What You Need to Know About Your External Beam Radiation Therapy

What is Radiation Therapy?
Radiation Therapy (also called radiotherapy) is a type of cancer treatment that uses high doses of radiation to kill cancer cells and stop them from spreading. External beam radiation uses a machine outside your body (linear accelerator) to aim radiation at your cancer.

There are many steps that will need to be done before you can start your radiation treatment. This handout will give you information about each step and how to plan for your treatment.

Who is on the radiation oncology treatment team?
Your radiation oncology treatment team includes a radiation oncologist, medical radiation physicist and dosimetrist, radiation therapists and nurses. Your radiation oncologist (a doctor who specializes in radiation therapy) will develop and order your radiation treatment. Your medical radiation physicist and dosimetrist work with your doctor to plan how your treatment will be done. Radiation therapists and nurses care for you during your treatments.

What will happen at my first appointment?
During this visit, you will meet with members of your radiation oncology treatment team to review your medical history and do a physical exam. Your doctor will talk with you about your cancer diagnosis, what treatment is best for you and what to expect during radiation therapy. You will not have radiation treatment at this appointment. You will be scheduled to come back for a treatment planning appointment.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

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What will happen at my treatment planning appointment?

At your treatment planning appointment, your treatment team will work together to take measurements of your body and determine the positions that are best for your radiation treatment. You will not have radiation treatment at this appointment.

A CT scan, also called a **CT simulation**, will be used to locate the area of your body that needs to be treated. During this scan your radiation therapist will use a permanent marker to put small marks on your skin to show the exact area of your body that needs treated. Clear stickers will be put on top of these marks to help protect them. It is important to keep these marks on your skin until you come back for your dry run appointment. Masks, molds or cushions may be used to help position you and hold you still during your treatment.

After your CT simulation, you will meet with a nurse to talk with you about your care during your radiation treatments. Before you leave, a team member will talk with you about parking and the check-in process for your next appointment. You will be given a radiation check-in wristband to wear to your future appointments.

When will I start radiation treatments?

After your CT simulation, a member of your radiation oncology treatment team will talk to you about when your radiation treatments will begin. It can take 1 to 2 weeks for your treatment plan to be completed. Your treatment schedule will depend on what is ordered by your doctor. You will be scheduled for a **verification simulation**, also called a “dry run” appointment before your radiation treatments can begin.
What will happen at my dry run appointment?

At your dry run appointment, you will be in a radiation treatment room with a linear accelerator. A linear accelerator is a special machine that uses radiation to kill cancer cells. Your radiation oncology treatment team will use the marks from your CT simulation to position you on the machine and take images of your body. Your radiation therapist will put new marks on your skin to show the exact area of your body that needs treated. It is important to keep these marks on your skin until all your radiation treatments are done. Your doctor will decide if you can have your first radiation treatment at this appointment.

What will happen on my first day of radiation treatment?

A radiation therapist will take you to the treatment room and help position you on the linear accelerator.

Before your radiation begins, all members of your treatment team will leave the treatment room. A TV monitor and intercom lets your radiation oncology treatment team see and hear you during your treatment.

Before your treatment, radiation therapists will take images to make sure you are in the correct position. The linear accelerator will move around your body to aim radiation from different directions. It is important to hold still during your treatment. Try to relax and breathe normal. Most treatments take about 20 minutes. You will not see or feel anything during your treatment, but you may hear a buzzing sound from the machine. It may help to listen to music during your treatment.
How often will I meet with my doctor?

You will see your radiation oncologist at least one time each week during your treatment to talk about any concerns or problems. It is important to tell a member of your radiation oncology treatment team if you have side effects from your treatment.

You may also call (614) 293-8415 to talk to a radiation oncologist or nurse if you have questions.

For more information on Radiation Therapy, we encourage you to visit our video library at http://cancer.osu.edu/patientedvideos.