ECZEMA

http://www.aocd.org

Eczema, also called atopic dermatitis, is a chronic skin that causes areas of red, itchy skin. This condition usually starts in early childhood, especially when there is a family history of atopy (asthma, hay fever, conjunctivitis, or food allergies). The skin fails to hold in moisture, becomes dry, then inflamed, itchy and often infected. Various combinations of factors cause the dryness. Allergies leading to an overactive immune system and hereditary dry skin (ichthyosis vulgaris) are the most prominent internal and external factors.

To treat this disease you need to work with the doctor in identifying and reducing those factors in your or your child's life that trigger flare-up the disease. These are different for each person, so no one therapy is appropriate for all eczema patients. You need to watch for some of the following possible exacerbating factors (follow these links to learn more).

- Irritants
- Allergens
- Infections

Treatment
Your skin is dry, not because it lacks grease or oil, but because it fails to retain water. Therefore, to correct dryness, water is added to the skin, followed by a grease or oil-containing substance to hold the water in.

Soaking the affected area, in a basin, bath, or shower, for 15-20 minutes using lukewarm water, can help to hydrate the skin. Hot water dries out the skin. Then, remove excess water by patting with a soft towel. Avoid vigorous use of a washcloth in cleansing. When toweling dry, do not rub the skin. Blot or pat dry so there is still some moisture left on the skin, and immediately apply a moisturizing cream (Eucerin Cream, Moisturel Cream, Cetaphil Cream). Moisturizing lotions contain some water, so they do not work as well. Use of moisturizers without first trapping in water is much less effective. Many patients find that two or three additional applications of moisturizers during the day give additional help.

Topical Steroids
Topical steroids are particularly useful to treat flare-ups of eczema. They help keep down the inflammation and itching. Apply them just on the rash (instead of the oil recommended above) especially after a soak or bath. Do not use topical steroids more than twice a day. Your pharmacist can provide topical steroids in large jars to reduce the cost.

Hydrocortisone ointment or cream can be used for eczema in infants and young children, or in skin folds in adults. More potent topical steroids should not be used on thin-skinned areas of the face, neck, axilla, and groin. Short, supervised courses of medium potency topical steroids creams are safe and effective for flares of eczema on other parts of the body. Adverse effects of long term topical steroids include thinning of the skin (atrophy), a change in the color of some skin (depigmentation), and acne-like eruptions.

Topical Non-steroids
A newer class of topical drugs are the 'topical immunomodulators' or TIMs. These locally calm down the immune system like topical steroids. However, they don't have the side effect of steroids in that they do not cause thinning of the skin with long term use. There are currently two of these drugs available: Protopic (tacrolimus) Ointment and Elidel (pimecrolimus) Cream. They can be used in patients two years of age or older.
Crisaborole (Eucrisa) is another alternative to steroids for eczema. It works by blocking the production of an enzyme that helps regulate inflammation in the skin, which can provide relief from mild to moderate eczema symptoms. This eczema treatment comes as an ointment that you apply to the skin, typically twice per day. It can be used by both adults and children as young as 3 months old. The most common side effect of crisaborole is burning or stinging at the application site. This sensation typically goes away after you use the medication for a while. The medication can be used continuously over the long term, or intermittently when you experience an eczema flare.

**Ultraviolet Light**

Ultraviolet light (UVB or PUVA) therapy may be of some help in chronic eczema that does not respond well to other therapy. UVB and PUVA require three per week and must be used under professional supervision. However, avoid sunburn and hot or humid conditions that might make your skin even itchier. The risks of UVB or PUVA are sunburn and increased risk of skin cancers if used for too long.

**Antibiotics - See eczema-Infections**

**Antipruritics**

Itching is often the most aggravating of all your eczema symptoms. Antihistamines may provide some relief. The antihistamines reduce scratching mainly through tranquilizing and sedative effects. It takes several weeks of use on a regular basis to help. This is because scratching aggravates the eczema, keeping it from healing. Cutting nails, and using cotton gloves at night can minimize scratching. For children, knee-high socks are better than gloves, because they are harder to accidentally pull off during sleep. The topical use of antihistamines such as Benadryl should be avoided, because it is ineffective and may produce allergic reactions. Menthol or Pramoxine containing products such as Aveeno cream, Pramasone cream/lotion or Prax lotion may offer additional help.

**JAK Inhibitors**

Janus kinase (JAK) inhibitors are relatively new in the treatment of eczema, and they don’t contain steroids. They work by preventing a type of protein called cytokines from attaching to certain receptors in the body that cause overactivity in the immune system. That helps reduce inflammation and reduce the severity of eczema symptoms. JAK inhibitors can be taken orally or applied as a cream directly to the skin, depending on which type your doctor prescribes. JAK inhibitors approved to treat eczema include:

- abrocitinib (Cibinqo) Tablets
- upadacitinib (Rinvoq) Tablets
- ruxolitinib (Opzelura) Cream

These medications are typically recommended for people with moderate to severe eczema who haven’t experienced positive results from other medications. While abrocitinib is only available to adults, upadacitinib and ruxolitinib can be used in adolescents 12 years of age or older.

**Biologic Medications**

Eczema can now be treated with two injectable medications:

- **dupilumab** (Dupixent), available for adults and children ages 6 and up
- **tralokinumab** (Adbry), available for adults only

This information has been provided to you compliments of the American Osteopathic College of Dermatology and your physician.
Injectable treatments for eczema do not contain steroids. They’re part of a class of medications called biologics which are made from living cells or organisms. They work by blocking overactivity in the immune system, which helps reduce inflammation. Injectable treatments for eczema are typically recommended for people with more severe symptoms that haven’t gone away with other treatments. These medications come in pre-filled syringes that can be injected at home. In rare cases, certain types of eye conditions can develop while using these medications, so it’s important to let your doctor know about any vision changes you experience.

**Evolving treatments**

Recently treatments with drugs that work on a system that is related to the one Aspirin works on have been used for asthma. These medications have few side effects (an occasional headache mostly) and show good result in a little under half the people treated. Adults are usually given Accolate (zafrilukast) 20mg twice daily, children over 6 years get Singular (montelukast) 5mg chewable daily and younger get 1/2 of 5mg chewable tab per day. About a third of the most severe eczema patients will improve with the drug [hydroxychloroquine](https://www.aocd.org). All will clear completely within weeks if given [cyclosporin](https://www.aocd.org), but long term damage to the kidneys prevents its use except for short periods.

**Corticosteroids**

**Oral steroids** should be minimized because of the seriousness of their side effects and the potential for severe flares of eczema when they are discontinued. If these are used for severe flares, then intensified skin care will help to suppress the flaring of the eczema during a taper from oral steroids.

**Therapy of Acute Flares**

The doctor may suggest hospitalization simply because it may be necessary to break the cycle of chronic inflammation, or other problems that are exacerbating the illness. Frequently, five or six days of vigorous in-hospital treatment care can result in a dramatic clearing of the eczema. Food tests, allergy skin testing, and the development of an outpatient therapy plan can all be done during the hospitalization. Unfortunately, getting approval from insurers is often difficult. During an acute flare the number of 15-20 minute baths must be increased to three or four per day. Besides hydrating the skin, baths also increase the penetration of topical medication up to ten-fold if the medicine is applied immediately after the bath. Wet wraps after baths may also help hydration and medicinal penetration. Bedtime wet wraps are most practical, and can be done with elasticized gauze followed by ace bandages or double pajamas. (The first pair of pajamas is worn damp but not soaking wet, and a second pair of dry pajamas is worn over them. For a tighter fit, sometimes a plastic sauna suit is used instead of the dry pajamas.) For feet and hands, socks can be used. Additional blankets or increased room heat may be necessary during this three to seven days to prevent chilling.