

Eczema

Skin is our foremost sensory organ. Skin is very important as it covers and protects everything inside our body. Imagine, without skin, our bones, muscles and organs would be hanging out all over the place! Skin holds everything together. It also protects our bodies, helps keep our bodies at just the right temperature and, through nerve endings close to the surface of the skin, allows us to have the sense of touch. Our skin protects us against chemicals, bacteria and radiation, helps maintain a stable body temperature, and stops losing our fluid and vital body chemicals.

However skin can become infected with bacteria, viruses and fungi, and can be irritated by chemicals or other substances it is in contact with. Skin is also exposed to sunlight, and can suffer as a result. You might be surprised to know that in medical terms, there are around 150 skin diseases. We will, however, discuss some most common diseases. In this part of the article, I tell you something about Eczema.

What is Eczema?

This is a Greek word. It means 'to boil over'. Or we can say that it is a general term for many types of skin inflammation, also known as dermatitis. Eczema is usually dry, making the skin feel rough, scaly and sometimes thickened. In severe eczema or after a prolonged bout of scratching, the skin becomes wet with colourless fluid, sometimes mixed with blood. The term 'eczema' covers a wide range of skin problems, which trouble people at different stages in their lives. It crops up in many different ways, such as in an elderly person with dry red skin around the ankles, a child with weeping red areas on the wrists, or someone whose eyelids have become itchy, red, dry and puffy in reaction to make-up.

Eczema can further be divided into various forms. The most common forms are given below :

Atopic eczema or atopic dermatitis : This type of eczema comes and goes repeatedly, and usually occurs in people who have a genetic tendency to have allergies. In about 70 percent of cases, either the patient or a family member has allergic asthma, hay fever or food allergies. Atopic eczema appears early in life, usually in babies between 2 months and 18 months old. In babies, atopic eczema primarily affects the face, neck, ears and torso. It also appears on the tops of feet or the outside surface of elbows. Atopic eczema also is seen in older children, teen-agers and adults, where it usually involves the skin inside the creases of the inward bend of the elbow, knee, ankle, or wrist joints, the hands, or the upper eyelids.

Contact dermatitis : When irritants touch the skin, they can produce two types of contact dermatitis. Irritant contact dermatitis is direct irritation of the skin. The problem is called allergic contact dermatitis when an allergic reaction occurs in the skin. Irritant contact dermatitis can be caused by prolonged contact with mild irritants such as bubble bath, soap, sweat, saliva, urine and even water. Allergic contact dermatitis only occurs in people who have an allergy to a specific substance. The most common allergens are poison ivy, poison oak and poison sumac. Other common substances that trigger skin allergies include construction materials used to build homes and offices, cleaning products, deodorants, cosmetics and medications. Dermatitis of the earlobes can be caused by an allergy to earrings that contain nickel. Chemicals in fragrances, skin cream and lotions, shampoos and shoes or clothing also can cause allergic reactions.

Varicose eczema : Varicose eczema affects the lower legs of those in their middle to late years, being caused by poor circulation. Commonly the skin around the ankles is affected, becoming speckled, itchy and inflamed. If left untreated, the skin can break down, resulting in an ulcer.

Discoid eczema : Discoid eczema affects the arms and legs, usually in middle-aged men. The eczema occurs in numerous round patches. It is usually found in adults and appears

suddenly as a few coin shaped areas of red skin, normally on the trunk or lower legs. They become itchy and can weep fluid.

Hand eczema : This form of chronic eczema is limited to the hands. It can be related to atopic eczema or it can occur because of repeated hand washing or exposure to strong detergents. Occasionally, hand eczema is caused by an allergy, such as a latex allergy.

Nummular eczema : This type of eczema causes round, coin-sized patches of irritated skin, typically on the legs, arms or chest. It usually occurs in adults. It can be related to atopic dermatitis and, less often, allergic contact dermatitis. In a few cases, it represents an allergic reaction to a fungal infection such as athlete's foot. In this case, nummular eczema still appears typically on arms, legs or chest, even if the fungal infection is elsewhere on the body.

Asteatotic eczema : This dry-skin eczema causes fine cracks in the skin, usually first involving the lower legs, where there are fewer oil glands. It commonly occurs in the elderly, especially during winter months spent indoors in a low-humidity environment.

Stasis dermatitis : This type of eczema occurs on the calves, ankles and feet in people who have varicose veins or other conditions that lead to poor blood circulation in the lower legs. Leg swelling leads to itching, fine red bumps, skin darkening and, sometimes, ankle sores.

Lichen simplex chronicus : This form of eczema is a reaction to repeatedly scratching or rubbing the skin in one location. A nervous skin-scratching habit can lead to thickened, discoloured skin on the wrist, the ankle, groin or the back of the neck. Skin picking can lead to smaller bump-like areas of the same type of rash called prurigo nodularis.

Seborrheic dermatitis or seborrhoea : Some doctors consider seborrhea to be a type of eczema, although it creates a greasier rash than is usual for eczema conditions. This scaly dermatitis commonly appears on the scalp as "cradle cap" in infants or dandruff in adults. It commonly affects the face or neck around the nose and at the scalp line. It probably is triggered by the skin fungus *Pityrosporum ovale*.

Symptoms of Eczema

Though there are various kinds of Eczema, yet we can generalize the symptoms. Whatever the cause, eczema leads to itching and redness, and may make the skin dry and flaky. Sometimes itchy blisters form. The surface of the skin may become moist and crusty if these blisters burst, or when scratching damages the skin. Atopic eczema is often worse in the folds of the skin where the limbs bend. The itch is intense, but scratching only makes the symptoms worse. Eczema makes the skin more sensitive, so you may notice that you are more irritated by cosmetics, soaps, detergents, etc. Eczema in infants is most commonly seen as a patch below the chin or cradle cap.

Itch : This is the main symptom, and without it a rash is not due to eczema (unless the itch has been improved by treatment). Itch is also a common feature of many other skin conditions as well as being a symptom of a range of diverse medical conditions not primarily to do with the skin, so although it is an 'essential' symptom when diagnosing eczema, it is not specific for it.

Redness : Increased redness of the skin usually means increased blood flow. An extensive network of tiny blood vessels known as capillaries, is present in the deeper layers of the skin that project loops of smaller vessels into the more superficial layers. The process of inflammation in eczema is complex and can be triggered by a range of factors but an important additional one to take into account when eczema flares up is the presence of bacterial infection. When bacterial infection gets into the deeper layers of the skin there is usually a marked increase in redness and heat from the tissues. Recognising that this may be due to infection is important in bringing the eczema under control.

Thickening : The skin of areas of eczema that have been inflamed for a while are usually much thicker than unaffected skin. Mainly this occurs as a protective response of the skin to the repeated trauma of scratching. Eczema often affects the skin in areas around joints such as the elbow, behind the knees and in front of the ankles (the 'flexures') where the skin also needs to be particularly flexible. Commonly one will see splits in the skin here also called fissures, as the thickened skin is unable to bend as it would normally.

Blisters : The microscopic study of skin structure in eczema shows there is less adhesion between the skin cells, particularly in the upper layers of the skin. This contributes to scaling and makes it easier for skin bacteria to get into the deeper layers, between the gaps. It also makes it possible for tissue fluids to ooze between the cells and, if sufficient, to gather into collections or blisters. Small blisters may be seen in active eczema but occasionally large ones may occur, either due to the particular nature of the eczema or because of skin infection coming along as well when the blisters may be filled not only with clear fluid but also pus.

Crusts : The fluid that oozes from inflamed skin is rich in protein. When this dries out in contact with air the protein is left behind as a crusty deposit. Often this occurs in conjunction with infection, when the infected crusts typically have a golden colour. A similar crusting is seen in the infectious skin condition called impetigo, which is commonly seen in children of primary school age as it is easily passed on by touching. In impetigo treating the infection eliminates the problem, but it is of course only part of what's required in eczema.

What causes eczema?

The causes are still not very much clear, but we do know that the tendency to get eczema is passed down through the family. If parents or grandparents of a child have eczema (or asthma or hay fever, other closely linked conditions), there's an 80% chance that child will develop it.

Further, irritants like tobacco smoke, chemicals or solvents, even weather (hot, humid conditions or cold, dry ones) can aggravate eczema. Allergens as well - like dust mites, moulds, plant pollens, pets and any number of pollutants - can trigger an outbreak, exactly the way asthma happens. Hence it is important to take notice of any allergies & sensitivities and avoid them. A flare-up occurs when the immune system in people's skin overreacts to environmental or emotional triggers and causes symptoms such as an itchy rash to appear. An individual's sensitivity to certain foods can trigger eczema. Among those most suspect are dairy and wheat products, citrus fruits, eggs, nuts, chemical food additives, preservatives and colourings. Not all of the foods, irritants or allergens listed may aggravate your eczema. Stress can also make eczema worse or trigger a flare.

Other causes may include the sudden changes in temperature or humidity, chemicals in pesticides, paint strippers, astringents, perfumes, harsh soaps, detergents and household cleaners, scratchy fabrics like wool, tissue fabric, some silks, furs etc.

What is the treatment for eczema?

First let us understand that the main problem in Eczema is itching. So the main objectives for the treatment of eczema are to prevent itching, inflammation, and worsening of the condition. Treatment of eczema may involve both lifestyle changes and the use of medications. Treatment is always based upon an individual's age, overall health status, and the type and severity of the condition. Keeping the skin well hydrated through the application of creams (with a low water and high oil content) as well as avoiding over bathing is an important step in treatment. Lifestyle modifications to avoid triggers for the condition are very important and must be maintained.

Before prescribing a treatment plan, a dermatologist considers the type of eczema, extent and severity of the eczema, patient's medical history, and a number of other factors. Medication and other therapies will be prescribed as needed to: Control itching, Reduce skin inflammation, Clear infection, Loosen and remove scaly lesions, Reduce new lesions.

It is important to realize that in most cases no one treatment will be effective. Medical research continues to show that the most effective treatment plan for eczema — regardless of type — involves using a combination of therapies to treat the skin and making lifestyle changes to control flare-ups. Doing so tends to increase effectiveness and reduce side effects from medications.

The type of medication prescribed will depend on many factors, including the type of eczema, past treatment, and the patient's preference. Topical (applied to the skin) medication is frequently prescribed. If the eczema is more severe, phototherapy (a type of treatment that uses light therapy) or systemic (circulates throughout the body) medication may be prescribed.

Today, there are many effective therapies available to treat the different types of eczema. With proper treatment, most eczema can be controlled.

Keep in mind that eczema can be stubborn. If the signs and symptoms persist, be sure to tell your dermatologist. Sometimes it helps to change how you use the medications or to set aside more time for relaxing activities. Stress triggers flare-ups in many people. Others find relief with stronger medication. Keeping a diary to learn what triggers the eczema and avoiding these triggers helps others. A dermatologist can work with you to tailor a treatment plan that meets your needs.

Prevention is always better than cure

As stated earlier also, the changes in lifestyle are the first line of defence in controlling eczema, regardless of the severity of the disease. Recommended by dermatologists, the following guidelines can help reduce the severity and frequency of flare-ups, which also may decrease the need for anti-inflammatory medicine. Continuing to follow these guidelines once the signs and symptoms clear can help prevent further outbreaks:

1. Never leave skin dry, keep it moisturized : Eczema is usually dry and itchy, so applying moisturizers as needed to keep the skin moist is part of an effective treatment plan. Frequent moisturizing locks in the skin's own moisture to prevent dryness and cracking. One of the best ways to lock in moisture is to apply moisturizer after bathing. When bathing, care must be taken to avoid irritating the skin.

2. Avoid contact with anything that irritates your skin. Soaps, bubble bath, perfumes, cosmetics, laundry detergents, household cleaners, too much time spent in water, finger paints, gasoline, turpentine, wool, a pet's fur, juices from meats and fruits, plants, jewellery, and even lotions can irritate sensitive skin. Know what irritates your skin and limit contact with all that does. Avoiding personal-care products that contain alcohol and not washing hands too frequently also will help reduce irritation.

3. Avoid sweating and overheating. The most common triggers of the scratch/itch cycle are sweating and overheating. It is essential to prevent these situations whenever possible.

4. Avoid sudden changes in temperature and humidity. A sudden rise in temperature can cause overheating and sweating. A drop in humidity can dry skin and lead to a flare-up.

5. Use a cold compress to curb the itch. Scratching makes the condition worse and may puncture skin allowing bacteria to enter and cause an infection. Gently applying a cold compress to the area that itches can reduce inflammation and lessen the desire to scratch.

6. Keep your fingernails short. Short nails decrease the likelihood that scratching will puncture the skin. Keeping nails short and wearing cotton gloves at night may help prevent scratching that punctures the skin while asleep.

7. Dress in loose-fitting cotton clothes. Synthetic fabrics, wool, and other materials that feel rough to the touch often irritate the skin and trigger a flare-up. Cotton and cotton-blend clothes usually make skin feel better.

8. Double rinse clothes, and wash new clothes before wearing. Laundry detergents can trigger flare-ups. Using a fragrance-free, neutral detergent and double rinsing clothes can help prevent flare-ups caused by laundry detergent. It also may be helpful to wash new clothes before they are worn as washing removes excess dyes and fabric finishers, which can irritate the skin. Tags should be removed, too, as these can rub the skin, causing irritation.

9. Reduce stress. Stress reduction plays a key role in preventing eczema flares. In today's fast-paced world, reducing stress can be challenging; however, there are ways to effectively reduce stress and stress must be avoided at all costs.

10. Follow a prescribed treatment regimen. Moisturizing and using medications as directed by a dermatologist go a long way toward keeping flare-ups at bay.

What can be done for children with eczema?

Children are unique patients because it may be difficult for them to resist scratching their eczema, thereby making the condition worse. Fortunately, for mild to moderate cases, the application of moisturizer on a regular basis can be very helpful. And, in most cases, the eczema will disappear as the child ages. In the meantime, avoid as many eczema triggers as possible. Keep your child's skin moist. After bathing, apply moisturizer within three minutes to retain the moisture in the skin. Avoid sudden temperature changes. Keep your child's bedroom and play areas free of dust mites. Use mild soaps – both on your child's skin and on your child's clothing. Dress your child in breathable, preferably cotton, clothing. If these methods fail to help your child, you should seek further advice from a dermatologist. After consultation, an over-the-counter cream, a prescription cream, ointment, antihistamines, or antibiotics may be advised. Regardless, most children will see improvement as time goes by.

Eczema : Ayurveda and Herbal Way

In the last two issues, readers must have got a reasonable amount of information about eczema including causes, symptoms, treatment and preventive measure. In this final part, I try to explain about this disease in terms of Ayurveda, herbal and home remedial way.

Eczema is seen in Ayurveda as a Pitta imbalance. The terms 'eczema' is called 'vicharchika' in Sanskrit and Hindi in the Ayurveda. It refers to distinctive reaction patterns in the skin, which can be either acute or chronic and due to a number of causes. According to Ayurveda, there are two types of Eczemas Exogenous and Endogenous. Exogenous eczema are Irritant and Allergic while Endogenous eczema are Atopic / Seborrheic / Discoid / Asteatotic / Gravitational Localised neurodermatitis / Pompholyx.

Home, herbal and Ayurvedic remedies :

(Note : Readers may keep in mind that Modern medicine must not be mixed with the herbal remedies. Also the following are only for the knowledge of our readers. Every person is genetically different with different chemical composition; hence nothing mentioned in this article be tried by the readers without the consultation of the qualified practitioner)

- **Babul** is an excellent remedy for eczema. The bark of the babul tree is useful in the treatment of eczema. About 25 gms each of this bark and mango bark should be boiled in about 1 litre of water and the vapours allowed to foment the affected part. After the fomentation, the affected part should be anointed with ghee.
- **Butea:** The seeds, ground and mixed with lemon juice, can be daubed on dhobi's itch - an eczema-type of skin disorder, characterized by itching.
- **Linseed:** A hot poultice of the seeds is a popular household remedy for skin disorder like eczema. Equal parts of linseed oil and lime water mixed together is an effective remedy for eczema and herpes.

- **Madhuca:** The leaves of madhuca are effective in the treatment of eczema. The leaves, smeared with sesame oil, warmed over a fire and bandaged on the affected parts provide relief. They should be changed after every 3 to 4 hours.
- **Neem :** The leaves, applied externally, are very useful in eczema and any type of skin diseases. They can be used either as a poultice, decoction or liniment.
- **A combination** of Ashwaghandha, Turmeric, and Indian Sasparilla to work as an anti-inflammatory, analgesic and complexion enhancer. This formula cures eczema by cleaning the wound and healing the irritation.
- **Application** of BAG BALM every night after bath helps reduce itching and redness away.
- **An oatmeal bath** is very helpful to some. Add 1/2 cup of olive oil mixed with a tsp. turmeric into the oatmeal bath. Spoon the mixture directly onto the affected areas and gently rub it into sore areas. Add the remainder to the bathwater. After a good soak and while the area is still moist, rub legs with plain olive oil and dress the legs in loose fitting cotton pants.
- **Apply a teaspoon of sandalwood** paste mixed with a teaspoon of camphor to the affected areas.
- **Turmeric** is an incredible anti-inflammatory and will help all eczema sufferers. It is proven as effective as steroids / corticosteroids.
- **Skin wash :** Mix 1 tsp. comfrey root. 1 tsp. white oak bark. 1 tsp. slippery elm bark. 2 cups of water. Boil for 35 minutes use it to wash the affected area.
- **Vitamin B** complex is needed for healthy skin.
- **Take Biotin** pills is essential to prevent dermatitis.
- **Put Vitamin E** on the affected area it calms the itching. Never use synthetic vitamin E because your body will not be able to utilize it.
- **Take Zinc** orally and apply it directly on the dermatitis
- **Shark cartilage** reduces inflammation.
- **Use a lotion** made out of blueberry leaves this is proven to be fantastic relieving inflammation of dermatitis.
- **Apply** a mixture of 1 teaspoon camphor and 1 teaspoon sandalwood paste on the rashes.
- **Apply nutmeg** paste to the affected areas.
- **Add 1 tbsp turmeric** powder to a tbsp of bitter neem leaves. Grind to paste and apply.
- **Apply** a mixture of 1 tsp camphor and 1 tsp sandalwood paste on the rashes.
- **Use pine tar** soap to wash the affected skin.
- **Deficiency of vitamin B6** may also cause eczema. So increase your intake of vitamin B6.
- **Evening primrose oil** can also help. It contains gamma-linolenic acid (GLA), which is what eczema sufferers need. Try skincare products with evening primrose oil, or get GLA through your diet by eating salmon two or three times a week or by

eating flaxseeds (or taking flax oil capsules), which you can buy at the health food store. In a blender or clean coffee grinder, grind enough for two tablespoons a day and sprinkle on foods like cereal or potatoes. Both salmon and flaxseeds provide omega-3 fatty acids.

- **A serving of watercress** every day is said to keep eczema at bay, along with a daily drink of parsley, spinach, celery, and wheat grass.
- **Salt** intake should be reduced. Sour items including pickles and curd are strictly prohibited.
- **Boil 200 gms of mustard oil** in an iron vessel. In the boiling oil add 50 gms of fresh clean leaves of neem. When the leaves turn black, stop heating, cool the oil and sieve it. Apply this oil 4 times a day. If applied for a year the problem will never occur again.
- **Papaya seeds** mashed and applied on areas prevent itching of the skin suffering from eczema.

Diet: Diet never causes eczema. Food only causes allergy, it does not cause eczema. It is the genes of a person that cause eczema. If you are allergic or sensitive to certain foods then try avoiding them, because they can trigger eczema. Dairy products, eggs, nuts, preservatives and citrus fruits are more likely to trigger eczema. Carrot and muskmelon are highly beneficial. Drink tomato juice daily, it will cure the symptoms in a few days. Avoid: Egg, Fish, Peanuts, Soya, milk and dairy products, tin food, preservatives
Use Coconut Oil

Life style: Patients need to be cleaned daily with warm water boiled with neem bark. After cleaning the paste of the bark should be applied over it and allowed to dry. Patients are not allowed to have any spicy and oily food. Patients need to avoid the hot, humid temperature and should be kept free from any tight clothing. Nylons, terylenes and other synthetic fibers should be avoided as they inhibit evaporation of perspiration.

(Source: allayurvedadotcom / Diana Kohnle / Hawel C. Williams / Skin Care Health Care dot Net /Ayurveda Nighantu / Skincarephysiciansdotcom)

Dr. A. Kumar Consultant

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