

Radiation Oncologist and Radiation Therapy Female Patient

A **radiation oncologist** is an internal medicine physician who specializes in the treatment of diseases using radiation treatments. After your cancer is evaluated and it is determined that the use of radiation therapy could destroy any remaining cancer cells which may be left in your breast area, you will be referred to a radiation oncologist. Most patients who have a lumpectomy or breast-conserving surgery are referred to a radiation oncologist for evaluation prior to their surgery.

Radiation therapy (treatment by high-powered X-rays) is an effective weapon against breast cancer because it damages cells and prevents cell reproduction. When a cell is about to divide and is radiated, it cannot divide, and it dies. Radiation therapy is used to destroy cancer cells in the area of the breast that is radiated. Chemotherapy kills cells that have spread to other parts of your body through the blood or lymphatic system. Often both methods are used to give the best possible chance for eradication of the disease.

On your first visit to a radiation oncologist, the physician will carefully review your pathology report, mammogram records or films, your surgery recommendations or surgical records, results from any diagnostic tests performed and your medical history. A physical exam will be performed and recommendations made for your treatment.

Candidates for Radiation Therapy

Radiation therapy is given after breast-conserving surgery to help lower the risk of a local recurrence in the breast or nearby lymph nodes. It is also given after mastectomy if the cancer was larger than 50 mm (about 2 inches) or if cancer had spread to the lymph nodes.

Types of Radiation Therapy

There are several types of radiation therapy used to treat breast cancer:

- **External beam radiation** comes from a machine outside or the body
 - Traditional external beam radiation therapy is given daily, five days a week for six weeks.
 - Accelerated external beam radiation therapy is administered in three weeks by giving a higher dosage of radiation at each treatment session.
- **Internal radiation** (brachytherapy) is a radioactive delivery source that is placed into the breast lumpectomy cavity for a short period and then removed. Treatment is usually given twice a day for five days.

External Radiation Therapy

The radiation oncologist will monitor your treatments. Treatments are given in a clinic or hospital on an outpatient basis. This first session will include special exams, such as CT scans or special X-rays, to determine the area to be treated. To ensure that the radiation beam is aimed correctly each day, a technician will outline your chest with tiny, freckle-sized dots. Ask your technician if your marks will be semi-permanent or permanent. If semi-permanent, the marks will eventually

fade away, but they need to remain until treatment is completed, so soap and scrubbing on the area must be avoided during the treatment period. Often, the marks are tattooed and are permanent. This visit may require one hour or longer. Treatments are given five days a week, Monday through Friday, for up to six weeks. Each treatment time requires approximately 15 minutes, with the actual time under radiation being only a few minutes.

Radiation therapy is delivered by a machine that produces high-energy X-rays from radioactive substances. The radiation is directed to the area in your body where disease was found or where there is a potential for microscopic disease. The treatments are painless and you cannot see the rays. You will lie on your back on a table in a treatment room. Once you are positioned correctly, the therapist goes into an adjacent room where they can monitor you on closed circuit TV and talk to you over an intercom during the procedure.



The machine is then turned on. Radiation equipment is large and often noisy. The machines may click or sound something like a vacuum cleaner as they move around to aim at the cancer from different angles. Radiation therapy is painless; but some women may have a sensation of warmth or mild tingling—this is normal. Once the machine delivers the prescribed dose to your body, usually within a few minutes, it is turned off and the therapist returns to help you up from the table. You can then dress and leave.

Most people in good physical condition do not need to be accompanied to their radiation treatment and can drive themselves. In fact, many continue to work or engage in normal daily activities following treatments.

It is important to avoid any products that could irritate the radiated area or interfere with the radiation treatments. Do not use any products such as deodorants, powders or soaps that contain aluminum as they can leave a residue on your skin. Ask your treatment team which products you may use during your treatments. Many women are concerned about perspiration odor under the surgical arm. Ask your healthcare provider if you may wipe the area with alcohol or dust with cornstarch.

The effects of the treatments will be monitored by your radiation oncologist throughout the treatments. Some women experience mild fatigue, slight skin discoloration in the area resembling a sunburn, sore throat or difficulty swallowing. These treatments do not make you radioactive, nor are you a danger to your family. Most women find that they are able to maintain a relatively normal lifestyle with added rest periods to compensate for the fatigue.

Questions About Radiation Therapy:

- How many radiation treatments will I receive?
- When will these treatments begin?
- How long will each treatment last?
- How will the area to be radiated be marked?
- Are the markings permanent or temporary?
- What kind of soap and bath do you recommend?
- What kind of skin reaction can I expect and how can I best protect my skin?
- Is there anything that I cannot use during my treatments (deodorant, powders, etc.)?
- Can I wear my bra or prosthesis during the treatment period?
- Will I be able to perform my normal duties during treatment?
- What side effects may I expect during or after treatment?
- How will the treatments affect my breast after treatment is completed?
- Do you have written information on radiation therapy?