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Tips for Managing Treatment-Related Rash and Dry Skin

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CancerCare

Learn about:

- Effects of targeted treatments on the skin
- Managing rashes and dry skin
- Treating nail conditions
- Your support team



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Rash can mean that a targeted treatment is working effectively.

During the past few decades, scientists have been developing a number of new drugs that appear to be effective treatments for many different kinds of cancer. Known as **targeted treatments**, these drugs are designed to block different mechanisms by which cancer cells are nourished, grow, divide, and spread.

As targeted treatments do their job, they focus on preventing the growth of cancer cells and killing them. That is how targeted treatments are different from chemotherapy, which can harm healthy cells as it kills cancer cells.

Although targeted treatments generally cause less severe side effects than chemotherapy, some of the new drugs lead to skin problems. In particular, a type of targeted treatment that blocks **epidermal growth factor receptors (EGFRs)** often causes rashes and other bothersome skin conditions. EGFRs are found in tumors, but they are also found normally in skin cells. (The word “epidermal” refers to skin.) By blocking or inhibiting the function of these receptors, EGFR inhibitors prevent cells from taking in messages ordering them to grow and divide. When this type of targeted treatment blocks the receptor on the cancer cells, it slows the growth of tumors or causes them to shrink. However, at the same time, it blocks receptors in the skin, leading to skin changes.

Targeted Treatments That May Cause Skin Changes

Targeted Treatment	Used to Treat
Cetuximab (Erbixux)	Colorectal and head and neck cancers
Erlotinib (Tarceva)	Non-small cell lung and pancreatic cancers
Lapatinib (Tykerb)	Breast cancer
Panitumumab (Vectibix)	Colorectal cancer
Sunitinib (Sutent)	Kidney cancer and gastrointestinal stromal tumors
Sorafenib (Nexavar)	Liver and kidney cancers

Common Skin Conditions Caused by Targeted Treatments

Targeted treatments, particularly those that block EGFRs, commonly cause five side effects that affect the skin: **follicular eruption**, hand and foot rash, **nail toxicity**, dry skin, and hair changes.

FOLLICULAR ERUPTION (RASH)

Follicular eruption refers to inflammation of the hair follicles—tiny sacs on the skin’s surface from which hair grows. In most cases, this rash appears on the face, scalp, upper chest, back, and areas around the ears. Very rarely, it occurs on the buttocks, lower arms, or legs.

Researchers have long thought that developing a rash when taking an EGFR inhibitor means that the treatment is working. Recent clinical trials seem to confirm this. For example, researchers in Canada led an international study

of people with colorectal cancer who were treated with cetuximab, an EGFR inhibitor. This clinical trial showed a strong link between the development of a rash and benefit from the medication.

Follicular eruptions tend to occur in many people who take EGFR-blocking drugs. Although the rash usually appears about one week to 10 days after starting treatment, it can occur as late as six weeks after the first dose. Over time, the rash can come and go; it may go away without treatment.

In some cases follicular eruptions become so severe, the patient has to stop taking the medication. In mild cases, the rash can be treated with creams applied directly to the skin. One type of drug that helps reduce inflammation—and the pain and discomfort that go with it—is corticosteroid creams or ointments. The medications used tend to be more powerful than the types that can be purchased over the counter and are available only with a doctor's prescription.

Steroid creams should be applied after cleaning the skin gently with a mild, soap-free cleanser, such as Cetaphil.



The creams must be used very carefully, particularly on the face. Side effects include thinning and whitening of the skin; the appearance of visible blood vessels; and a red, pimply or acne-like rash. Because of such side effects, doctors recommend that patients limit their use of steroid creams to no more than two weeks at a time.

Other topical treatments sometimes used to treat mild follicular eruptions include topical antibiotics (typically erythromycin, clindamycin, or metronidazole). These treatments have been shown to help

some people with follicular eruptions. But they should be used carefully, as they can irritate and dry the skin. Initially, doctors often advise using these drugs every other day and then slowly increasing to daily use.

For some cases of follicular eruption, doctors may also prescribe antibiotics taken in pill form. These drugs help relieve inflammation.

The class of antibiotics usually recommended is



the tetracyclines (tetracycline, minocycline, and doxycycline). These drugs may take several weeks to start reducing signs and symptoms. Tetracyclines may increase the skin's sensitivity to sun, so when using these drugs, it's particularly important to use a sunscreen daily. As much as possible, avoid exposure to the sun or tanning rays.

Severe rashes can be treated with antibiotics and/or a stronger steroid cream, such as clobetasol (Temovate and others). Doctors also prescribe steroids taken in pill form for severe cases of follicular eruption. Although these strong medications can help, they may result in steroid-induced acne, which can complicate matters. Each case is different, so be sure to talk with your doctor about the best approach for you.

Pain due to a follicular eruption can be treated with an over-the-counter pain reliever, such as acetaminophen (Tylenol and others). If pain persists, a doctor may prescribe a more potent pain reliever. For itching, antihistamine drugs such as Benadryl, Claritin, Allegra, or Zyrtec for example—all available over the counter—can be helpful. The prescription

drug hydroxyzine (Atarax, Vistaril) is another option you can discuss with your doctor.

Occasionally, follicular eruptions can become infected. If a rash worsens despite treatment, a sample of the irritated area could be tested for bacteria. If bacteria are present, an antibacterial cream or ointment such as mupirocin (Bactroban and others) may be useful.

HAND AND FOOT RASH

Some patients experience side effects on the hands and feet, ranging from redness to blistering which can turn into thick calluses. Generally, if this type of rash is going to affect a patient, it occurs within the first 45 days of treatment.



Unlike other types of rashes, those that affect the hands and feet are not related to EGFRs. Rather, they can result from the use of sunitinib (Sutent) and sorafenib (Nexavar) which are different types of targeted treatment. These treatments work by blocking the blood supply that tumors need to grow.

Preventive measures to reduce hand and foot rash include:

- Where possible, avoid extremes in temperature, pressure, or friction on the hands and feet.
- Be sure to carefully moisturize the hands and feet with thick urea-based creams that your doctor can prescribe.
- Wear socks at night after applying the moisturizer. You can also wear thin cotton gloves.

Don't Forget the Sunscreen

An anyone who is taking a targeted treatment would be wise to use a sunscreen daily. Sun exposure can aggravate sensitive skin, particularly if a rash has developed. In addition, certain antibiotics increase the skin's sensitivity to the sun.

The ingredient called Helioplex keeps a sunscreen from breaking down the way other products do. This ingredient is gentle on sensitive skin and can be found in several Neutrogena-brand sunscreens, including Neutrogena Ultra Sheer Dry-Touch Sunblock, SPF 55.

- If the rash causes pain, talk to your doctor about using a topical steroid or numbing medication.
- If pain persists, talk to your doctor about pain pills or other systemic drugs.

Rash in the armpits and groin may be related to hand and foot rash. This can be prevented by sponging these areas during chemotherapy. Doctors believe that chemotherapy may be excreted by the sweat glands, so taking a daily shower or bath and applying powder can also help.

NAIL TOXICITY

Nail toxicity refers to changes that occur in the nails of the fingers or toes or in the skin around them. Typically, the skin around the nails becomes very dry and cracked and may begin to peel away from the ends of the fingers or toes. In addition, the cuticles may swell, and some nails may become ingrown.

Nail toxicity tends to occur weeks or months after beginning an EGFR-inhibiting targeted treatment and often persists for weeks or months after stopping the drug. This condition tends to affect toes and thumbs more often than fingers.

Gentle Cleansers for Sensitive Skin

- Cetaphil-brand cleansers and bars
- Neutrogena Extra Gentle Cleanser
- Dove Sensitive Skin Foaming Facial Cleanser
- Basis Sensitive Skin Bar
- Fragrance-free cleansers



Like follicular eruptions, nail toxicities can improve or worsen during treatment. Sometimes the problem disappears without treatment. But unlike follicular eruptions, which suggest that a targeted treatment is working to slow cancer growth, nail conditions do not seem to indicate whether a medication is effective.

To help prevent nail problems if you are taking EGFR-inhibiting drugs:

- Try not to bite your nails.
- Avoid using fake nails or wraps.
- Consult your doctor before having a manicure.
- Don't wear tight-fitting shoes.
- Don't push back your cuticles.

To prevent fingernails from drying out:

- Wear gloves while washing dishes.
- Wear rubber or cotton-lined gloves to do household chores, especially when using chemical cleaning agents.
- Moisturize your hands and feet frequently. Petroleum jelly, such as Vaseline, works best and should be applied

to the skin around the nails periodically throughout the day. At night, apply a thick coat of petroleum jelly to your hands and feet, then cover them with white cotton gloves and socks.

If the nail area becomes inflamed:

- It can be treated with a disinfectant such as an antibacterial soap (Lever 2000, for example), as well as antibiotic and antifungal ointments, to prevent infection.
- A steroid ointment such as clobetasol can also be used to relieve inflammation. Wrapping the treated area with a bandage or clear plastic wrap (such as Saran wrap) will help the ointment penetrate the area. Some also find it helpful to apply a liquid bandage to the area at the first sign of any skin cracking.

DRY SKIN

Dry skin is one of the most common side effects of EGFR

Coping with Itchy Skin

To relieve itchy skin, try the following:

- Moisturize frequently.
- Take short, lukewarm showers, using a moisturizing soap.
- Bathe in lukewarm water plus 1 to 2 cups of baking soda or the contents of an Aveeno bath treatment packet.
- After showering or bathing, be sure to moisturize your skin immediately while it's still damp, to prevent dryness.
- Use an over-the-counter hydrocortisone cream or ointment.

If itching is severe and persistent, ask your doctor about treating the problem with a steroid cream or antihistamine drug. They are available over the counter and by prescription for stronger doses.

inhibitors. The skin can become very itchy and, without proper treatment, may become infected. To reduce irritation, take short lukewarm showers (no more than one each day) and use a moisturizing fragrance-free cleanser, such as Dove soap for sensitive skin or Cetaphil soap-free



cleanser. After showering or bathing, apply a fragrance-free hypoallergenic body lotion while your skin is still damp. This will help your skin stay moist and prevents dryness.

In addition, apply a moisturizer at least twice a day. While petroleum jelly works best, it can be greasy. Good alternatives include Eucerin moisturizing creams and lotions, Aquaphor

ointment, or Cetaphil moisturizing creams and lotions. If the skin becomes extremely itchy, a doctor may prescribe a steroid cream and an antihistamine drug.

HAIR CHANGES

Some people experience changes in their hair about two to three months after starting on EGFR-targeted treatments. Sometimes the hair becomes fine, brittle, or curly. There may be a permanent loss of hair in the front of the scalp or slowed hair growth.

Sometimes, the growth of facial hair increases. Upper lips may become a bit hairier, and eyelashes and eyebrows may get longer. If excess facial hair becomes a problem, it can be removed with electrolysis, laser treatment, or waxing. So that they don't irritate your eyes, you can carefully trim long eyebrows. But if you develop changes in your eyelashes,

which can become rigid or sharp, ask your eye doctor to trim them to avoid damage to the eyes.

Your Support Team

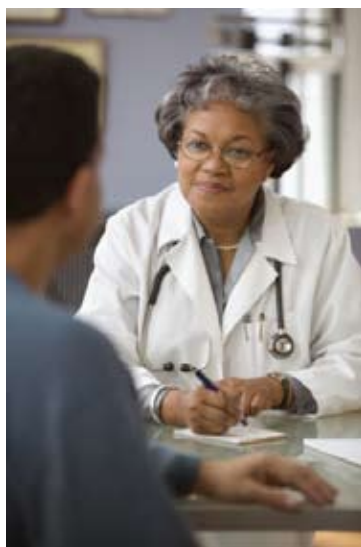
When you are diagnosed with cancer, you're faced with a series of choices that will have a major effect on your life, and maybe you're not sure where to turn. If treatment affects your skin and appearance, you may feel concerned about how others perceive you. But help is available. Your health care team, including a dermatologist, is your most important resource in managing rash and skin changes.

It is very important to develop good communication with them. In addition, many cancer organizations and major medical centers have programs designed to help people whose appearance has been affected by cancer treatment. You can also turn to these resources:

Oncology social workers and nurse practitioners

are specially trained to help you find out more about your treatment options, learn how to navigate the health care system, get the best care possible, and manage skin changes. Often, when

people are coping with cancer, they need someone to talk with who can help them and their families sort through the complex emotions and concerns that arise. These health care professionals can provide emotional support, help you cope with treatment and its side effects, and guide you to resources. CancerCare® offers free counseling from



professional oncology social workers on staff.

Support groups Many support groups are available for people with cancer. Support groups provide a caring environment in which you can share your concerns with others in similar circumstances. Support group members come together to help one another, providing insights and suggestions on ways to cope. At *CancerCare*, people living with cancer and their families can take part in support groups in person, online, or on the telephone.

Financial help is offered to eligible individuals by a number of organizations, including *CancerCare*, to help cover cancer-related costs such as transportation to treatment, child care, or work that needs to be done around the home. *CancerCare* also provides referrals to other organizations that give assistance.

To learn more about how *CancerCare* helps, call us at 1-800-813-HOPE (4673) or visit our website at www.cancercares.org.

Frequently Asked Questions

Q My face broke out in a rash about a week after starting treatment with Erbitux (cetuximab). I've been wearing a certain brand of makeup for years, but now it seems to aggravate my rash. Is there something else that I can use?

A Many name-brand cosmetics are made with fragrances and alcohol bases, which can irritate sensitive skin. As an alternative, try Dermablend makeup, which provides excellent coverage.

Q I've completed cancer treatment, but the skin on my face still has dark spots that appeared during the treatment. Is there something I can do to get rid of them?

A What you are describing is a common condition called post-inflammatory hyperpigmentation. This refers to dark spots in areas of skin that were reddened and inflamed during treatment for cancer. To help eliminate them, use a sunscreen daily before leaving the house, because exposure to the sun can cause the spots to get even darker. In addition, ask your dermatologist to prescribe a cream containing a bleaching agent such as hydroquinone. Your dermatologist may also prescribe a cream containing a retinoid, such as Retin-A, to help lighten the skin. This treatment requires patience, as it usually takes several months to a year to see improvement. In the meantime, dark spots can be covered with makeup, such as Dermablend.

Q I've undergone chemotherapy and several other treatments for non-Hodgkin's lymphoma. I'm in remission right now, but my face is always red. It's so obvious, that people are always asking me about it. What causes this, and what can I do about it?

A There are a number of possible causes, most of which are not related to cancer treatment. A dermatologist can make the correct diagnosis and recommend medication. The most important thing you can do is protect your face with a sunscreen, applied daily. Both men and women find Dermablend makeup helpful for covering the redness.

Q Since I started targeted treatment a few weeks ago, my skin seems to be aging rapidly. I'm getting more dark spots and fine lines on my face, and my skin seems thin, like crepe paper. I've tried using creams, but nothing seems to help. Is there anything I can do?

A The dark spots and lines sound like the result of skin damage due to sun exposure over the years. You should use a sunscreen regularly, and ask your doctor for a cream containing a retinoid to help eliminate the lines and dark spots. Retin-A is one of the better ones you can get with a prescription. Over-the-counter retinoid products generally don't work as well. These measures may help, but they take time. You probably won't notice any benefit until you've used them regularly for eight to 12 months.

The thin appearance of your skin may be due to dryness, which can be a side effect of many medications. Using a lot of moisturizer may improve your skin's appearance. Look for a thick moisturizer that is labeled "non-comedogenic," meaning that it doesn't clog pores that could lead to acne. Olay, Neutrogena, and Pond's all make non-comedogenic products that moisturize very well. A gentle skin cleanser such as Cetaphil can help as well. (See page 8 for a more complete list.)

Glossary

epidermal growth factor receptors (EGFRs) On the surface of the cell, receptors act as doorways that permit messages to enter the cell. These messages promote cell growth. The more receptors on a cell, the more the cell grows and divides. EGFR-targeted treatments work by blocking these growth factor receptors from both inside and outside the cell.

follicular eruption Inflammation of the hair follicles—tiny sacs on the skin’s surface from which hair grows. Because it looks similar to acne, some doctors call it an acne-like rash.

nail toxicity Changes that occur in the nails of the fingers or toes or the skin around them. Typically, the skin around the nails becomes very dry and cracked and may even begin to peel away from the ends of the fingers or toes. In addition, the cuticles may swell, and some nails may become ingrown.

targeted treatment Unlike chemotherapy, targeted treatments attack specific molecules and cell mechanisms thought to be important for cancer cell survival and growth. This specific targeting helps to spare healthy tissues and causes less severe side effects.

Resources

CancerCare

1-800-813-HOPE (4673)

www.cancercares.org

American Cancer Society

1-800-227-2345

www.cancer.org

Cancer.Net

Patient information from the American Society of Clinical Oncology

www.cancer.net

Gilda's Club Worldwide

1-888-445-3248

www.gildasclub.org

National Coalition for Cancer Survivorship

1-888-650-9127

www.canceradvocacy.org

National Cancer Institute

Cancer Information Service

1-800-422-6237

www.cancer.gov

The Wellness Community

1-888-793-9355

www.thewellnesscommunity.org



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When one word changes your world,

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makes all the difference



With CancerCare,
the difference comes from:

- Professional oncology social workers
- Free counseling for you and your loved ones
- Education and practical help
- Up-to-date information

Our trusted team of professionally trained oncology social workers provides free counseling, education and practical help for you and your loved ones.



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