

## Skin, Nail, and Hair Changes with Epidermal Growth Factor Receptor (EGFR) Inhibitors

Epidermal growth factor receptor (EGFR) inhibitors are a type of cancer treatments called targeted therapies. Targeted therapies can either be given through an IV or by mouth.

EGFR is found on many normal cells, including skin cells. Treatment with an EGFR inhibitor may cause skin changes. This handout explains some of the skin changes you may notice and tips to manage these side effects.

The EGFR Inhibitor medicine you are receiving is: \_\_\_\_\_.

If you are also having radiation treatments, talk with your radiation doctor or nurse about skin care tips.

### Acne-like Rash

Most patients who receive an EGFR inhibitor will get a rash. The rash often appears on the face, scalp, neck, upper chest, and back. It can sometimes appear on the trunk, arms, legs, and buttocks. It may look like acne, but it is **not** acne. Rashes may be mild or severe. The skin may be red, dry, and itchy or painful. Tell your cancer doctor if you have pus or any other signs of infection.

The rash often begins within 2 weeks of starting treatment. It can get better and worse over the course of treatment. The rash should go away within 4 weeks after you stop the EGFR inhibitor. Your doctor may order an antibiotic to help prevent or treat your rash. Acne medicines will not be helpful and can worsen the rash by irritating and drying out the skin.

### Tips

- Avoid popping or picking the pustules (a small blister or pimple on the skin that contains fluid or pus).
- Apply a thick moisturizer throughout the day such as Eucerin<sup>®</sup>, Vanicream<sup>®</sup>, Aveeno<sup>®</sup>, Desitin, or Cetaphil<sup>®</sup>. Some patients have good results with Lindicream<sup>®</sup>. Apply Aquaphor<sup>®</sup>, petroleum jelly, Bag Balm<sup>®</sup>, Cetaphil<sup>®</sup> Cream, or Cutemol<sup>®</sup> if your skin is very dry, has deep cracks, or to help remove yellow crusts from a dried rash.
- Use skin care products that do not contain alcohol, dyes, or perfumes. These will dry and irritate the skin.
- Protect your skin from the sun by:
  - Using sunscreen that contains zinc oxide or titanium with an SPF of 30 or higher (e.g. Coppertone<sup>®</sup>, Aveeno<sup>®</sup>, Neutrogena<sup>®</sup>).
  - Wearing a broad brimmed hat and protective clothing.
- When you shower or bathe:
  - Use lukewarm to warm water. A blast of cool water at the end of a shower may be soothing.
  - Avoid hot water or soaking for more than 20 min at a time.
  - Use a mild soap (Dove<sup>®</sup>, Cetaphil<sup>®</sup>, Vanicream<sup>®</sup>).
  - Pat skin dry, avoid rubbing.
  - Dry skin well before using moisturizers.
- Use mild laundry soap.
- Wear rubber gloves when washing dishes or when using harsh cleaners.

- A cold compress may soothe burning and itching of the scalp.
- Reduce scalp dryness with shampoos that contain pyrithione zinc (e.g. Head and Shoulders<sup>®</sup>, Selsun Blue<sup>®</sup>, Herbal Essence<sup>®</sup> no flaking way, Biolage<sup>®</sup> anti-dandruff, Neutrogena<sup>®</sup> T-gel, Denorex<sup>®</sup>).
- Olux Foam<sup>®</sup> shampoo contains steroids and may give some relief. Your doctor may prescribe medicine(s) to help prevent or treat the rash. This may include a steroid cream, an antibiotic cream, or an oral antibiotic.

### **Nails**

Changes in fingernails, toenails, and the skin around nails often begins 1 to 6 months after the start of treatment. The skin around the nail may crack or become red and swollen. The nail may peel, crack or lift off the nail bed. You may get an infection. The skin around and under nails may become tender or painful. Nails may discolor and become pitted or ridged. See your cancer doctor if you have a lot of pain, foul odor, or drainage.

### **Tips**

- Apply a thick moisturizer throughout the day.
- Wear white cotton gloves and socks over thickly applied moisturizer to keep your hands and feet moisturized overnight.
- Soak fingertips and toes in a 1:10 mixture of white vinegar and water for 5-15 minutes, twice daily.
- Use rubber gloves when washing dishes or cleaning.
- Always wear well-fitting shoes.
- Talk to your doctor or nurse if your nails start to peel or break.

### **Itching**

Your rash may make you itch.

### **Tips**

- Take an oatmeal bath or use Aveeno<sup>®</sup> Soothing Bath Treatment. The water should be cool to lukewarm. Do not soak for longer than 20 minutes.
- Put moisturizers in the fridge before using. Sarna lotion can also help relieve itching
- Apply a cold compress.
- Take oral antihistamines such as Benadryl<sup>®</sup> or Claritin<sup>®</sup> to relieve the itching and help you sleep

### **Hair**

Hair changes may appear after 2 to 3 months of treatment. Hair may become brittle, curly or grow more slowly which can lead to hair thinning or loss. Hair growth may increase on the face. Eyelashes may become thick, long, and wiry. You may notice infection (redness, swelling, drainage, pain) around a hair follicle (like an ingrown hair). You may have inflamed eyelids with crusting.

### **Tips**

- Ask your health care provider, a family member, or friend to trim your eyelashes to avoid scratching the cornea. Close your eyes while your lashes are being trimmed.
- A warm, moist compress may soothe eyelids.
- To help soften or loosen crusts try:
  - Using a warm moist compress, or
  - Mixing a drop of baby shampoo in a cup of warm water. Soak a cotton ball or Q-Tip<sup>®</sup> in the mixture and gently scrub the eyelid. Rinse with a cotton ball soaked with plain water.

- Your ophthalmologist (eye doctor) may prescribe ointments.
- Sleep on a satin pillowcase to decrease hair breakage.

### **Avoid**

- Skin products with alcohol, perfumes, or dyes
- Over-the-counter acne medicines, creams, or gels
- Biting your fingernails or pushing back the cuticle
- Strong soaps or cleaners
- Tight shoes
- Sun exposure and UV rays from tanning beds
- Artificial/acrylic nails
- Products that contain benzoyl peroxide and salicylic acid

### **When to Call**

- You have a large increase in the number of pustules or if your skin becomes painful.
- You get an infection (redness, pain, swelling or pus) at or around your nails or if you have a fever of 100.8°F or greater
- Your eyes become red or irritated
- You have drainage coming from your eyes

Tell your provider if you are having trouble managing your symptoms. You may be referred to an ophthalmologist or dermatologist.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 8/2020. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7124.