Breast Cancer Radiation Therapy: What You Need to Know



The information in this pamphlet is for patients, family members and caregivers.



What is radiation treatment?

Radiation treatment uses high energy x-rays to kill cancer cells. Radiation damages cancer cells so they cannot grow or divide. Once they are damaged, they can no longer repair themselves, so they die. However, normal cells are affected by radiation, but can continue to repair themselves and heal. The treatment does not cause pain or discomfort and does not make you radioactive.

How can I prepare for my first visit?

If your mammograms were not taken at Massachusetts General Hospital, bring them with you! Our doctors and technicians need to review the films to plan your treatment.

How can I prepare for radiation treatment?

- Tell your doctor or nurse if there is a chance you could be pregnant. Radiation can harm a developing child. If you are pregnant, you cannot have radiation treatment. If you are not sure if you are pregnant, you can have a pregnancy test done.
- Use more than one form of birth control if you are actively having sex. For example, use birth control pills and condoms. You need to be very careful to prevent pregnancy in the weeks before and during your radiation treatments.

During the entire time you are getting your radiation treatments:

- Do not shave under your arm during treatment and for 2-4 weeks after treatment is finished. Shaving takes off the top layers of the skin.
- There are many moisturizers that you should not use. Talk

with your nurse and radiation doctor before using any moisturizers or lotions on the area receiving treatment.

Use only skin moisturizers approved by your radiation team.

What can I expect during treatment?

Weekly Status Checks

Your radiation oncologist and radiation nurse will see you every week. These visits are to check for any possible side effects, to make sure that everything is going well, and to give you a regular time to ask questions. This weekly "status check" will be scheduled on a set day of the week. Please plan to stay an extra 30 minutes after treatment on status check days. Your radiation oncology nurse will review your treatment follow-up schedule.

What are side effects?

Cancer treatment is quite powerful. It often causes changes in your body. These changes are called side effects and may occur during treatment or many weeks or months after treatment. They are most likely to occur in, or close to, the area that is being treated, like the skin of the breast and armpit.

What are some early side effects of radiation that I might experience?

Some side effects are skin problems, lymphedema (swelling), and fatigue.

Skin Problems

What skin problems might I have?	For how long?	
Dryness	About 2-3 months after your treatment ends	
Redness or darkening skin	About 4-6 weeks after your treatment ends	
Tenderness and slight swelling in: breast tissue muscles of the chest wall, in between the ribs, and under the arm	This can start several weeks after treatment begins and can last 2-3 weeks after your treatment ends.	
Peeling skin, especially in areas with a lot of friction (skin folds, underarm, under the breast, bra lines)	The peeling heals about 2 weeks after your treatment ends.	

Lymphedema (Swelling)

- Lymphedema is swelling that happens when there is an interruption in the vessels that carry fluid from the body's tissues. The interruption can be caused by **surgery** when lymph nodes are taken out, by **radiation**, or by the combination of **surgery** and **radiation**.
- Lymphedema in breast cancer patients can occur in the breast or chest wall, in the arm, or both.

- Lymphedema can be treated or controlled with:
 - exercises for the arm and chest muscles
 - massage
 - custom-made compression sleeves



Tell your nurse if you have problems with lymphedema. Your nurse can refer you to a specialist who can help treat and manage lymphedema.

What can I do to manage skin problems and swelling?

You can practice good skin care.

- Treat your skin very gently. Wash daily and dry by patting your skin, rather than rubbing. This helps keep irritation down and also helps prevent peeling of the outer skin layers.
- Use a moisturizer on the treated area that has been approved or recommended by your treatment team. Your nurse will give you directions on where and when to apply the moisturizer.
- Use soap that is fragrance free and hypoallergenic (made to reduce the chance of an allergic response).
- Avoid very hot or very cold temperatures on the skin in the treatment area. Heated or frozen objects will damage your skin cells. This means no hot tubs, no ice packs, and no soaking the treated areas in the tub. You may use refrigerated cooled objects, such as aloe gel, a wet face cloth, or the special gel pads (sold in pharmacies) specially made for radiation skin reactions.
- Protect the treated area from the sun during your treatment, and for at least two years after your treatment ends. Use a sun block with SPF 45 or higher if you are outdoors. The treated area will burn more easily. Apply sunscreen under clothing and on exposed skin.
- Take anti-inflammatory medication, such as Ibuprofen, three times a day. This will help decrease skin and muscle discomfort. Most patients do not feel they need a stronger medication. Make sure you tell your radiation nurse and doctor about any discomfort or pain that you have. If you cannot take anti-inflammatory medication, Tylenol can also help.

You can wear the right clothing.

- Wear loose blouses or t-shirts made of cotton or cloth that breathes.
- Do not wear bras with underwire. Make sure that nothing digs into your skin. Many patients find sports bras comfortable.
- Try to wear a different style bra each day. This will lessen friction areas on the skin and keep you more comfortable. There are many different bras and camisoles available.

Fatigue

- Fatigue, or tiredness, can develop two to three weeks into your treatment or shortly after your radiation treatment is finished.
- Fatigue may cause you to not have enough energy for daily activities.
- Everyone is different in how much fatigue they experience and how long it takes to recover. Listen to your body and rest when you are able to.
- Ask your nurse for the Managing Fatigue: Exercise and Saving Energy pamphlet.

What can I do to manage my fatigue?

You can do light exercise.

- Try to exercise at least 10-15 minutes 3-5 times per week during your radiation treatment. Walking and aerobics are good exercises to do.
- You can keep doing upper body exercises (light weight lifting, rowing, walking) during your radiation treatment.
- When you are further into your treatment, your chest muscles

may become sore and you may have spasms. If this happens, decrease the number of repetitions or amount of weight you are lifting.

- Try the Gentle Yoga workshop offered by the Integrative Therapies program.
- Speak with your doctor about swimming before you start your treatment. Chlorine or salt water will dry your skin and make your skin peel. Your skin must be washed immediately after swimming. You should not swim if your skin is irritated.
- Some patients cannot exercise without help. If you are unable to exercise, tell your treatment team, who can refer you to physical therapy.

You can eat healthy foods.

- Eat protein with every meal. Chicken, turkey, fish, nuts, eggs, cheese, and beans are good sources of protein. Proteins help your body heal during and after your radiation treatment. Eating well will help keep up your energy, especially towards the end of treatment.
- If you need help planning menus or if you have questions about your diet, schedule an appointment with a nutritionist, who specializes in helping cancer patients. Talk to the front desk staff to make your appointment.

You can get as much rest as you can.

- If possible, try to set aside time for relaxation. Many women find it helpful to nap, meditate, read, or write in a journal.
- Find time for yourself. It will help reduce stress and increase your sense of well-being.
- Relax in the Healing Garden, a landscaped setting for rest and comfort. The Healing Garden is located on Yawkey 8 and is open year-round.

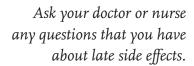
What are some possible late side effects?

Serious late side effects after radiation treatment are **rare**. It is important to write down your concerns and review them with your radiation oncologist at your next appointment. Here are some of the late side effects that you may experience:

- Hardening or firmness of the breast/chest wall tissue. This usually starts during the first year after treatment and can be permanent.
- Inflammation of the lung, especially if you received chemotherapy. This can begin 1-3 months after radiation treatment ends. If you have a cough that lasts a long time, or shortness of breath, tell your radiation nurse and oncologist right away.
- Spider veins of the treated area in the breast/chest wall.
- Rib discomfort. This is temporary and can begin 6 weeks to a few months after your treatment ends.

• Weakness, numbness, or tingling in the arm of the treated side. This may occur if you had radiation on the lymph nodes in the collarbone or in the underarm. The feeling is usually

temporary, but in rare cases may be permanent.



I feel like I am having a hard time coping. Is this common?

You may feel many different emotions while you are receiving treatment or when your treatment finishes. Some of these feelings include anxiety, fear, anger, stress, decreased sense of sexuality, or a sense of loss. Women cope differently with these strong emotions. These feelings are normal. We have a number of ways to help you.

What Mass General support services are open to me?

Oncology Social Workers help patients and their families with many concerns from daily problems to life's most difficult situations. This is done through counseling, active problem solving, and using hospital and community resources. Social workers are members of your treatment team and are available to you at anytime. All social work services are free of charge. A referral is not needed.

The Network for Patients and Families

A peer support program that matches patients and family members with volunteers who are experienced in living with a similar type of cancer. Call 617-643-1784.

The Katherine A. Gallagher Integrative Therapies Program

The Integrative Therapies Program offers free wellness services and education and support workshops for patients with cancer and their families, 617-724-6737. The calendar listing the workshops and services is available throughout the Cancer Center and online at massgeneral.org/cancer/supportservices.



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