daily appointment schedule will be as convenient for you as possible. You will be notified of any holidays on which you will not receive treatments.

Your doctor will examine you and review your progress **once a week**. This scheduled checkup will take longer than the treatment visits. The nurse who sees you during the checkup will work closely with you and the doctor to help you manage any side effects you may have. This is a good time to ask for refills of medicines that help manage side effects.

What delays can I expect?

Sometimes you may have to wait for your treatment or to see the doctor because the radiation treatment center is very busy. However, if you wait longer than 30 minutes, please tell a staff member.

The most frequent cause of delay is equipment downtime. This happens when a radiation treatment machine cannot be used because it is being serviced. In most cases of downtime, you will be asked to wait, or you may be treated on another machine.

What side effects may I have, and how long will they last?

Side effects depend on the part of the body being treated. Most go away a few weeks after treatment stops.

Some common side effects include:

- **Red, itching and peeling skin** - This usually happens in your treatment area after about 4 weeks of radiation treatment. Report any skin problems to your nurse or doctor. Refer to the next section for skin care information.
- **Fatigue** - You may feel more tired than usual. Make sure to get plenty of rest, and do not overexert yourself.

- **Loss of appetite** - You may not feel like eating. This side effect is common if your abdomen or mouth is in the treatment area. If so, try eating several small meals or snacks throughout the day instead of 3 big meals. A dietitian can give you more tips on eating during treatment.
- **Hair loss** – You may have hair loss, but only in the area being treated.
- **Problems with swallowing** – Problems with swallowing may occur after the first 2 weeks of treatment if your neck or chest is in the treatment area.

You will receive information about your type of radiation treatment. This information will include what to do in case of problems and how to manage side effects. **Tell your doctor or nurse if you have side effects.**

How do I take care of my skin while I am getting radiation treatment?

Toward the end of your treatment, the radiated skin may become pink and itchy. In some cases, the skin will blister and flake, like a sunburn.

What to do:

- **Leave the marks on your skin until all of your treatments are finished.** In some cases, you may rinse the treatment area with warm water, but **do not** rub or scrub off the marks. Your nurse will talk with you in more detail about caring for the treatment area. **Do not use soap** on the marks.
- Wear loose-fitting cotton clothing that does not rub the treatment area.
- Do not put anything hot or cold on the treatment area, and do not expose the area to sun light.
- If your skin itches in the treatment area, **do not** scratch it. If this is a problem for you, tell your nurse or doctor. Some medicines may relieve the itching.
- **Do not** put anything (cream, lotion, powder or makeup) on the treatment area unless your nurse gives you other instructions. You may receive an ointment to soothe the skin.
- Before shaving any part of the treatment area, check with your nurse or doctor. If you are allowed to shave, use an electric shaver.

Will I be able to have sex?

You may have sexual intercourse if it is comfortable for you. You are not radioactive, and your partner is not in danger from the radiation treatments or the cancer.

You must use some type of birth control if you are a woman of childbearing age and have sexual intercourse during treatment. Your doctor can help you decide what kind of birth control is best for you.

You may want to address concerns about sexual activity with your radiation oncologist. Coping with the diagnosis of cancer and its treatment can be difficult. Your radiation treatment health care team is here to help you. Please tell your nurse or doctor about your concerns.

What other things can I do to help myself during treatment?

- Eat a well-balanced diet. Every day, choose foods from these groups: breads and cereals; meats and eggs; milk or milk products; and vegetables and fruits. **Always follow the dietary recommendations of your dietitian or other members of your health care team.**
- Try to eat enough food to keep your weight at the same level as before treatment. Your body needs more calories now, so you may need to eat more than usual. A dietitian can help you set up a food plan.
- Tell your doctor or nurse if you lose or gain 5 or more pounds (2.2 or more kilograms).
- Drink 8-12 (8-ounce size) cups of fluid (2-3 liters) every day. Fluids may include water, gelatin, ice pops, juices, decaffeinated tea and soup.
- If you notice your weight going down, try to drink fluids that are high in calories, such as milkshakes or nutritional supplements. For more information about nutrition during treatment, talk with a member of your health care team.
- Get some exercise and plenty of rest. It is okay to continue your regular activities as long as you take rest periods and do not overexert yourself. Your doctor will talk with you about how much exercise you should get.
- Try to sleep at least 6 hours at night, and take naps during the day if you can.

What should I do about medicine?

Tell your doctor or radiation treatment nurse if you are taking prescription or over-the-counter medicines. He or she will review your current medicines, which usually can be continued throughout your treatment. Your local doctor may still prescribe any medicines you are taking for problems other than cancer. You may continue to buy your routine medicines at your local drugstore.

What if I have other questions?

If you or your family have questions about your care, please ask a member of your health care team.

Being told that you have cancer can affect you and your family in many different ways. A counselor or social worker may be able to help you with individual counseling, support groups, community resources, transportation and housing while you are receiving treatment.

With your help, your radiation treatment team can give you the best care possible.

Resources

National Cancer Institute (NCI)

Radiation Therapy Website

<http://www.cancer.gov/about-cancer/treatment/types/radiation-therapy>