

When you return to begin your treatments, you will meet the radiation therapists who deliver your daily treatments. Treatments are scheduled Monday through Friday. The exact number of treatments will be determined by your physician and is designed to best meet your specific treatment needs.

Radiation therapy is closed for certain holidays, and you will be notified if a holiday occurs during your course of treatment. Due to the number of patients under treatment and emergency hospital patients, there can be delays in the time of your daily treatment. We appreciate your patience.

Side Effects

At your initial consultation, your radiation physician reviewed the anticipated results and side effects of the radiation plan determined to best fit your needs. This handout is to acquaint you with some of the most common side effects that can occur because of your treatment. It will also explain some of the things that can be done to help manage these side effects.

It is important to remember that most people do not experience all of the side effects mentioned here. Please keep us informed of your particular needs so that appropriate recommendations can be provided for you.

Skin Reactions

Because radiation beams must penetrate the skin to reach the target area, most patients will experience some degree of skin irritation. This can affect the skin, hair follicles, and moisturizing glands. The degree of skin reaction is influenced by a number of factors:

- Reactions are worse in skin folds/friction areas, such as the underarm and under the breast.
- Skin reactions are increased with prior or concurrent use of chemotherapy agents.
- Acute skin reactions generally begin 2 to 3 weeks after the initiation of radiation.
- Skin reactions generally resolve within approximately 2 to 4 weeks after completion of treatment.

- Late effects in the skin can include atrophy, pigment changes, thinning, and changes in the appearance of superficial blood vessels.

The sweat glands within the path of the radiation beam may become less active, and you may notice the area becomes chronically drier.

Our clinical staff will direct you on recommendations to manage the particular symptoms you experience. Some of the common recommendations include the following:

- Cornstarch can be applied to intact skin, especially skin folds, to decrease excess moisture and itching. This is discouraged if areas of moist blistering are present.
- Various moisturizing lotions or gels can be applied for soothing and dryness. Our clinical staff will direct you on the products best-suited for your situation.
- 1% hydrocortisone cream can be applied to areas of irritated, itchy skin during treatment.

It is recommended that patients follow certain skin care guidelines during treatment:

- Avoid friction (i.e., skin surfaces rubbing together, clothing rubbing against skin).
- Avoid temperature extremes (i.e., heating pads, ice packs).
- Avoid irritants (i.e., deodorants, soaps, lotions, perfumes other than those recommended by our clinical staff).

- Avoid exposure of the treated region to the sun.
- Wash your skin gently with a mild soap and lukewarm water.
- Use an electric razor if shaving is needed in the treatment area.
- Maintain good nutrition intake to promote rapid tissue healing.
- Report any problems or changes other than redness to the clinical staff.

Patients can experience significant itching in the treated region. It is important to avoid scratching the area because of increased risk of infection. We do recommend that patients cut their fingernails short if they have significant itching.

NOTE: After you complete treatment, you may find that you have chronically dry skin in the treatment region. If this is noted, we recommend the regular use of a moisturizing agent, such as Aquaphor or Eucerin cream. The frequency of application depends upon the degree of dryness you experience.

Hair Loss

Breast radiation will only cause hair loss from areas within the treatment field, such as your underarm. Regrowth of this hair may occur within 3 to 6 months following completion of your therapy. If you need to shave the underarm during treatment, we recommend this be performed with an electric razor. Shaving with a blade razor increases the risk of skin injury that can cause an infection.

Breast Changes

You may notice mild breast swelling or redness after just a few treatments. This is due to some retained fluid within the breast tissues (especially the skin). This will disappear slowly after you complete treatment. It is normal for breast skin to look dimpled (an orange peel appearance) after treatment.

Chest Wall Symptoms

The muscle (pectoralis) and joints lying just below the breast are within your treatment field. Swelling may be associated with some mild discomfort. This is usually relieved with mild analgesics (i.e., Tylenol) or anti-inflammatory medications (i.e., ibuprofen, Aleve, etc.). Active use of your affected arm and range of motion exercises are encouraged. This will help minimize swelling and maintain normal strength and function of your shoulder.

Fatigue

Fatigue associated with radiation therapy to the breast may occur and does vary in severity from one individual to another. Tiredness may develop gradually over several weeks and will subside gradually after completion of the treatment. It may be minimized by pacing your activities to avoid becoming overtired. A regular exercise program, such as a short daily walk, and maintaining your strength and weight by eating a well-balanced diet are important and encouraged. Unfortunately, no medications are available to fight fatigue.

Nausea

With breast irradiation, it is unusual for patients to experience nausea. If this should occur, please notify our clinical staff for recommendations on managing this problem.

Nutrition is an important part of your therapy, and weight maintenance is recommended. Eating well helps maintain your strength and energy, provides building blocks for repair of normal tissues, and prevents weight loss. You will feel better and, thus, be more able to cope with your therapy and its possible side effects. If you are having difficulty maintaining your weight, please contact our clinical staff for suggestions.

Lymphedema

Because of the effects of treatment (surgery and radiation), you may have disruption of the lymphatic system, which can result in chronic extremity swelling. Fortunately, given modern surgery and radiation techniques, this problem is becoming less and less frequent. Your particular risk of chronic swelling will be explained to you by our clinical staff during your initial evaluations.

There are a number of preventative measures that you can take to decrease your risk of lymphedema following treatment:

- Avoid invasive or traumatic procedures in the affected extremity (i.e., blood draws, IVs, injections, and blood pressure measurements).
- Use an electric razor when shaving the underarm in the treated area.
- Carry heavy packages and purses on the unaffected arm.
- Wash cuts immediately and treat with antibacterial medication.
- Avoid elastic cuffs or other restricting bands in your clothing on the affected extremity.
- Wear protective gloves while gardening or using strong detergents.
- Avoid excessive sun exposure (i.e., sunburns) in the treatment area and adjacent hand or arm.
- See your primary care physician as soon as possible should you develop any signs of infection (i.e., redness, warmth, and tenderness) in the treatment area or adjacent hand or arm.

Please let your primary care physician or our clinical staff know if you experience any extremity swelling or develop any signs of infection, i.e. redness, warmth or tenderness. Early detection facilitates referral for successful treatment of lymphedema and treatment of infection.

Breast Self-Exam

For patients who perform breast self-examinations after treatment, it is important to expect changes in the breast tissues after treatment. This can result from further changes in your surgical scarring, fluid retention within the breast, and some decrease in size due to post-radiation scarring. Please note that the greatest area of scarring due to radiation is at the site of your “boost.” This area received a slightly higher dose of radiation and it may develop increased scarring that can be delayed 6 to 12 months after completion of your treatments.

It is probably best if breast examinations be performed in partnership with regular mammography under the guidance of one of your physicians. Your physician may wish for you to return for evaluation with us if there are questions or concerns about future changes seen or felt in the treated breast.

Sexuality and Cosmetic Outcome

Sexuality is an important part of our everyday life. Feelings about sexuality affect our zest for living, our self-image, and our relationships with others. The most common sexual side effect from local treatment for breast cancer is associated with a possible change in body image. You may feel an increased need to be held and comforted.

Most women who have chosen breast conservation surgery followed by radiation therapy have felt that their cosmetic outcome has been good to excellent. The ultimate result is a balance between the appearances after surgery, any swelling related to fluid retention within the breast, and some decrease in size due to post-radiation scarring.

While Receiving Radiation

You will have scheduled visits with our clinical staff at least one time per week during treatment. We will be assessing your progress and making recommendations to you on changes in your care program as needed.

Our clinical staff will be available at any time if you have questions or concerns that need to be addressed between these scheduled weekly visits.