

## Radiation Treatment for Lung Cancer

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

### Simulation

Before you start radiation treatment you will undergo a simulation, which is a treatment planning or marking session. This is the time your radiation doctor begins planning your treatment. Patients usually have a CT (computerized tomography) scan taken of the area to be treated. After the simulation, you will receive a schedule with the start date, times, and how many treatments your doctor has ordered.

### Treatment Schedule

Your radiation doctor will discuss your entire plan of care with you. If you have concerns about your treatment, ask your radiation doctor or nurse. Discuss questions about your radiation treatment schedule with the radiation therapist for your daily treatments.

### Treatment

Each day you will check in with the receptionist before going to the waiting area. A staff person will take you to the treatment room and explain the entire procedure.

You will be in the same position as simulation. It is important to be still, relax and breathe normally. After you are positioned, the therapist will leave the room but is able to see and hear you at all times. The therapist can speak to you during treatment if you like through a 2-way intercom system. Anytime you need the therapist to enter the room while you are on the table you can call out to them. A good sign for help is to bend your knees. Remain very still during treatment. You shouldn't see or feel anything but you will hear a little noise coming from the machine. If you have pain, tell the therapist. The machine will rotate around you during treatment.

Once your treatment is complete you may leave. You are not radioactive afterwards.

## Weekly Management Visit

You will see your radiation doctor once a week. He or she will check symptoms you may have and answer your questions. You can keep a journal so you can write down changes you may have from week to week. This will help you remember to discuss these changes during your weekly visit.

## Side Effects of Treatment

Side effects depend on the part of the body being treated, size of the treatment area, or if the treatment is combined with chemotherapy. If you are treated with stereotactic radiotherapy, side effects are usually minimal. They may include some skin reactions after treatment is complete. At any time you feel sick and you think it's caused by the radiation, you can see the nurse in clinic. Radiation is still working 2 weeks after treatment, so the side effects may worsen during that time. Common side effects are:

- The skin in the treated area may become red, itchy and have a burning sensation and peel. Tell your nurse if you have any skin changes. Medicine is available to help relieve these symptoms.
- You may feel more tired than usual. Take frequent rest breaks during the day and try not to do too much.
- You may have problems swallowing, changes in taste, nausea and loss of appetite. Medicine is available to help. Please tell your nurse. Some patients find it helpful to eat small frequent meals during the day rather than 3 large meals.

Tell your nurse if you have any 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 recorded during your weekly doctor visit. You will be scheduled to see a dietitian during the first 2 weeks of treatment. The dietitian will teach you how to meet your nutritional needs.

### Diet

After 2-3 weeks of treatment, you may have difficulty swallowing. Certain products can irritate the treated area and may make side effects worse. These include:

- Tobacco products
- Alcohol
- Carbonated beverages
- Acidic beverages (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
- Extreme temperature foods and beverages

Try the following tips to help ease discomfort while eating:

- Drink cool fluids that are non-carbonated and non-acidic
- Eat 5-6 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 make swallowing easier

## **Skin**

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

## **After Hours**

The radiation treatment clinic is open Monday-Friday 8:00 am- 5:00pm. If you have problems after these hours, please go to the nearest hospital emergency room or call 911 for life threatening problems.

## **Home Care After Treatment**

Radiation side effects often become worse 10-14 days after the last treatment. They will slowly begin to improve over several weeks. 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 emergency center or call 911.
- Call your radiation doctor, mid-level provider or nurse at 713-792-0865 if you have lumps, sores, continued weight loss or difficulty in swallowing that does not get better.
- Tell your radiation doctor before you have any invasive procedures (such as a biopsy) in the treated area.
- Do not smoke or use other tobacco products.
- Drink fluids to help speed the healing process. Eat a well-balanced diet and continue the instructions your dietitian gave you. After 2-4 weeks you may slowly return to your normal diet. If you have questions regarding your diet, please call your dietitian at 713-563-5167.
- To clean the treated skin, use a mild soap and your hands, not a washcloth. Do not soak in a tub for long periods of time. Pat the skin dry in the treated area and apply Aquaphor®, or other product that your doctor has recommended, to the skin. These products may be applied 3-4 times per day or more frequently until your skin has healed.
- The treated area will always be sensitive to injury. Do not expose the treated skin to extreme temperature changes (such as using an ice bag or hot water bottle) and always protect the skin from the sun. Radiated skin reacts quicker to sun exposure. 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 complete treatment, your radiation doctor will determine a schedule for your follow-up visits and what tests, if any, need to be scheduled. If you have not received a schedule in the mail within a month, call your radiation patient service coordinator (PSC) at 713-792-0865.
- 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 necessary, your local doctor can contact your radiation doctor for more information.

## Resources

### **MD Anderson Cancer Center**

Radiation Treatment Center Website

<http://www.mdanderson.org/patient-and-cancer-information/care-centers-and-clinics/specialty-and-treatment-centers/radiation-treatment/index.html>

### **National Cancer Institute**

Lung Cancer Website

<http://www.cancer.gov/types/lung>

### **National Cancer Institute (NCI)**

Radiation Therapy Website

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