Skin, Nail, and Hair Changes with EGFR Inhibitors

EGFR (Epidermal (skin) Growth Factor Receptor) is found on the surface of many normal cells and some cancer cells that helps control cell growth by binding (joining) with certain proteins. **EGFR Inhibitors** slow (inhibit) the growth of some cancer cells. There are 3 types of EGFR inhibitors.

- Monoclonal antibodies
- TKI (tyrosine kinase inhibitors)
- HER2 (human epidermal growth factor receptor 2 inhibitor)

The EGFR Inhibitor medicine you are taking is: _______________________.

EGFR is found on skin cells. Treatment with an EGFR inhibitor may cause skin changes. This handout explains some of the skin changes you may notice and suggestions for managing these changes.

**If you are also receiving radiation treatments, talk with your radiation doctor or nurse for special skin care tips.**

**Rash**

Most patients who receive an EGFR inhibitor will develop a rash, most often on the face, neck, chest, and back. It may look like acne but it is not acne. Acne medicines will not be helpful. Acne medicines are drying and may increase the burning and irritation of the skin. The skin may be red, dry, and itchy or painful. Rashes may be mild or severe. They often begin within 2 weeks of starting treatment. Rashes most often clear up 2 – 3 months after treatment is stopped. Your doctor may order an antibiotic to help prevent or treat your rash. Report any pus or other signs of infection right away.

- Moisturize your skin throughout the day with a thick emollient such as Eucerin®, Vanicream®, Aveeno®, Desitin, or Cetaphil®. Some patients have reported good results with Lindicream®.
• For extremely dry skin (xerosis), deep cracks in the skin (fissures), and to help remove yellow crusts from a dried rash try Aqua
phor®, petroleum jelly, Bag Balm®, Cetaphil® Cream, or Cutemol®.
• Use hypoallergenic skin care products that do not contain alcohol, dyes, and perfumes. These will dry and irritate the skin.
• Apply sun screen that contains zinc oxide or titanium with an SPF of 30 or higher (e.g. Coppertone® Water Babies). Another sunscreen option is Neutrogena sunblock with Helioplex. Wear a broad brimmed hat and protective clothing when you are in the sun.
• Avoid long, hot showers that will dry your skin. A blast of cool water at the end of a shower may be soothing.
• Dry skin thoroughly before applying moisturizers.
• Use a mild soap (Dove®, Cetaphil®, Vanicream®) and a mild laundry detergent.
• Wear rubber gloves when washing dishes or cleaning.
• Apply 1% Hydrocortisone Cream at bedtime.
• Your doctor may prescribe a 2.5% Hydrocortisone cream or another type of cream to apply to rash
• Your doctor may order an antibiotic to treat a skin infection. Take it as directed until it is gone.
  Antibiotic ordered is ________________________________.

Nails

Changes in fingernails, toenails, and the skin around nails often begin 4 – 8 weeks after the start of treatment. The skin around the nail may crack or become red and swollen. Infection may develop. The skin around and under nails may become tender or painful. Nails may discolor and become pitted or ridged.
• Moisturize hands and feet often throughout the day with one of the thick emollients listed above.
• White cotton gloves and socks worn over thickly applied emollients may help keep your hands and feet moisturized overnight.
• Soak fingertips and toes in a 1:10 solution of white vinegar and water for 5 minutes twice daily.
• Use rubber gloves when washing dishes or cleaning to avoid prolonged contact with water or chemicals.
• Wear well-fitting shoes to avoid trauma to feet and toes.
• See your doctor if infection occurs with pus oozing from the nail bed or if you have a fever of 100.8°F or greater. The nail bed should be cultured so the correct antibiotic can be ordered.
Itching

Rashes can hurt, burn, or itch. Along with the ideas listed above you could try some of these tips.

- Oatmeal baths. Aveeno Soothing Bath Treatment may help.
- Refrigerate creams and emollients. Cooled Sarna lotion has a menthol base that may lessen itching.
- Cold compresses.
- Oral antihistamines such as diphenhydramine (Benadryl®) or loratadine (Claritin®) may relieve the itching and help you sleep.
- Topical lidocaine.

Hair

Hair may become brittle while taking an EGFR inhibitor. Hair thinning or loss is possible. Eyelashes may grow long and curly and in many different directions risking scratches of the cornea. Inflammation of the eyelid with crusting may occur. The facial skin rash may extend onto the scalp.

- Ask your health care provider, a family member, or friend to trim your eyelashes to avoid scratching the cornea. Be sure to close your eyes while your lashes are being trimmed.
- Warm, moist compresses may soothe eyelids and help soften or loosen crusts.
- To help soften or loosen crusts, mix a drop of baby shampoo in a cup of warm water. Scrub the eyelid gently with a Q-Tip® or cotton ball soaked in the shampoo solution. Rinse with a cotton ball and plain water.
- Your ophthalmologist (eye doctor) may prescribe medicated ointments.
- Cold compresses may soothe burning and itching of the scalp.
- Reduce scalp dryness with shampoos that contain pyrithione zinc (e.g. Head and Shoulders®, Selsun Blue®, Herbal Essence® no flaking way, Biolage® anti dandruff, Neutrogena® T-gel, Denorex®). Olux Foam® shampoo contains steroids and may give some relief.
- Over-the-counter or prescription antihistamines (Benadryl®, loratadine) may relieve itching and help you sleep.
Things to avoid while undergoing EGFR-inhibitor therapy

✓ 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 detergents.
✓ Tight shoes.
✓ Sun exposure, including the UV rays from tanning beds.
✓ Artificial/acrylic nails.
✓ Avoid acne medications such as benzoyl peroxide and salicylic acid.

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

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