



Eczema/atopic dermatitis/neurodermatitis/lichen simplex chronicus

Eczema is a very common condition, occurring in almost one of five individuals. This occurs in people with sensitive skin who, when their skin is irritated, itch. When skin itches, the person rubs and scratches. Rubbing and scratching feel wonderful to someone who has eczema, but rubbing and scratching also increase irritation, which increases the itch, which increases the rubbing and scratching. This is called the "itch-scratch cycle." Eczema is most common in childhood, when the skin is more sensitive than during adult years.

The rash of eczema is caused by the rubbing and scratching. Those people who mostly scratch have red, scaling patches with scratch marks and open sores. People who mostly rub have thickened "elephant skin" or leathery areas of the skin, almost like a callous.

Although individuals with allergies such as hay fever and asthma are at highest risk for developing eczema, we don't know all of the reasons that people get this skin condition. Eczema is not usually an allergic reaction, although it often worsens with the stress of hay fever or an asthma flare. We know there is a tendency for eczema to run in families. We know that some of the protective proteins are missing in the skin of some people with eczema, so that the skin dries out more easily and is more easily irritated.

The original irritation that starts eczema is often dryness, over-washing, soaps and cleansers that remove natural oils, sweat, or friction. Of course, the worst irritation is scratching.

There is no cure for eczema, but careful skin care, topical medications, and moisturization usually manage this condition. If treatment does not control eczema, patch testing is often done to search for allergies to chemicals that might be causing the eczema.

Management of eczema consists of:

Avoidance of irritants. Washing the skin is a common cause of irritation. Washing also removes the natural oils from the skin and produces tiny, invisible cracks and breaks that itch. Therefore bathing (either shower or bath) should be limited to three times a week while the eczema is active, avoiding hot water and harsh soaps. Dove soap is the least expensive mild soap. Also, medicated ointments and a moisturizer should be applied immediately after bathing for the best absorption and to replace those natural oils that were washed away.

Rough, new, stiff fabrics and wool directly next to the skin can be irritating for some people. Overheating generally worsens itching, and sweat can be irritating as well. Therefore, patients with eczema should stay as cool as is comfortable. This is especially important for children who are too small to tell their patients that they are hot.

It is very difficult to protect the hands and feet from irritation, since shoes tend to trap heat and sweat against the skin, and hands handle rough and irritating chemicals and objects, and are generally exposed to over-washing. Using a hand sanitizer rather than washing can help protect the skin.

Corticosteroid (cortisone, steroid) ointments or creams. Corticosteroids help to soothe irritation and inflammation, and also help to stop the itching. Corticosteroids are not the same steroids as those used illegally by some athletes. Although cortisones are extremely useful in the treatment of eczema, simply applying the cortisone without attention to moisturizing the skin and avoiding excessive washing and irritation often does not improve eczema very much. Cortisones are applied very sparingly - more does not work better than less - and they are applied only to the areas of scaling, redness, or itching. The cortisone should be used twice daily until the skin feels normal to the touch, and then the frequency is tapered to the least frequent application that keeps the skin comfortable. Often, cortisones only need to be used intermittently.

Overuse of steroids can eventually lead to thinning and lightning of the skin, and very strong cortisones used over large areas, especially in children, can expose the internal organs to small amounts. In the short term, this is not a problem. For long-term control, lower potency cortisones are used, or strong cortisones are used but less frequently.

Moisturization of the skin. This is important because flaking and cracking of the skin are very irritating and worsen itching. Covering the cracks with a moisturizer soothes the skin and decreases itching. Also, moisturizers are applied over the steroid since they help push the steroid into the skin and make that medicine work much better.

The best moisturizers are often those that are very stiff. The greasier the moisturizer, the better it works. Moisturizers do not have to be applied heavily; frequent application of small amounts is more effective. Moisturizers should be applied both immediately after the topical steroid, and is often as necessary to keep the skin from feeling and looking dry.

Moisturizers that pour from a bottle (lotions) are creams or ointments that have been mixed with alcohols (which are irritating) and water to make them less greasy and more cosmetically acceptable. However, they will be more irritating. These sometimes sting when they are applied to the cracked, broken skin of eczema. When eczema is flaring, thicker is better. Examples of good moisturizers are plain white petroleum jelly (Vaseline®), Aquaphor®, Eucerin cream® (not lotion), and even vegetable shortening from the grocery store. CeraVe®, Aveeno®, and Cetaphil are lotions that are useful. Choosing a moisturizer is an individual decision, but the moisturizer should be a product that the eczema patient is willing to use.

Nighttime medications for sleep. Scratching and rubbing mostly occur at night, during sleeping hours. There are no specific pills for itching, but medication at night to cause deeper sleep generally decreases rubbing and scratching. Over-the-counter diphenhydramine (Benadryl®) 25 mg, one to three tablets a bedtime for adults, or 12.5/5cc, 5-15 cc generally produces a deep sleep without rubbing and scratching. There are also prescription medications that produce an even deeper, longer sleep. This can be stopped as soon as eczema and itching are controlled.

Antibiotics. Often, the cracks and breaks in the skin of eczema predispose to infection. In some people, germs simply living on the skin can cause irritation and eczema flares, even without causing infection. Weeping and crusting are the more common causes of actual infection in eczema. In addition to antibiotics, some patients, particularly children, benefit from one fourth of a cup of plain

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Clorox bleach (the old-fashioned bleach, not one of the newer fancy bleaches) in a tub of water. This amount of bleach is not irritating.

The management of eczema can be a lot of work, particularly until it is controlled. During flares, all of these steps should be taken. Patients who are on the very strong cortisones are normally reevaluated in the office after about a month for a new treatment plan for ongoing care. After the skin is managed, stress, skin irritants, and other illnesses are prone to cause flares in eczema. Most patients who understand how to treat their skin and have medications at hand, can restart aggressive treatment quickly and avoid significant flares.