

Skin and Nail Changes During Cancer Treatment

Cancer treatments can cause skin and nail changes. While skin problems caused by chemotherapy or radiation treatment are often mild, more severe skin changes can happen in patients receiving immunotherapy, targeted therapy, or stem cell transplantation. It is important for you to tell your healthcare team about any skin and nail changes as soon as you notice them so they can be treated right away.

What skin and nail changes should I watch for, based on my treatment type?

Radiation therapy

- Radiation can cause the skin on the body part being treated to become dry, peel, and turn red or darker than the skin around it.
- It is also common for the skin to itch.
- The skin may look sunburned and become swollen or puffy.
- Sores (open wounds) can develop on the skin and become wet, painful, and infected (this is called a **moist reaction**).
- It is important to know that your skin can have a reaction from the radiation weeks or even months after treatment is completed (this is called **radiation recall**). No matter how long it's been, you should still report any skin changes to your healthcare team once you notice them.

Chemotherapy

- Some types of chemotherapy can cause similar skin reactions as radiation therapy (dryness, itching, redness or darkening of the skin, or peeling skin).

- You may develop a minor rash
- You may be at higher risk for your skin to burn easily in the sun.
- Your nails may become dark and cracked, and your cuticles (the thin layers of skin at the base of your nails) can become sensitive or painful with some chemotherapy plans.

Targeted therapy

- The type and severity of skin changes from targeted therapy depends on the type and dose of the medication.
- One of the main skin side effects of targeted therapy is a rash that looks like acne.
- Another common side effect is **hand-foot syndrome (HFS)**, which is redness or swelling that can affect the palms of your hands and soles of the feet. HFS symptoms can also happen at pressure points (such as the waistline or bra line), causing redness, pain, or discomfort in these areas.
- Other common skin changes include itching, dryness, sensitivity to the sun, and a change in skin color.

Immunotherapy

- Mild itchy skin and rash is a common side effect of immunotherapy that can be treated with over-the-counter (non-prescription) lotions. However, these medications can also cause a more severe rash. It is important to report any skin changes while you're receiving immunotherapy drugs.
- Call your provider immediately if you develop a fluid-filled blister on the skin or a rash that starts on the mucus membrane (such as the mouth). This could be an early sign of a rare and very serious skin disorder called Stevens-Johnson syndrome (SJS). SJS is considered a life-threatening condition that could require hospitalization for treatment.

Stem cell transplantation

- Stem cell transplant can result in **graft-versus-host-disease (GVHD)**, which may cause skin changes like skin thickening, itching, rash, and blisters. These skin changes can be mild to severe.
- You may have nail texture changes, and even nail loss, after stem cell transplantation.

What can I do to keep my skin and nails healthy during cancer treatment?

- **Protect your skin.** Use broad spectrum sunscreen with at least 30 SPF and sun-protective lip balm. Sun-protective clothing is also an excellent choice to reduce your sun exposure and skin damage. You can wear a loose-fitting long-sleeved shirt, long pants, and a wide-brimmed hat outdoors to prevent sunburn. Do not use tanning booths at any time during treatment. If you are receiving radiation therapy, do not use heating pads, ice packs, or bandages on the treatment area.
- **Prevent or treat dry, itchy skin.** Avoid products that list alcohol or fragrance as ingredient, since they can dry out or irritate your skin. Take short showers in lukewarm (not hot) water. Put moisturizing lotion on your skin after drying off from the shower, while your skin is still a little damp.
- **Moisturize your skin.** Daily skin care can prevent your skin from becoming dry and itchy. Moisturize every day if you're able.
- **Use only recommended skin products.** Use mild soaps and lotions without alcohol, perfumes, or dyes since they are gentle on the skin. If you are receiving radiation therapy, make sure to find out what skin products to avoid before your treatment (such as some types of antiperspirants).
- **Prevent or treat minor nail problems.** Keep your nails clean and cut short to avoid accidentally tearing them. Protect your hands and nails by

wearing gloves while doing chores. Avoid getting manicures and pedicures. Wear loose, comfortable shoes.

When should I call the doctor?

- Report any mild skin and nail changes to your healthcare team as soon as you notice them, so we can make treatment recommendations early. This can help you avoid developing a severe problem of the skin or nails and unnecessary discomfort and treatment disruptions.
- Tell your healthcare team immediately if you have a fluid-filled blister on your skin or the inside of your mouth. This could be very serious, and we will need to give you treatment recommendations as soon as possible.

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