

Skin Reactions from Radiation Treatments

Skin reactions are a common side effect of radiation treatments. They are caused when repeated doses of radiation pass through the skin. Skin reactions occur within “treatment fields.” Treatment fields are the parts of the body that are treated with radiation. Skin reactions can worsen as more treatments are given. They can continue to worsen for 7-10 days after treatments end. Most skin reactions heal 1-2 weeks after treatments end.

Types of Skin Reactions

Skin reactions can vary. They can be mild with the skin turning light pink or brown. They can be more severe and look like a sunburn. In some cases, the outer skin peels off to reveal a layer of moist, “weepy” skin. Areas of bleeding, blisters, or crusting can also occur.

The skin within treatment fields can also become tender to the touch. It can become dry and itchy. This is because the oil and sweat glands in the treatment fields can shut down for a short amount of time. Sometimes a mild pinpoint type rash will occur. Repeated treatments can also lead to hair loss. If the total dose given is high enough, the hair loss can be long-term.

The type of skin reaction depends on many factors. One factor is the total dose of radiation given. This dose is prescribed by your doctor. Higher total doses more often lead to more severe skin reactions.

The shape and size of the treatment fields will also affect how severe the reaction will be. Small, flat treatment fields (the middle of the chest, for instance) will often have little or no skin reaction. Larger treatment fields with curves (the pelvis and groin, for

instance) will often have a more severe reaction. If skin folds are present in the treatment fields, the skin within the folds will have a more severe reaction.

Your doctor or nurse can advise you on what to expect. The radiation therapists know a lot about what might happen to your skin from your treatments.

Self-Care During Treatments

There are things you can do to help yourself and your skin during your treatments. These include:

- Handling the skin in treatment fields gently.
- Cleaning the skin in treatment fields gently.
- Keeping yourself well-nourished and well hydrated.
- Avoiding smoking and excessive amounts of alcohol.
- Getting enough rest and sleep.
- Getting some light exercise everyday (walking).

These tips may not prevent a severe skin reaction, but they may help you to feel better. Keeping a healthy lifestyle may help you to feel better during your treatments.

Caring for Skin in Treatment Fields

Avoid skin irritants. Common skin irritants include:

- Lanolin
- Perfumes and dyes
- Camphor
- Menthol
- Zinc
- Aluminum
- Alcohol

Your pharmacist, doctor, nurse, or radiation therapist can help you understand product labels.

Avoid extremes of hot and cold on treated skin. These may cause further damage to the skin. Do not use ice packs or heating pads.

Avoid exposing treated skin to direct sunlight. This includes tanning beds. Keep treated skin covered when outside.

Avoid swimming pools or hot tubs. They contain harsh chemicals that can dry and irritate the skin.

Avoid friction to the skin in treatment fields. Try not to rub or scratch your treated skin. Avoid “rough” clothing or clothing that rubs back and forth over treated skin.

Wear soft cotton clothing that has been washed in mild baby soap. This provides comfort to treated skin.

Avoid high pressure shower sprays. They may cause further damage to treated skin.

Avoid shaving with a normal razor. If you need to shave in areas where your skin is being treated, use an electric razor.

Do not use tape on treated skin. Removing it can cause damage.

Do not use hair dye or permanent wave solutions if your head or scalp area is getting treated. It is okay to wash your hair gently with a mild shampoo.

Pain

Tell us if your skin becomes sore or tender to the touch. Your doctor or nurse may tell you to take Tylenol[®] or ibuprofen for pain. If your pain is keeping you from sleeping,

you may want to take one of these at bedtime.

Cleaning Skin in Treatment Fields

Gently wash the skin in treatment fields. Use warm water alone, or warm water with a mild soap. Wash your treated skin with your hands or a soft washcloth. If you use soap, be sure to fully rinse it off. Pat your skin dry with a soft clean towel. You can also let it air dry.

Avoid washing any of the plastic dressings or short-lived marks placed on your skin by the therapists.

Breast patients can use an antiperspirant or deodorant on your treated side.

Here is a partial list of mild soaps that you can use.

- Aveeno[®]
- Dove[®]
- Basis[®]
- Neutrogena[®]
- Cetaphil[®]
- Ivory[®]
- Value Rite[®] skin cleanser

Creams and Lotions

Keep your treated skin clean, soft, and moist by using creams and lotions. Your skin will most likely feel softer with the use of creams and lotions. **Using creams and lotions will not reduce how severe your skin reaction becomes.** Creams and lotions may help your skin to feel more comfortable. You may use a skin cream or lotion up to 1-2 hours before your treatment.

There are many skin care products on the market. You can keep using your normal products on your treated skin if they do not cause burning, tingling, itching, or a rash. **If burning, tingling, itching, or a rash begins, stop using these products.**

You may then want to switch to products that are made for sensitive skin. Use products that do not contain any alcohol or perfumes. See the list of recommended skin care products below.

- Aloe Vesta[®]
- Aveeno[®]
- Aquaphor
- Biafine[®]
- Calendula cream
- Cavilon[™]
- Curél[®]
- Elta[®] Lite lotion
- Lubriderm[®]
- Petroleum Jelly
- ProShield[®] Plus Skin Protectant
- Neutrogena[®]
- VaniCream[®]
- Vaseline[®] Intensive Care lotion

Caring for Skin After Treatment Ends

Most skin reactions will appear to fully heal 1-2 weeks after treatments end. But the deeper parts of your skin and tissues will need more time to fully heal. In some cases, the skin in treatment fields can change over time. The skin can toughen, darken, or form

brown scaly spots or broken blood vessels. This can happen weeks to months after treatments end.

Keep cleaning, moisturizing, and handling your treated skin gently for at least six months after your treatments end. When outdoors, always use a good sunscreen (SPF 30 or higher) on treated skin. Treated skin is at a higher risk for skin cancer.

Your treated skin may also remain dry and itchy. You may need to keep using creams or lotions. You may also find that your treated skin is more sensitive. You may need to use soaps and lotions made for sensitive skin. You should also protect your treated skin from hot and cold extremes, friction, or other kinds of stress.

When to Call

If your treated skin is still bothering you, talk to your radiation doctor or nurse. They will help you form a long-term plan to manage your treated skin.