

Radiation Treatment for Lung Cancer

This handout will help you understand the process of radiation treatment and how to manage side effects.

Simulation

Your first radiation therapy session is called a simulation and does not involve actual treatment. The session usually takes 45 minutes to 1 hour to complete.

During the Simulation

Your radiation doctor locates the area to be treated and helps plan the daily treatment setup with your radiation treatment team.

A computerized tomography (CT) scan and x-rays will be taken. These are used to create a 3D picture of the treatment area. These images also help your doctor protect healthy tissue while targeting the tumor. You will be scheduled for a non-contrast CT simulation

After the simulation, you will receive a treatment schedule with the start date, time and number of treatments your doctor has ordered. If you have questions or concerns about your schedule, talk with your radiation therapist. You will receive a telephone number where you can contact your radiation therapist.

Treatment

- Your radiation doctor will discuss your entire plan of care with you. If you have questions about your treatment, ask your radiation doctor or nurse.
- Each day you will check in with the receptionist before going to the waiting area. Once you reach the waiting area, a member of your care team will take you to the treatment room and explain the procedure.
- Although the actual treatment lasts only a few minutes, the entire process to deliver treatment takes about 15 to 20 minutes. The staff will help you onto the treatment table. Your position on the table will be the same for each treatment.
- After you are positioned, **do not move** until instructed by the radiation therapist to do so. You will be alone in the treatment room after the therapist leaves. The therapist will monitor you by closed-circuit television and will talk with you through an intercom.
- Family members or caregivers **are not allowed** in the simulation or treatment rooms during scans or treatments for their safety.
- The treatment machines are large and can be noisy while in use. Relax and breathe normally.
- You should not feel pain.
- Tell the radiation therapist if you need something. He or she can turn off the machine and come into the room. The radiation stops when the machine is off.
- You may leave after your treatment is complete. You are not radioactive.

Weekly Doctor Visit

You will see your radiation doctor once a week. Your doctor will check your symptoms and answer your questions. It may be helpful for you to keep a journal so you can write down any changes you have from week to week. This will help you remember to discuss these changes during your weekly visit.

Side Effects

Side effects depend on the part of the body being treated, the size of the treatment area, and if the treatment is combined with chemotherapy. If you receive stereotactic radiotherapy, side effects are usually minimal. This may include skin reactions after treatment is complete.

If you feel sick and you think it is caused by the radiation, you can come into the clinic and see the nurse. Radiation is still working 2 weeks after treatment, so the side effects may worsen during that time.

Common Side Effects

- The skin in the treated area may become red, itchy and have a burning feeling and peel. Tell your nurse if you have skin changes. Medicine is available to help relieve these symptoms.
- You may feel more tired than usual. You may need to rest during the day. Try to remain active and do not change your daily routine.
- You may have problems swallowing, changes in taste, nausea and loss of appetite. Medicine is available to help. Eating small frequent meals during the day, rather than 3 large meals can help with these symptoms

Tell your nurse if you have side effects that are not controlled with medicine or self-care measures.

Home Care During Treatment

Nutrition

It is very important to eat well and maintain your weight. Your weight will be measured during your weekly doctor visit.

Things to Avoid

After 2 to 3 weeks of treatment, you may have problems swallowing. Certain things can irritate the treated area and may make side effects worse.

These include:

- Tobacco products
- Alcohol

- Carbonated drinks
- Acidic drinks, such as orange juice, grapefruit juice and tomato juice
- Sharp-edged foods, such as pretzels, potato chips, corn chips, dry toast and crackers
- Highly seasoned or spicy foods
- Very hot or cold foods and drinks

Try the following tips to help when eating:

- Drink cool fluids that are non-carbonated and non-acidic.
- Eat 5 to 6 small meals per day instead of 3 large meals.
- Chew food well before swallowing.
- Add sauce, gravy or other liquid to food and sip fluids to help make swallowing easier.

Skin

After 2 to 3 weeks of treatment, the skin in the treated area may be red, sensitive, irritated and peel. Your radiation nurse will give you instructions on how to care for your skin. This may include using a skin cream or ointment.

Home Care After Treatment

Radiation side effects often become worse 10 to 14 days after the last treatment. They will slowly improve after this. It is important to follow these instructions after completing treatment.

- **If you have severe shortness of breath, a cough that does not get better, a fever of 101°F (38.3°C) or higher, tightness in your chest or sudden pain, go to the nearest hospital emergency center or call 911.**
- Call your radiation doctor, advanced proactive provider or nurse at 904-202-7300 if you have lumps, sores, continued weight loss or swallowing problems that do not improve.
- Tell your radiation doctor before you have any invasive procedures in the treated area.
 - Examples are a biopsy or bronchoscopy.
- **Do not** smoke or use tobacco products.
- Drink plenty of fluids to help speed the healing process. Eat a well-balanced diet and follow the guidelines your dietitian gave you. After 2 to 4 weeks you may slowly return to your normal diet.
- To clean the treated skin, use a mild soap and your hands, not a washcloth. **Do not** soak in a bathtub for long periods. Pat the skin dry in the treated area and apply Aquaphor®, or other product suggested by your doctor, to the skin. You may apply these products 3 to 4 times per day or more often until your skin heals.
- The treated area will always be sensitive to injury. **Do not** expose the treated skin to extreme temperature changes, such as using an ice pack or heating pad on the skin. Skin in the treated area will react quicker to sun exposure, so always protect your skin from the sun. Apply sunscreen with a SPF of 30 or higher and reapply often when the area is exposed to the sun.

Follow-Up Care

After you have completed treatment, your radiation doctor will schedule you for follow-up visits and any needed tests. If you have not received a schedule in the mail within a month, call 904-202-7300.

In the future, if you need surgical procedures or biopsies that involve the treated area, tell your doctor about the radiation treatment you received. If needed, your local doctor can contact your radiation doctor for more information.

Contact Information

The Radiation Treatment Clinic is open Monday through Friday 8 a.m. to 5 p.m. The clinic is closed on weekends and holidays. For non-urgent needs when the clinic is closed, call the hospital operator at 904-202-7300 and ask to speak to the on-call radiation oncologist.