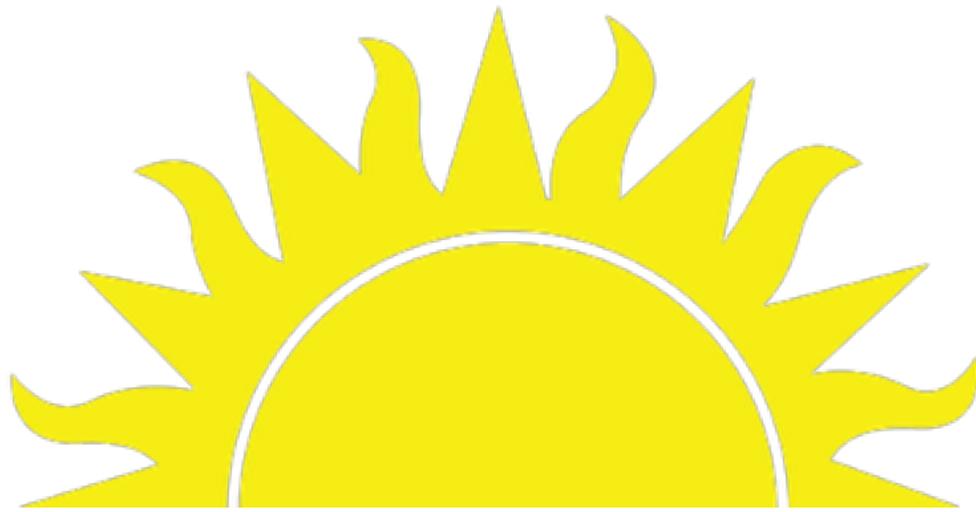


Information About Eczema



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What is Eczema?

Eczema is a very common condition which in some form, at some time, afflicts more than half the population. Eczema is simply an inflammation of the skin, which can have many causes, but regardless of the cause, the changes that occur in the skin are very similar. Often, the terms eczema and dermatitis are used interchangeably as dermatitis means, 'inflammation of the skin', hence they are synonyms.

Eczema may be acute or abrupt in onset and last only a limited time or it may be slow in onset and persist for long periods of time. In acute eczema the skin is swollen, red and scaly and on examination under a microscope, large numbers of immune white blood cells are seen to be accumulated in the skin. In chronic eczema the skin is dry and scaly and as a result of scratching, it may become very thickened. Infiltration of the skin by immune white cells is also found in chronic eczema.

There has been much investigation of the mechanism and causes of eczema but unfortunately it remains a poorly understood disorder. We know there are several different causes of eczema, several of which are inherited, but how some abnormality of a gene is translated into the skin changes we see is unknown. It is important to distinguish between the different types of eczema because the outlook and to some extent the management, can be quite different.

A point on terminology: the terms eczema and dermatitis are used interchangeably and common usage dictates a choice of terms.

The Different Types of Eczema

Atopic Eczema

An inherited condition which is associated with hay fever and asthma. Some patients only have eczema while others have two or three of these conditions. Atopic eczema can begin at any age but the commonest time of onset is in childhood. The course of the condition is very unpredictable and punctuated by frequent remissions and relapses.

Seborrheic Eczema

Also an inherited condition but the transmission of this trait is rather random and frequently skips generations. Seborrheic eczema is closely related to psoriasis and both conditions may be found in the one family, or even in the same individual.

Dandruff is the mildest degree of seborrheic eczema. The addition of redness and inflammation of the scalp to the flaking of dandruff is the next stage. Seborrheic eczema can spread from the scalp to the face, chest and other parts of the body so that it can be generalized in some patients.

The development and spread of seborrheic eczema is partly a function of the patient and partly a function of the environment. Other illnesses, particularly those necessitating bed-rest, frequently are the trigger for seborrheic eczema.

Winter can also be a trigger factor. Recently, evidence has accumulated that a yeast-like organism, which is a normal resident on the skin, may be closely involved in the basic defect in seborrheic eczema. Elimination of the organism is associated with resolution of the eczema but, as yet, there is no safe and effective way to achieve this.

Hand Eczema

This is in some ways the most disabling form of eczema because it impedes the function of a particularly important part of our anatomy. Three factors interact in causing hand eczema but the importance of each one varies between individuals.

First, a genetic or inherited tendency to develop hand eczema probably underlies all cases. A family history can be obtained in about 80% of patients.

Second, contact with chemical irritants appears to be the trigger for developing eczema in many patients and is an aggravating factor in all patients.

For example, the commonest time of onset of hand eczema in women is after the birth of the first child. At this time, increased housework, in particular lots of laundry and wet work, is mainly responsible for onset of the problem.

The third factor is nervous and emotional stress and this likewise is the dominant cause in some people and plays some role in everybody's hand eczema.

Winter Eczema

Many names have been used to describe this condition, but perhaps this is the most descriptive term. Winter eczema mainly occurs in that season and is confined to people with a tendency for dry skin.

Central heating giving a dry atmosphere, plus frequent, long, hot showers with liberal use of soap are the trigger factors in this condition. Winter eczema tends to become more common and more severe as we grow older and this tendency is probably due to older skin being less able to produce oil and retain moisture. In some elderly people winter eczema persists year round.

The first change seen in the skin is some mild flaking which is associated with itch. Soon redness, cracking and scaling appear. The commonest sites for winter eczema are the flanks and the lower limbs but any area can be affected.

Contact Eczema

The name of this condition explains its cause: it is due to contact with a chemical to which one is allergic. The commonest example is poison ivy dermatitis. The site of eczema is determined by what portion of the body comes into contact with the offending chemical since only skin that has had direct contact will be affected. The duration of the problem depends on the duration and frequency of contact with the chemical.

Thus, poison ivy dermatitis usually only lasts a few days, or at the most a week or two, because in most instances it is triggered by a single encounter with the chemical. In contrast, shoe dermatitis due to a dye in leather may persist for months because of daily contact and unawareness that a chemical is causing the problem.

Neurodermatitis

This is a term used rather loosely to refer to several types of eczema. Chronic neurodermatitis usually consists of a single patch of eczema with marked thickening of the skin located on the nape of the neck, the back of a leg or the outer aspect of an arm. Another form of neurodermatitis consists of nodules in the skin which are scattered over all parts of the body.

The hallmark of neurodermatitis is intense itching and the consequent scratching of the

skin results in the thickening of the skin and the formation of nodules. The name neurodermatitis implies that nerves have something to do with this condition, but there is no evidence that the nerves in the skin or nervous stress have anything to do with the cause of this type of eczema.

The Diagnosis of Eczema

Eczema can usually be readily diagnosed from the history of the condition plus examination of the skin. Microscopic examination of a small biopsy of the skin can be used to provide confirmation of the diagnosis in the few cases where doubt exists. If contact eczema is diagnosed, patch tests are often required to detect what chemical is causing the allergy, unless its identity is apparent from the history.

Treatment of Eczema

There are three aspects to the treatment of eczema: specific treatment aimed at removing the cause; nonspecific treatment aimed at removing aggravating factors and controlling symptoms; and suppressive treatment aimed at suppressing the inflammation that is occurring in the skin.

Specific Treatment

Contact eczema is the only type of eczema for which a specific cause is known. Once the chemical responsible for the eczema has been identified, it must be eliminated from the environment of the patient and all further contact should be avoided. For example, if poison ivy is thought to be the cause of a patient's eczema, that plant and related species such as poison oak must be avoided in the future.

Non-Specific Treatment

Several measures can be very helpful in reducing the symptoms and severity of eczema:

Moisturizers

The skin of patients with chronic eczema is usually very dry. Dry skin tends to be itchy and this symptom can be reduced by frequent application of moisturizers. The best time to apply a moisturizer is immediately after a bath or shower since the amount of water

in the skin is maximal at that time and the moisturizer will help to lock-in this water and prevent its evaporation.

The choice of a moisturizer is individual, some prefer an ointment, some a cream and some a lotion. We have samples of different moisturizers and will be pleased to let you try some. One important point: price is a poor guide to quality of a moisturizer and the most expensive is not necessarily the best for you.

Antipruritics

Itchiness, or pruritus as it is called, is a major symptom in all people with eczema. There is a vast number of drugs listed as being antipruritic and most are moderately successful in controlling itch. Almost all antipruritic are antihistamines, which have two problem side-effects: drowsiness and enhancement of the effects of alcohol. When trying a new antipruritic you should first take it at home in the evening to test whether it makes you drowsy. Always be cautious of mixing antihistamines and alcohol and never mix antihistamines, alcohol and driving; the combination may be lethal.

Antibiotics

Infection is often super-imposed on eczema and frequently elimination of such infection can greatly reduce the severity of eczema. Short and long courses of antibiotics may be required to combat infection.

Reduction of Irritants

There are a number of irritant factors in our environment which increase the severity in patients with eczema involving the hands but apply to all patients with eczema in a greater or lesser degree.

Here are a few simple rules to protect your hands and help reduce eczema:

Whenever you must have your hands in dirty or soapy water or in strong solutions, wear cotton gloves covered with rubber gloves of adequate size. Rubber gloves with bonded cotton linings are second best. Dust talc or corn starch inside the gloves to absorb moisture. The gloves should not be worn for more than 15 to 20 minutes at a time because the accumulated heat and perspiration will be quite harmful to the skin. Use only water to rinse the gloves and liners and see that they are dry before each use.

Use long-handled brushes as much as you can for cleaning and scouring dishes, pots

and pans.

When doing dry, dusty or dirty housework wear cotton gloves. Babies may be bathed with bare hands unless the hands are actually inflamed.

Avoid prolonged contact with fruit juices, fruits, vegetables and raw meats. Use as many "convenience" foods as possible. Avoid exposure to hair lotions, dyes, rinses, shampoos and tonics with the bare hands. Gloves or Q-Tips may be used to apply these things to the scalp.

Wash your hands as little as possible. When cleaning is necessary just wipe them with a wash cloth and luke-warm water. Pat dry. Use soap as little as possible and rinse thoroughly.

Discontinue the wearing of rings while the eczema is active. Often the trouble starts under rings due to trapping of soap, detergent, or other potentially irritating materials. Always rinse thoroughly under your rings.

Suppressive Treatment

Elimination of inflammation in the skin will eliminate eczema. Anti-inflammatory treatment is the main approach presently available for treating eczema. But it is important to realize this is not a specific treatment since it is not attacking the basic cause of eczema. Furthermore, if the basic cause of an eczema continues to operate, anti-inflammatory treatments will only be effective as long as they are used, or put another way, suppression of the inflammation is a treatment and not a cure.

There are two effective anti-inflammatory treatments:

Cortisone Treatment

Cortisone is a hormone produced by the adrenal glands, which has, as one of its effects, the property of reducing inflammation. Dozens of derivatives of cortisone have now been produced and these have greatly enhanced anti-inflammatory effects and reduced less desirable effects. In the treatment of eczema these compounds are usually applied to the skin as lotions, creams or ointments. When used as directed, these preparations are safe and effective treatments but it must be remembered that these are potent agents and misuse can result in very undesirable side-effects.

Thinning of the skin with formation of stretch marks and broken blood vessels are

two common problems from over use of cortisone steroid medication.

Cortisone, as a compound called prednisone, is sometimes taken by mouth for the treatment of eczema. In short courses, as for the treatment of poison ivy dermatitis, this is a very effective and safe treatment. However, long-term use in the treatment of chronic eczema is associated with two inevitable problems. First, the effectiveness of the drug diminishes so that more and more is required to produce the same effect. Second, prednisone will eventually cause side effects in the form of weakening of bones, cataracts and proneness to develop serious infections such as pneumonia. Thus, prednisone is not a safe or effective long-term treatment for eczema.

Ultraviolet Light

Psoralen in combination with ultraviolet A light (PUVA therapy) has been used in the treatment of chronic eczema for the past 20 years. The response rate varies with the type of eczema. About 75% of patients with generalized atopic eczema have a good response after 20-30 treatments. The reason for a failed response in the remaining 25% is not known. Over 90% of patients with seborrheic eczema and hand eczema have a good response after 20-30 treatments. Generalized winter-type eczema in the elderly patients also usually responds.

Ultraviolet B light (broadband) has also been used in the treatment of eczema but it is less effective than PUVA therapy. Narrow-band UVB phototherapy, a new treatment for eczema is more effective than broadband UVB, and will clear many patients with eczema. It is a useful alternative to PUVA therapy.

Phototherapy has three advantages over topical cortisone steroid ointments and creams. First, a successful response to phototherapy results in a return of the skin to a normal appearance without symptoms whereas cortisone treatment only produces a partial suppression of the eczema. Second, once controlled, infrequent maintenance treatment is usually sufficient to maintain a clear state whereas cortisone treatment usually has to be used daily. Finally, phototherapy does away with the bother of applying potions and lotions to the skin.

Treatments That Do Not Work in Eczema

Desensitization

Desensitization has been used in atopic eczema in the belief that allergy to various materials in the environment are the cause of the condition. While it is true that people with atopic eczema often give positive responses to pollens, grasses, dander etc. when tested by the prick allergy testing, desensitization to these substances does not improve the eczema.

Exclusion Diets

Exclusion diets have also been used in atopic eczema in the belief that food allergy is the basic cause. Careful studies have shown these diets are of no value apart from the placebo effect of "doing something", except in a select group of young children.

Sedatives, anti-depressants and other mood-altering drugs

Sedative, anti-depressants and other mood-altering drugs of various types have been popular, particularly in the treatment of neurodermatitis. Unless there is other evidence for the diagnosis of a neurosis, little or no improvement is achieved with this approach.

Vitamin and Mineral Supplements

Vitamin and mineral supplements have been advocated in the treatment of various types of eczema. Eczema is not a manifestation of dietary deficiency and dietary supplementation of any type is completely without value in its treatments.