ViewRay MRIdian Treatment Machine

The MRIdian Linac (ViewRay, Inc) is a radiation treatment machine. An MRI scanner shows us the inside of your body. It uses a magnet to give detailed pictures of your soft tissue. This machine allows us to take pictures during your entire treatment. This helps us to give radiation to just the tumor area. Your healthy tissue can then stay healthy.

Preparing for Your Treatment
A radiation therapist will call to schedule your first radiation treatment. They will give special instructions to you about your treatment. As an example: Nothing to eat or drink 4 hours before your treatment.

Your treatment will be on a machine that is also an MRI scanner. You may wear your own clothes if there is no metal on them. We can give you a hospital gown or scrub pants to change into in needed. The staff will also remind you to check your pockets. You should not have any metal on you, including glasses, hearing aids, cell phones, etc.

Positioning for Your Treatment
The radiation staff will put you into the best position for treatment. They line up marks that have been put on your skin. Once you are set up for treatment, you will be given headphones and an alert cord. The staff will talk to you during the treatment through the headphones.
If you ever have a question or issue, you could press the alert cord to signal the staff f or assistance.

A foam pad called a “coil” will be placed under and over your body. The coil helps make clear MRI pictures. Once you are in position and the top coil is placed, we will send you into the scanner.

The first step for a radiation treatment is taking MRI pictures. These pictures will be taken every day before your treatment. This helps the staff see the area that we need to treat. By using the pictures, small changes are made to your position. The radiation beams aim at the exact spot. The scan can take 30 seconds to 2 minutes. After the first scan, the staff take 5-20 minutes to look it over and line up the treatment area. Your doctor may also be looking at the scan.

During the Treatment
MRI pictures are taken during the whole treatment. This allows the staff to watch for movement or changes. Then adjustments can be made.

ViewRay is used to treat different areas of the body. You will be told what you need to do to help ViewRay target the specific tumor and its location. Some examples of this include breathing a certain way during the procedure or having a full or empty bladder. The radiation staff will let you know what to do.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2025 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8100.