MRI-Guided Adaptive Radiation Therapy

This information will help you prepare for your radiation therapy treatment.

Adaptive radiation therapy

Adaptive radiation therapy is a type of treatment that allows your care team to make real-time changes to your radiation treatment plan. The adapted treatment is based on the daily changes in your body.

During (and between) your radiation treatments, a tumor can move, and surrounding organs can move and change shape. Your physician will use magnetic resonance imaging (MRI) scans to track these changes in your treatment area. Then, they will adapt, or change, the treatment to target the radiation to the exact spot it needs to go.

The Radiation Oncology team

The Radiation Oncology team includes the following:

- Radiation oncologist (physician who specializes in radiation treatment for cancer) – plans your care and guides your treatment
- Medical physicist and dosimetrist – creates your treatment plan with your physician
- Radiation therapist – delivers the radiation treatments
- Registered nurses – provide education and help with follow-up needs
- Social worker – helps you find resources as needed, and offers support and counseling to you and your family

Treatment

You will meet with the radiation oncologist for a planning session. Your care team will work together to create your treatment plan. A radiation therapist will call you with your treatment schedule about 2 weeks after your planning session.

You will have 1 to 5 treatments. Each treatment can take 1 to 2 hours. You will have treatments every other day (no treatments on weekends).
**Day of treatment**
Before your appointment:

- Take your usual medications as instructed by your physician.
- Based on the area being treated, you may not be able to eat or drink before the planning or treatment sessions. Your nurse or therapist will tell you if you can eat or drink.

**During treatment**
You will lie still for the whole treatment. Your care team will ask you to hold your breath at times during the treatment.

**After treatment**
You may go back to your usual activities. Be sure to keep all follow-up appointments with your care team.

**Side effects**
Side effects vary based upon the area of your body that is being treated. Your physician will talk with you about the side effects you may have.

If you have any questions about your treatment, please ask your physician.