Eczema / Atopic Dermatitis

Atopic dermatitis, or eczema, is a chronic skin condition 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. There have been recent developments in the area of atopic dermatitis that suggest the predominant cause is an issue with the skin barrier.

To treat this disease you need to work with the doctor in identifying and reducing those factors in you child's life that trigger flare-ups of 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 possible exacerbating factors which can include irritants, allergens, infections and emotional stress, which will be covered later in this section. You need to also be vigilant with protecting the skin barrier, even when the condition has subsided.

**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. This can be done by soaking the affected area, in a basin, bath, or shower, for 15-20 minutes using lukewarm water. 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 an oil (e.g. Herbal Bath Oil or RoBathol are best, also Neutrogena light sesame oil, Alpha-Keri, Lubriderm oil or plain Vaseline or Crisco). Use these only after the bath, as they do not contain water as the lotions do. Then apply a moisturizer (examples: Cetaphil cream, Cetaphil Restoraderm lotion, or Cerave cream. Use of moisturizers without first trapping in water is much less effective. Still, most patients find that two or three additional applications of moisturizers helps and clothes should be laundered with detergents free of chemicals, as Tide Free and Clear or Dreft. Avoid drier softening sheets.

**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—such as Cutivate, Elocon or Derematop -- are safe and effective for flares of eczema on other parts of the body. Adverse effects of topical steroids include thinning of the skin (atrophy), a change in the color of some skin (depigmentation), and acne-like eruptions.
Eczema / Atopic Dermatitis

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 sessions per week and must be used under professional supervision. Avoid sunburn and hot or humid conditions that might make your skin even itchier.

The risks of UVB or PUVA are sunburn and increased the risk of skin cancers if used for too long. Do not use ultraviolet light therapy if you always burn and your skin doesn’t tan at all, or if light aggravates your condition.

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. Zyrtec is particularly helpful. 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 or Prax lotion may offer additional help.

Evolving treatments

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

Corticosteroids

Oral steroids should be avoided because of the seriousness of their side effects and the potential for severe flares of eczema when they are discontinued. Intensified skin care will help to suppress the flaring of the eczema during a taper from oral steroids.
**Eczema / Atopic Dermatitis**

**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 are worn damp but not soaking wet, and a second pair of dry pajamas are 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 these three to seven days to prevent chilling.

**Eczema – Allergens**

Allergens in the air and in the food are often triggers for a flare-up of this disorder. If you can furnish a list on how your disease gets activated, the doctor may try to correlate this with a skin (prick or intradermal) or blood (RAST) test. Don’t try to avoid everything that might be considered an allergen without any incriminating evidence. Occasionally, using an air purifier (HEPA air cleaner like the Honeywell Enviracare) can help reduce allergen exposure at home or in the workplace.

Use of moisturizers without first trapping in water is much less effective. Still, most patients find that two or three additional applications of agents that moisturize the skin help their skin.

Dust mite allergy is the most important home allergen. Go after the dust mites; almost all atopics are highly sensitive to dust mites. There are dust mite covers to enclose mattresses and box springs. Try Vellux blankets. You may need a dehumidifier to keep relative humidity below 50% since mites thrive in humid environments and an acaricide such as benzyl benzoate (“Acarosan”) to carpeting. Removal of fitted carpets in the bedroom should be recommended. Get new pillows and wash the duvets and pillows every three months; washes should be hotter than 55°C to kill mites and denature antigens. Reducing upholstered furnishings and regular use of a modern cylinder or upright vacuum cleaner fitted with an adequate filter, or better yet a “HEPA” vacuum, are additional helpful precautions.

Infantile eczema is often allergy related in the first year of life. Peanuts, wheat, soy, whole milk, eggs and citrus are the common offenders. Great care is needed if the diet is changed because malnutrition can do more harm in the long run than eczema. Lamb, chicken and rice are usually completely safe. Breast milk is the best “formula”; then try soy formulas. If there is no improvement consider goat’s milk. Allergy tests (both skin and blood) are not completely reliable for foods, but may at times be helpful. One of the most important allergens is the dust mite. This causes eczema on the air-exposed skin more so than the covered skin. Eliminate a suspected food, but if no clear benefit is obtained after 4 weeks, do not continue.
Eczema / Atopic Dermatitis

As the child grows, many food allergies often fade or disappear. In the small minority of eczema sufferers who get real benefit from food avoidance there is great benefit. Care must be taken to avoid malnutrition when any restrictive diets are used. In small children special diets are difficult to implement, and the help of a dietitian is necessary.

There are studies showing breast feeding may delay the onset of eczema if practiced for at least the first three to six months of life. Some mothers also avoid cow’s milk and other possible food allergens during pregnancy and nursing, but this is unproven.

**Eczema - Emotional Stresses**

Anger, frustration, and anxiety are commonly experienced by patients with atopic dermatitis and often complicate the problem. It is very important that you and your family understand that such feelings are common and understandable in chronic disease, and try to move beyond them. Be reassured that the disease can be controlled, and that the majority of patients improve with age. Recent research is suggesting a variety of new, promising therapeutic approaches.

**Eczema – Infections**

Flare-ups and hard to control eczema are often due to a bacterial, and sometimes fungus or virus, infection. If your eczema is weeping or oozing, if it crusted, or if it has small bumps, your doctor will probably test or treat for bacterial infection.

Systemic antibiotics are often necessary to decrease the irritation caused by Staph bacteria on the skin. Most patients with eczema have Staph bacteria on their skin, and this can cause irritation even without overt infection. In acute flares, antibiotic treatment usually lasts from 14 to 28 days. Chronic maintenance antibiotics may be used if you develop infections repeatedly. Some have found success by adding very dilute bleach to the bathwater—no more than a tablespoon for a full bathtub. Topical antibiotics like Neosporin should not be recommended and most antibacterial cleansers may worsen the condition.

**Eczema – Irritants**

Environmental factors can have a big effect on your eczema. To prevent irritation, you should minimize the use of soaps. Deodorant soaps are often very harsh and drying. If you need them, limit their use to areas that develop an odor such as the armpits, genital area, and feet. Recommended soaps are Dove, Olay and Basis. Even better than soap are non-soap cleansing agents such as Cetaphil Lotion, Cerave cream, and Aquanil. Since residual laundry detergent in clothes may also be irritating, in some a second rinse cycle is beneficial. Use a perfume and color free detergent such as Tide-free or All-free.
Eczema / Atopic Dermatitis

Hand dermatitis occurs mostly in adult eczema patients. Here it is especially important to avoid irritant contact with solvents, soaps and detergents. Also avoid jobs and hobbies that require exposure to these irritants, as well as to dust, dirt, and heat. If you wash frequently, it is important to apply emollients after hand washing; also trying a non-water cleansing method, such as Cetaphil, may be beneficial. Wearing appropriate gloves (Allerederm brand) when using potential irritants is also important.

If sweating causes itching, modify your activity and surroundings to minimize sweating. Work and sleep in a fairly constant temperature (68-75 F) and humidity (45-55%). Wear open-weave, loose-fitting garments made of cotton blends, rather than wool or stiff fabrics.