

Constitutional eczema



What is constitutional eczema?

Constitutional eczema, also called atopic eczema, is a form of eczema that mainly occurs in childhood. Eczema usually starts before the age of two and is mainly characterised by intense itching. Constitutional eczema is often accompanied by a predisposition to developing allergies. This predisposition is hereditary and is called atopy. If eczema develops during infancy, it is highly likely that it will automatically disappear at a later age. However, eczema can also be chronic or flare-up at a later stage.

What is the cause of constitutional eczema?

The exact cause of constitutional eczema is unknown. It is assumed that eczema is caused and maintained by a combination of various factors. On the one hand there is genetic predisposition; on the other hand there is the influence of allergic and non-allergic factors from the environment. For people with constitutional eczema, there is usually a reduced barrier function of the skin. Because of the impaired barrier function, the skin doesn't retain enough moisture, causing dry skin. This dry skin is a characteristic of constitutional eczema and is considered to be an important causal factor.

Genetic predisposition usually become apparent because of the fact that eczema or other atopic disorders occur in the family, such as asthma, hay fever and other allergies.

The role of allergy factors is usually not clear. Many patients with constitutional eczema have become sensitised. This means that their blood produces antibodies against common environmental substances. This can be shown by a skin test or a blood test. On the one hand, these are substances that enter the body through the lungs, the so-called inhalation allergens, such as dust mites, grass and tree pollen and cat and dog dander. On the other hand, these are substances that enter the body through food, such as cow's milk, egg, chicken protein, fish, peanuts and nuts.

The presence of antibodies in the blood against certain allergens does not mean that someone is actually allergic to those substances. Current thinking is that an allergy to inhalation allergens or food allergens is not the cause of constitutional eczema.

It is not clear to what extent contact with these substances can aggravate eczema. For example, it has been shown that reducing exposure to dust mites does not improve eczema in people with a proven allergy to dust mites. Therefore, even if an allergy to dust mites has been detected, this has no consequences on the patient's treatment.

Because it is not sufficiently clear whether other environmental substances or food play a role in maintaining or aggravating eczema, there is currently a debate about the usefulness of allergy testing in people with constitutional

eczema. In infants, children with constitutional eczema sometimes have a food allergy. At this age, a food allergy can aggravate eczema and therefore it can sometimes be useful to carry out an allergy test.

The skin of people with constitutional eczema is dry and is therefore easily irritated by non-allergic factors. Frequent washing with soap and other degreasing agents dries out the skin even more and itching increases. The same applies to taking long showers with hot water. In winter, the skin dries out more than in the summer due to lower humidity, often resulting in aggravated eczema. In muggy heat and during physical exertion, itching may also increase as a result of perspiration.

Wearing clothing made of wool or rough fibres can cause skin irritation and therefore itchiness. Wearing synthetic clothing can also cause itching because the heat cannot disperse. The general condition of someone with constitutional eczema also plays an important role. Physical influences (illness, fatigue) or psychological influences (emotions, stress) can aggravate eczema.

What are the symptoms?

The symptoms of constitutional eczema are redness, scaling of the skin and the appearance of small bumps. Blisters may also develop and there may be some discharge. The skin is dry all over and feels rough to the touch. Because eczema is always more or less itchy, there are often scratches on the skin. If eczema has been present for a long period of time, there can be localised coarsening and thickening of the skin.

Constitutional eczema usually occurs in the first 6 months of birth, but can, in principle, start at any age. Eczema can appear for a relatively short time, but can also become chronic. With some people, it disappears completely and

then flares up again much later. Constitutional eczema in babies is also referred to as infantile eczema.

Infantile eczema is located mainly on the face and behind the ears, on the scalp, on the trunk and the arms and legs. It usually occurs at the age of three months. In pre-school children, constitutional eczema is mainly found in the skin folds at the joints, such as the elbows, knees, wrists and ankles. This type of eczema is often also found in the neck area. After the age of 10, it mainly affects the hands, feet and the creases of the elbows and knees. In some adult patients, eczema can be found particularly on the face (the eyelids, upper lip) and in the neck area.

The skin of people with constitutional eczema is more susceptible to bacterial infections as well as the herpes simplex virus (the cause of cold sores). Bacterial infections can cause pimples, open sores and yellowish scabs on the skin. If there is an infection with the herpes simplex virus, the eczema patches will develop numerous blisters, and possibly the development of a high temperature.

How is the diagnosis made?

The diagnosis is made based on the existing skin problems and itchiness. In addition, information about the occurrence of eczema, asthma or allergies in the family can also help the diagnosis.

If there are indications of acute allergic reactions, allergy testing is necessary. If there is only constitutional eczema, there is no point in carrying out an allergy test, as the results of the test will have no effect on the course and treatment of the eczema. However, if there are other indications of atopy, an allergy test could be useful.

How is it treated?

Many factors play a role in constitutional

eczema. There may be spontaneous improvements and flare-ups. It is not possible to cure constitutional eczema with medicines. Treatment is aimed at suppressing and reducing the symptoms. Treatment consists mainly of external treatment with creams and ointments. Sometimes tablets or liquid extracts can also be prescribed. Hypo-allergenic nutrition may be useful for infants with a hypersensitivity to cow's milk.

External treatment

In cases of constitutional eczema, the skin is dry to very dry. It is very important that the moisture content of the base layer of your skin is improved by applying ointments or creams. This applies to the entire body and not just to the patches of eczema.

In addition, eczema is usually treated with a corticosteroid ointment or cream. Corticosteroids are derived from the natural hormone cortisol.

These hormone preparations are available in various strengths (see the leaflet "Using corticosteroids for your skin"). If the eczema is minor or moderate, the use of a mild to moderate corticosteroid is usually sufficient. If the eczema is more severe, then stronger corticosteroids are prescribed. The strength of the corticosteroids can be reduced gradually, as soon as the eczema calms down. The long-term use of a Class 1 or Class 2 corticosteroid (Class 1 in children under two years of age) generally does not cause any side effects. This is also true for Class 3 corticosteroids which are not used continuously, but only for a few days a week. Because the face and body folds are more sensitive to side effects, only Class 1 and Class 2 corticosteroids are used for those areas. Coal tar therapy is hardly used nowadays.

Patients with moderate or severe eczema usually also respond well to ultra violet light. For adults, this can be effective alongside the treatment with corticosteroid ointments. If for some reason corticosteroids should not be used, then pimecrolimus cream or tacrolimus ointment can be used instead. These medicines do not contain any hormone preparations and therefore do not cause the side effects of corticosteroids, such as thinning of the skin.

Pimecrolimus is suitable for treating mild to moderate eczema and tacrolimus for treating moderately-severe eczema. These agents are not powerful enough to treat severe eczema. Pimecrolimus cream and tacrolimus ointment may initially cause a burning sensation, but that usually disappears as the treatment continues.

In cases of bacterial or fungal infections, antibacterial and/or anti-fungal agents can be used in a cream or ointment. If there is extensive bacterial infection, the preferred treatment is to prescribe a course of antibiotics.

Internal treatment

Internal treatment is mainly aimed at suppressing the itching. This is done with antihistamines that causes some degree of drowsiness. These are especially prescribed if the patient experiences nocturnal insomnia.

If cases of severe constitutional eczema that has not improved with the use of corticosteroids in ointments or creams, then cyclosporin can be prescribed. This is a medicine that suppresses the immune system. It has a positive result in 85% of patients with severe eczema. However, it may cause side effects and therefore requires careful monitoring of the patient's blood and blood pressure.

If the eczema does not respond to cyclosporin, a treatment may be considered using azathioprine or mycophenolate mofetil. This treatment requires regular laboratory tests to be carried out. Severe constitutional eczema may be treated with a short-course of corticosteroid in tablet form, such as prednisone. A short-course of treatment with prednisone hardly ever causes serious side effects. If large areas of eczema ever become infected with bacteria, a course of antibiotics may be necessary.

What else can you do?

Dry skin is a major characteristic of constitutional eczema. Therefore, the skin should not be washed with a lot of soap, and especially not with bath or shower gel as this dries out the skin even more. However, it is advisable to use bath or shower oils and to apply cream or ointment to the skin.

It is important to pay attention to the clothing that is worn. Woollen textiles can be very itchy. Textiles made of rough fibres are the same and are therefore not recommended. Cotton clothing is tolerated well and is therefore preferred. Tight-fitting nylon clothing is not recommended. There is no evidence to show that dust mite repellent mattress toppers have a positive effect on eczema.

Itching is quickly caused by physical exertion as well as sweating. After physical exertion – sports, for example - it is recommended to take an immediate brief shower. Itching is also caused by high temperatures, either indoors or outdoors in the sun. Sunbathing in itself doesn't necessarily have a negative effect, as long as there is some cooling relief (i.e. a breeze). There is no reason why eczema sufferers should not swim.

After swimming, it is best to take a shower and to apply creams or

ointments. Sometimes, a holiday by the sea can work wonders. The combination of relaxation, sea and sunlight on uncovered skin can have a positive effect.

Eczema sufferers usually scratch their skin at night. Any damage can be limited by keeping nails really short and, where possible, wearing dermatological cotton gloves.

Eczema on the hands can be aggravated when eczema sufferers come into frequent contact at work with liquids or irritants. It is important to wear suitable gloves. If necessary, ask the company doctor for advice. People with a skin condition such as constitutional eczema, are often faced with the notion that their condition is infectious. However, constitutional eczema is not infectious. To help family members and other people around you understand this better, it may be useful to give them information about the nature of this condition.

It is well known that stress factors can affect eczema. Annoyance and emotional events are major factors which aggravate the itching and eczema. Conversely, more severe forms of constitutional eczema can lead to psychological symptoms and constitutional eczema has a clear negative impact on the quality of life. It is advisable to ask for help if there are any psychological problems. In some cases, the help of a psychologist or other psycho-social counsellor is recommended. It is also possible to try behavioural therapy to try and reduce scratching impulses.

What are the prospects?

The course of constitutional eczema can vary greatly. In many children, eczema disappears after the age of two; in others, their eczema will improve during their primary school years. Sometimes

eczema disappears for years only to (temporarily) flare up again in young adulthood.

Eczema can also persist into adulthood and start to improve only after the age of 40 to 50. However, the opposite can also happen - namely, that eczema develops in adulthood. Some young children with eczema will develop asthma. It is impossible to predict which children will be affected, but it seems that children with severe eczema are more likely to be affected. There is also an increased risk of getting hay fever. This usually happens later. It is advisable to let your doctor know early on about any symptoms of asthma or hay fever.

Accessibility

If necessary, the dermatologist or nurse can be available within two working days via telephone number (020 - 755 7015) or via e-mail (derma@zha.nl). You can find more information about Ziekenhuis Amstelland at www.ziekenhuisamstelland.nl

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