



ATOPIC ECZEMA

What are the aims of this leaflet?

This leaflet has been written to help you understand more about atopic eczema (AE) which is also known as atopic dermatitis (AD). The words eczema and dermatitis mean the same thing, and so atopic eczema is the same condition as atopic dermatitis. For simplicity we shall use atopic eczema or AE in this leaflet. It tells you what it is, what causes it, how it can be treated, and where you can find out more about it.

What is atopic eczema?

Atopic eczema is a very common skin condition due to skin inflammation. It may start at any age but the onset is often in childhood. 1 in every 5 children in the UK is affected by eczema at some stage. It may also start later in life in people who did not have AE as a child.

The term '*atopic*' is used to describe a group of conditions, which include asthma, eczema and hay-fever and food allergy. These conditions are all linked by an increased activity of the allergy side of the body's immune system. '*Eczema*' is a term which comes from the Greek word 'to boil' and is used to describe red, dry, itchy skin which can sometimes become weeping, blistered, crusted, scaling and thickened.

What causes atopic eczema?

Atopic eczema is a complex condition and a number of factors appear important for its development including patient susceptibility and environmental factors. Patients typically have alterations in their skin barrier, and overly reactive inflammatory and allergy responses. Environmental factors include contact with soaps, detergents and any other chemicals

applied to the skin, exposure to allergens, and infection with certain bacteria and viruses. A tendency to atopic conditions often runs in families (see below) and is part of your genes. An alteration in a gene that is important in maintaining a healthy skin barrier has been closely linked to the development of eczema. This makes the skin of patients with eczema much more susceptible to infection and allows irritating substances/particles to enter the skin, causing itching and inflammation. AE cannot be caught from somebody else.

Is atopic eczema hereditary?

Yes. Atopic eczema tends to run in families. If one or both parents have eczema it is more likely that their children will develop it too. Approximately one third of children with AE will also develop asthma and/or hay fever. AE affects both males and females equally.

What are the symptoms of atopic eczema?

The main symptom is itch. Scratching in response to itch may cause many of the changes seen on the skin. Itch can be severe enough to interfere with sleep, causing tiredness and irritability. Typically AE goes through phases of being severe, then less severe, and then gets worse again. Sometimes a flare up can be due to the reasons outlined below, but often no cause can be identified.

What does atopic eczema look like?

Atopic eczema can affect any part of the skin, including the face, but the areas that are most commonly affected are the creases in the joints at the elbows and knees, as well as the wrists and neck (called a flexural pattern). Other common appearances of AE include coin-sized areas of inflammation on the limbs (a discoid pattern), and numerous small bumps that coincide with the hair follicles (a follicular pattern).

Affected skin is usually red and dry, and scratch marks (accompanied by bleeding) are common. When AE is very active, it may become moist and weep fluid (during a 'flare-up') and small water blisters may develop especially on the hands and feet. In areas that are repeatedly scratched, the skin may thicken (a process known as lichenification), and this may cause the skin to itch more. Sometimes affected areas of the skin may become darker or lighter in colour than the surrounding, unaffected skin.

How is atopic eczema diagnosed?

The features of AE are usually easily recognised by health visitors, practice nurses and doctors, when they assess the skin. Blood tests and skin tests are usually not necessary. Occasionally the skin may need to be swabbed (by rubbing a sterile cotton bud on it) to check for bacterial or viral infections.

What makes atopic eczema flare-up?

- Many factors in a person's environment can make AE worse; these include heat, dust, woollen clothing, pets and irritants such as soaps, detergents and other chemicals.
- Being unwell, for example having a common cold can cause a flare-up.
- Infections with bacteria or viruses can worsen AE. Bacterial infection (usually with a bacteria called Staphylococcus) makes the affected skin yellow, crusty and inflamed, and may need specific treatment. An infection with the cold sore virus ([herpes simplex](#)) can cause a sudden painful widespread (and occasionally dangerous) flare-up of AE, with weeping small sores.
- Dryness of the skin.
- Teething in babies.
- In some, food allergens may rarely cause a flare up
- Stress

Can atopic eczema be cured?

No, it cannot be cured, but there are many ways of controlling it. As they get older, most children with atopic eczema will see their AE improve with 60% clear by their teens. However, many of these people continue to have dry skin and so need to continue to avoid irritants such as soaps, detergents and bubble baths.

AE may be troublesome for people in certain jobs that involve contact with irritant materials, such as catering, hairdressing, cleaning or healthcare work. In later life, AE can present as hand dermatitis and as result exposure to irritants and allergens must be avoided both in the home and at work.

Can atopic eczema be prevented?

Regular use of medical moisturisers can help restore the skin's barrier in children who might otherwise develop AE.

Although exclusive breast-feeding has been advocated for the prevention of eczema in susceptible infants, there is no evidence that this is effective. There is also no definite evidence that organic dairy products help to reduce the risk of eczema, or that eating fish oil during pregnancy helps to prevent eczema in childhood.

For some patients who flare-up frequently, intermittent use of a topical steroid or [calcineurin inhibitors](#) (see below) may reduce the number of flare-ups.

Can someone with atopic eczema lead a normal life?

Yes. You can lead a full life including sports, swimming and travel. You may need to make minor changes such as keeping moisturiser with you at school, work or when away from home.

How can atopic eczema be treated?

'Topical' means 'applied to the skin surface'. Most eczema treatments are topical, although for more severe eczema some people need to take 'oral' medication (by mouth) as well.

'Complete emollient therapy' is the mainstay of treatment for all patients with eczema as the most important part of their treatment - this means regular application of a moisturiser (also known as an emollient) and washing with a moisturiser instead of soap (known as a soap substitute).

Moisturisers (emollients): These should be applied several times every day to help the outer layer of your skin function better as a barrier to your environment. The drier your skin, the more frequently you should apply a moisturiser. Many different ones are available, varying in their degree of greasiness, and it is important that you choose one you like to use. The best one to use is the greasiest one you are prepared to apply. Moisturisers containing an antiseptic may be useful if repeated infections are a problem.

Aqueous cream was originally developed as a soap substitute. It is often used as a moisturiser but can irritate the skin and make your AE worse. For this reason it is recommended that aqueous cream is not used as a moisturiser.

CAUTION: This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils which can catch fire. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that a naked flame or cigarette smoking could cause these to catch fire. To reduce the fire risk, patients using skincare or haircare products are advised to be very careful near naked flames to reduce the risk of clothing, hair or bedding catching fire. In particular smoking cigarettes should be avoided and being near people who are smoking or using naked flames, especially in bed. Candles may also risk fire. It is advisable to wash clothing daily which is in contact with emollients and bed linen regularly.

Topical steroid creams or ointments: These will usually improve the redness and itching of AE when it is active. They come in different strengths and your doctor will advise you on which type needs to be used, where and for how long. Use a fingertip unit (squeeze steroid from the tube to cover the length of your index fingertip) to cover an area the size of the front and back of your hand.

Used appropriately topical steroids are very effective and safe to use. Used inappropriately (too strong or for too long and on the wrong body site), topical steroids may cause side effects, including thinning of the skin. However insufficient treatment with topical steroids is generally considered by doctors to be more of a problem than overuse.

Weaker topical steroids are usually prescribed for use on the face, breasts, genitals, eyelids and armpits. This is because the skin is much thinner in these sites. Stronger steroids can be used at other sites, especially thicker areas such as hands and feet.

It is recommended that you do not purchase 'natural' herbal creams, as they can cause irritation and allergic reactions. Some so-called 'natural' creams have been shown to contain potent steroids. Other herbal creams have been shown to contain high levels of harmful bacteria including MRSA which may cause skin infections and septicaemia.

Antibiotics and antiseptics: If your AE becomes wet, weepy and crusted, it may be infected and a course of antibiotics may be needed. Antiseptics, when applied to the skin alone or as part of a moisturising preparation, can be helpful in stopping the infection. Incorrect use of antiseptics can, however,

irritate the skin and make AE worse. Antiseptics should not be used continuously because this can result in excessive drying of the skin.

Topical calcineurin inhibitors: [Calcineurin inhibitors](#), tacrolimus ointment and pimecrolimus cream, may be used when AE is not responding to topical steroids, or in skin sites which are more susceptible to the side effects of steroids, such as the face, eyelids and armpits and groin. The most common side effect is stinging on application but this normally disappears after a few applications. They are associated with an increased risk of skin infections and should not be applied to infected (weeping, crusted) skin.

A maintenance regimen using intermittent calcineurin inhibitors (see below) is useful in patients who have frequent flare-ups of AE.

Antihistamines: Antihistamine tablets can be helpful in some patients. Antihistamines that make people sleepy can be useful when used at night. They have no effect on the inflammation of AE and are helpful largely as a result of their sedating effects, reducing sleep disruption.

Bandaging (dressings): Cotton bandages and cotton or silk vests/leggings worn on top of creams can help keep creams from rubbing off and stop scratching. Sometimes these may be applied as 'Wet wraps' which can be useful for short periods. Wet wraps can upset babies/young children because they can become too cold. For some patients the use of medicated paste bandages may be helpful, as they are soothing and provide a physical barrier to scratching. It is important to be taught how to use the dressings correctly. Your doctor or nurse will advise you regarding the suitability of the various bandages and dressings available.

Avoidance of Allergens:

Atopic people often have allergies:

- Air borne allergens from cats, dogs, pollen, grass or the house dust-mite, can cause flares of AE in some patients.
- Food allergies. In infants and young children where the AE is severe, intensely itchy and difficult to control, food allergens may be aggravating the skin. Dietary avoidance should only be undertaken with medical advice.
- Latex (rubber) allergy is more common in people who are atopic. The symptoms may, consist only of itching of the skin after contact with rubber products.

- Contact allergy to creams and ointments used to treat atopic eczema can rarely occur. Let your doctor know if your treatments seem to be making your skin worse (see Patient Information Leaflet on [Contact Dermatitis](#)).

Ultraviolet light: Some people with chronic eczema benefit from ultraviolet light treatment, which is usually given in a specialist hospital department (see Patient Information Leaflet on [Phototherapy](#)). This is not usually recommended for children.

Other treatments: People with severe or widespread atopic eczema not responding to topical treatments may need oral treatments (taken by mouth). These work by dampening down the immune system and are given under the close supervision of a health care professional. Options include:

- Oral steroids (prednisolone)
- [Azathioprine](#)
- [Ciclosporin](#)
- [Methotrexate](#)
- [Mycophenolate mofetil](#)

Chinese herbal treatment: This is a complementary therapy that has been reported to benefit some patients but doctors do not generally recommend these. Potentially serious side effects, such as inflammation of the liver, have been known to occur with Chinese herbal treatment.

Many people with eczema benefit from a psychological approach to their condition in addition to their use of creams, ointments etc.

Self care (What can I do?)

- Moisturise your skin as often as possible, ideally at least 2-3 times each day. The most greasy, non-perfumed moisturiser tolerated is best. This is the most important part of your skin care. Smooth it on in the direction of hair growth. Do not put your fingers back and forth into the pot of moisturiser, as it may become contaminated and be a source of infection. It is best to remove an adequate amount to cover the skin with a spoon or spatula and put this on a saucer or piece of kitchen roll.
- Wash with a moisturiser instead of soap (known as a soap substitute), and avoid soap, bubble baths, shower gels and detergents.

- Wear non-powdered non-rubber gloves (e.g vinyl gloves) to protect your hands and avoid contact with irritants, such as when doing housework.
- Rinse well after swimming and apply plenty of your moisturiser after drying. Make sure that the shower at the swimming pool contains fresh water and not chlorinated water from the swimming pool.
- Wear comfortable clothes made of materials such as cotton and avoid wearing wool next to your skin.
- Try to resist the temptation to scratch. It may relieve your itch briefly, but it will make your skin itchier in the long term. Smooth a moisturiser onto itchy skin.
- Avoid close contact with anyone who has an active cold sore as patients with eczema are at risk of getting a widespread cold sore infection.
- Do not keep pets to which there is an obvious allergy.
- Keep cool. Overheating can make eczema itch more.
- Treat eczema early - the more severe it becomes, the more difficult it is to control.
- Wash clothes with a non-biological washing powder and use a double rinse cycle to remove detergent residues from the clothing.

Where can I get more information about atopic eczema?

Links to patient support groups:

National Eczema Society
Hill House
Highgate Hill
London, N19 5NA
Tel: 0800 089 1122
Email: helpline@eczema.org
Web: www.eczema.org

NICE Guidance
Web: <https://cks.nice.org.uk/eczema-atopic>

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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