

Radiation Side Effects: Skin Changes



What they are:

Radiation therapy can cause skin changes in your treatment area. Radiation will not affect skin outside the area being treated with radiation. Skin changes do not always occur; your doctor can let you know the likelihood that you will develop skin changes.

Here are some common skin changes:

- **Redness.** Skin in the treatment area may look as if you have a mild to severe sunburn or tan.
- **Itching.** The skin in your treatment area may itch. Avoid scratching because scratching too much can lead to skin breakdown and infection.
- **Dry and peeling skin.** Skin may be so dry that it peels like it does after a sunburn.
- **Moist reaction.** Radiation kills skin cells in your treatment area, causing your skin to peel off faster than it can grow back. When this happens, you can get sores, blisters, or ulcers, and the skin in your treatment area can also become wet or infected. This is more common where you have skin folds, such as your buttocks, behind your ears, under your breasts. It may also occur where your skin is very thin, such as your neck.
- **Swollen skin.** The skin in your treatment area may be swollen and puffy.

Why they occur:

Radiation therapy causes skin cells to break down and die. When people get radiation almost every day, their skin cells do not have enough time to grow back between treatments. Skin changes can happen on any part of the body that gets radiation.

How long they last:

Skin changes may start a few weeks after you begin radiation therapy, and may worsen over the course of treatment. The skin heals after radiation therapy is complete, usually over a period of 2 to 4 weeks. The skin that received radiation may return to normal, but some patients always have some discoloration, tightness, or dryness of the skin. Skin may feel more dry or thick than before, and you may always burn more quickly and be sensitive to the sun. You will always be at risk for skin cancer in the treatment area. Be sure to avoid tanning beds and protect yourself from the sun by wearing a hat, long sleeves, long pants, and sunscreen with an SPF of 30 or higher.

Ways to manage:

- **Skin care.** Take extra good care of your skin during radiation therapy. Be gentle and do not rub, scrub, or scratch in the treatment area.
- **Use lotions and ointments.** Use a moisturizing ointment or lotion on the skin within the radiation treatment area two to three times per day. Avoid skin products with fragrance. A list of recommended products is included at the end of this handout. Do not apply ointments or lotions immediately prior to your daily radiation treatment. Use them at least 2 hours before your treatment session. The skin should be clean and dry during the treatment. If your skin does not feel dry at the time of radiation treatment, gently wash it and pat it dry. You can apply ointments and lotions immediately after radiation. If you are unsure what skin area is affected by the radiation treatment, check with your therapist. If necessary, prescription strength ointments or lotions are available.
- **Do not put anything on your skin that is very hot or cold.** This means not using heating pads, ice packs, or other hot or cold items directly on the treatment area. It also means washing with lukewarm water.
- **Be gentle when you shower or take a bath.** You can take a lukewarm shower every day. If you prefer to take a lukewarm bath, do so only every other day and soak for less than 30 minutes. Whether you take a shower or bath, make sure to use a mild soap that does not have fragrance or deodorant in it. Dry yourself with a soft towel by patting, not rubbing, your skin. **In some circumstances, your therapists may instruct you to avoid washing away temporary ink marks that they have placed on the skin. The tattoos that you received on the day of simulation will not wash off, and it is okay to clean the tattooed area of the skin.**
- **Use only those lotions and skin products that your doctor or nurse suggests.** AVOID cornstarch, perfume, powder, hair removers, sunscreen or zinc oxide on the treatment area unless approved by your doctor or nurse.
- **Cool, humid places.** Your skin may feel much better when you are in cool, humid places. You can make rooms more humid by putting a bowl of water on the radiator or using a humidifier. If you use a humidifier, be sure to follow the directions about cleaning it to prevent bacteria.
- **Soft fabrics.** Wear clothes and use bed sheets that are soft, such as those made from cotton.
- **Do not wear clothes that are tight and do not breathe,** such as girdles and pantyhose.
- **Protect your skin from the sun every day.** The sun can burn you even on cloudy days or when you are outside for just a few minutes. Do not go to the beach or sun bathe. Wear a broad-brimmed hat, long-sleeved shirt, and long pants when you are outside. Talk with your doctor or nurse about sunscreen lotions. He or she may suggest that you use a sunscreen with an SPF of 30 or higher. You will need to protect your skin from the sun even after radiation therapy is over, since you will have an increased risk of skin cancer for the rest of your life.

- **Do not use tanning beds.** Tanning beds expose you to the same harmful effects as the sun.
- **Adhesive tape.** Do not put bandages, BAND-AIDS®, or other types of sticky tape on your skin in the treatment area. Talk with your doctor or nurse about ways to bandage without tape.
- **Shaving.** Ask your doctor or nurse if you can shave the treated area. If you can shave, use an electric razor and do not use pre-shave lotion.
- **Rectal area.** If you have radiation therapy to the rectal area, you may have skin problems around the anal opening. These problems are often worse after a bowel movement. Clean yourself with a baby wipe or squirt of water from a spray bottle. Also ask your nurse about sitz baths (a warm-water bath taken in a sitting position that covers only the hips and buttocks.)
- **Armpit area.** If you are receiving radiation to the armpit, it is OK to use deodorant. Research studies have not shown any worsening of skin irritation when deodorant is used. If, however, you find that applying deodorant is uncomfortable or painful, stop using it.
- **Talk with your doctor or nurse.** Some skin changes can be very serious. Your treatment team will check for skin changes each time you have radiation therapy. Make sure to report any skin changes that you notice.
- **Medicine.** Medicines can help with some skin changes. They include lotions for dry or itchy skin, antibiotics to treat infection, and other drugs to reduce swelling or itching.

Suggested ointments and lotions are listed below:

- Aquaphor
- Biafine (active ingredient trolamine)
- Alra Therapy Lotion
- Remedy Skin Repair Cream
- Elta creme
- Glucan Professional Moisturizing Cream
- Udder cream
- AloePlex Gel
- RadiaPlex Gel
- Xclair.
- Miaderm Radiation Relief.
- Cetaphil moisturizing lotion or cream
- Aveeno daily moisturizing lotion