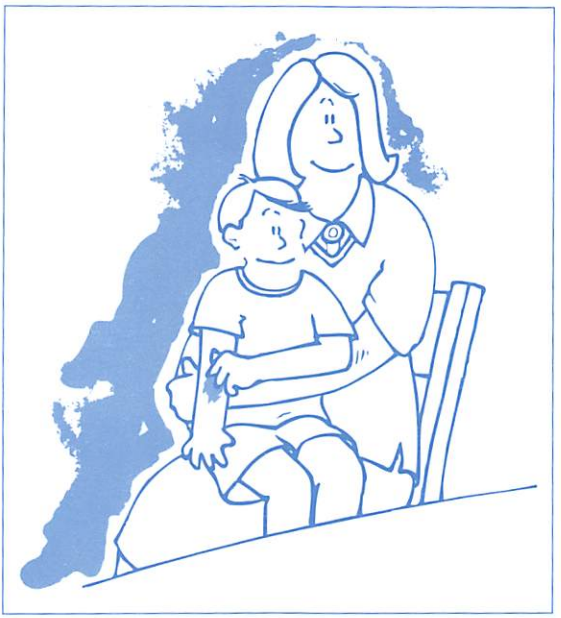
Coping with eczema



An information booklet for parents

4th edition

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Preface

The purpose of this booklet is to answer those questions which are most commonly asked by parents of children with eczema. I hope that this information is useful and that these suggestions will benefit your child. Regular daily skin care is essential. It is important to remember that the long-term outlook is usually excellent.

I would like to acknowledge the helpful advice of my colleagues and the Dermatology Nursing Staff at Great Ormond Street Hospital.

JH

by
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What is eczema?

The word eczema comes from the ancient Greek meaning "to boil over".

It is used to describe an inflammation of the skin, which causes redness and intense itching. The most common type of eczema in children is atopic eczema, which may be associated with asthma or hay fever. The terms 'atopic eczema' and 'atopic dermatitis' mean the same thing.

Why does my child have eczema?

Atopic eczema is essentially a genetic disorder.

Often there is someone else in the family with eczema, asthma or hay fever, but this is not always the case.

There are many external factors which may influence eczema on a day to day basis. These are discussed in more detail later on.

Will my child grow out of eczema?

Yes, for the majority of children.

Eczema will gradually improve as your child gets older. The age at which eczema ceases to be a problem varies, but many show a significant improvement by the age of 5 years and most will be clear by the time they are teenagers. Only a few continue to have troublesome eczema in adult life.

Is eczema due to an allergy?

No, eczema is not caused by one specific allergy.

Children with eczema have a hypersensitive skin, which reacts to many different environmental allergens, such as grass pollen, house dust mite, dander from cats and dogs, and feathers. Young children may react to certain foods, in particular eggs, cows' milk, peanuts and fish. The pattern of allergic reactions from one child to another is not consistent and may alter as the child gets older.

Will allergy tests help?

For most cases, routine allergy testing is not necessary.

Children with eczema usually demonstrate multiple positive results on skin and blood tests, which does not alter the basic approach to treatment.

However, for the child with severe troublesome eczema which does not respond to first line treatment, allergy tests should be considered in an attempt to identify any factors that could be making the eczema worse. Often there is a clue from the history.

GUIDELINES TO TREATMENT

There is no single medication which will cure eczema. However, for most children, it is possible to treat eczema effectively and keep it in check, using a simple regime of treatment, as follows:

EMOLLIENTS

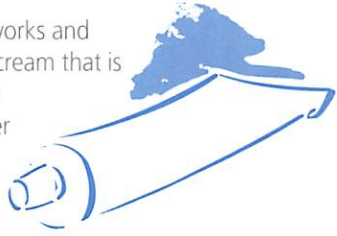
These are products which moisturise and soften the skin. They restore the elasticity and suppleness of the skin and help to reduce the itching and scratching. Emollients are safe and should be used frequently, as first-line treatment. These should include:

- a bath oil, with regular once or twice daily baths
- a soap substitute, such as aqueous cream
- a moisturiser applied liberally to all areas of dry skin, at least twice daily and if possible more frequently.

AN ANTI-INFLAMMATORY CREAM OR OINTMENT

Topical steroids

The traditional treatment for eczema is an appropriate topical steroid which, used correctly, is safe and effective. This should be applied initially daily (either once or twice a day as directed by your doctor) specifically to the areas of inflammation, that is the red or pink areas, immediately after a bath, and not at the same time as the moisturiser. The weakest steroid necessary to control the eczema should be used. A mild topical steroid, such as 1% hydrocortisone, is usually sufficient for most children. Occasionally, a stronger steroid cream may be required for the treatment of more severe eczema.



A topical steroid preparation is only of value if it works and helps improve the eczema. The ongoing use of a cream that is too weak and ineffective must be avoided. In that situation, it is better to use a cream that is stronger so as to clear the eczema rapidly, and enable the eczema to be controlled on less frequent applications, ideally once or twice weekly.

Topical tacrolimus or pimecrolimus

These new preparations are called "topical immunomodulators" and are effective treatments for eczema. They do not cause skin thinning like topical steroids. Clinical trials have shown them to be safe in the short to medium term. At this stage these products should be used as a replacement for topical steroids in those children requiring daily stronger topical steroids to keep their eczema under control. Also, they have a clear advantage over topical steroids for the more delicate areas of skin: such as the face, especially around the eyes; the neck; the elbow and knee creases and the groin area. It is likely that these and future similar preparations will eventually replace most steroid treatment, but as they have only recently been introduced caution should prevail in relation to possible longterm side effects.

AN ANTIHISTAMINE MEDICINE

Given just before going to bed, this will help the child settle and have a more comfortable night's sleep.

OTHER TREATMENTS

The following may need to be considered for difficult eczema, which has not responded to the more simple measures:

- wet or paste medicated bandages
- dietary restriction, if there is any suggestion of food allergy, which must be under the supervision of a doctor or preferably a dietician
- admission to hospital for treatment under supervision

If these measures fail, for those FEW children with VERY SEVERE eczema, there are other approaches to treatment which would need to be given careful consideration:

- oral steroids (prednisolone or beclomethasone)
- cyclosporin
- azathioprine

It must be stressed that these are strong drugs with potentially serious side-effects and would only be considered when all else had failed. They should only be prescribed under the supervision of a Consultant Dermatologist or Paediatrician.

Are the bacteria that live on eczema important?

Yes.

Eczema seems to attract certain bacteria, in particular Staphylococcus aureus, which are found on the surface of the skin in the majority of children with eczema. The presence of Staphylococcus aureus on the skin does not necessarily indicate infection. It has been suggested that children with eczema may be "allergic" to some of these bacteria and that this may aggravate the condition. This is one important reason for frequent bathing.

Infection

Children with eczema are susceptible to skin infections, because of scratching and splitting of the skin. An acute flare-up of eczema is often associated with secondary bacterial infection and usually requires treatment with an antibiotic medicine. For localised areas of infection an antibiotic cream may be sufficient.

For children with difficult eczema and recurrent infections the use of an antiseptic oil-based bath additive can be helpful.

Children with eczema are especially susceptible to cold sores (caused by herpes simplex virus). Contact with the virus may result in a widespread infection, which may make the child feel very unwell. If this is suspected, you must contact your doctor as soon as possible. It is important to keep children with eczema away from anyone with an active cold sore.

Children with eczema are also susceptible to warts and mollusca contagiosa (water warts). These are often numerous and persistent - it may take 6 months to one year, and sometimes even longer - but eventually they do disappear - with or without treatment!

What is the difference between an ointment and a cream?

An ointment is greasy (like vaseline) and is appropriate for "dry"scaly areas of eczema.

A cream contains water and is much thinner in consistency (like aqueous cream). Creams are more suitable for "wet" weeping areas of eczema.

Are steroid ointments dangerous?

Essentially no, if used correctly.

Topical steroid preparations vary in their strength. The use of a mild or moderately strong topical steroid is generally safe, as detailed in the section on "Guidelines to Treatment".

Parents are often anxious about the use of topical steroids, but these worries stem from the misuse of the very strong steroids, which may cause problems, such as thinning of the skin, and should not be used to routinely treat children.

The long-term use of a mild or moderate topical steroid, under regular medical supervision, is essentially safe. On the face of the very young, topical steroids should be used with caution and, when necessary, only for a limited period of time.

How much steroid ointment should I put on the skin?

Cover the eczema (the red and pink areas of skin) evenly with a clearly visible fine film of ointment such that the surface of the skin "glistens in the light".

For children with dark skin, the eczema is less well defined and seen as an area of increased pigmentation with the typical skin changes of scaling, crusting and often thickening.

The words "use sparingly" on tubes of steroid creams or ointments worry parents and can lead to under-usage. It is important to use steroid preparations "appropriately".

Do not stop using a steroid cream or ointment abruptly, as this will likely cause a rebound flare of eczema. The quantity required will depend upon the extent of the eczema, but should reduce rapidly as the eczema improves.

The application of topical tacrolimus or pimecrolimus is exactly the same.

Is it harmful to have a bath?

No, in fact just the opposite...frequent baths are the rule.

At least once daily, twice daily is even better.

Bathing keeps the skin clean and free from crusts and scales, which helps to prevent infection.

It is necessary to add a suitable bath oil to the bath water, to prevent the skin from drying out.

Soaking in the water for 10 minutes will help the skin considerably. Avoid soaking in the bath for too long as this may be detrimental.

For babies it is best to use aqueous cream to cleanse the skin. This is well tolerated and easy to use. It is important not to touch the eczema and then put your hand in the tub of cream, as this will risk introducing contamination. Use a tablespoon to take out a measured quantity for the bath. The aqueous cream should be used to clean the skin with a soft cloth or flannel, whilst the child is in the bath. Ideally these cloths should be freshly hot washed for each bath. Avoid using a sponge as these can harbour bacteria.

When washing the skin this must include all the hidden skin folds, in particular the neck, under the arms and nappy area.

For small babies aqueous cream can be used on the scalp as a shampoo. For older children, avoid using a proprietary shampoo in the bath, as these can have an irritant effect on the skin if it gets into the bath water. The hair should be washed separately, either in the bath after removing the bath water, or preferably leaning over the bath and using a shower attachment.

There are a number of alternative soaps, which include oily shower gels; some contain antiseptic agents, some are skin pH balanced and some contain a moisturising cream.

The temperature of the bath water should be cool and the bathroom warm. Avoid any sudden changes in temperature which may make the skin itch.

After the bath the skin should be soft and slightly greasy.

Dry the skin by patting gently with a soft towel.

Bathing is better than showering, but if only a shower is possible, then use an appropriate emollient shower gel and rinse well before drying.

If you have been prescribed topical tacrolimus or pimecrolimus the bathing instructions are the same.

Is it helpful to have a water softener?

Hard water can irritate the skin, but this can be minimized by the addition of a bath oil. A water softener may help but whether it is worth the cost of installation is debatable. It is more relevant to those families who live in a hard water area.

Are antihistamines helpful?

Yes.

Antihistamines may be helpful for the treatment of associated allergies. They also act as a sedative and are useful at night to help sleeping. The bedtime dose should be given at least half an hour before the child goes to bed, ideally before 7pm so that they are not drowsy the next morning.

Non-sedative antihistamines are sometimes prescribed during the day. These are especially useful for those children who suffer with hay fever during the summer months.

Antihistamine medicines are not addictive and there is no evidence to suggest that long-term use is dangerous.

Antihistamine creams should not be used on eczema as they may cause a contact allergic reaction.

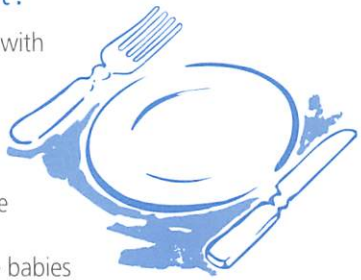
Is it better to breast feed?

Yes, if possible.

Although there is no evidence that breast feeding will prevent your child developing eczema, breast feeding does seem to have a protective effect in relation to severity during the early months of life and should therefore be encouraged.

Sometimes however, severe eczema can occur in babies who are being breast fed. This can be complicated by loose stools and failure to gain weight satisfactorily and may be related to the mother's diet. This poses a difficult problem because suggesting that mother restricts her own diet usually doesn't help the situation and may reduce the nutritional value of the breast milk. It is important that mother has a well balanced diet with no excess of "high risk foods" (see later section); but, if the eczema continues to be a significant problem, it may be necessary to introduce a hydrolysate milk formula (see next section) and gradually reduce and stop breast feeding.

Should my child be on a diet?



It is the generally accepted view that children with eczema should not automatically be put on a special diet. Many parents are concerned that eczema is caused by something the child is eating; however, ROUTINE exclusion diets are usually unhelpful. Often parents have already tried soya milk. This should not be encouraged. A significant proportion of those babies who are allergic to cows' milk are also allergic to soya milk.

Sheep's and goats' milk are not suitable for the child under one as they are nutritionally inadequate. In addition, children who are allergic to cows' milk are likely to also be allergic to sheep's and goats' milk.

It is essential to seek medical advice.

Diets should be reserved for the very young with severe eczema non-responsive to the standard treatment regime and for those who have a clear history of specific food intolerance. The diets employed are usually avoidance of dairy products, substituting a hydrolysate milk formula for cows' milk, such as: Pregestimil, Nutramigen or Pepti-junior. In some situations it may be necessary to use an elemental feed called Neocate.

The diet should be for a trial period of 2 months and supervised by a dietician to ensure that the child is not at risk of nutritional deficiency.

If a child needs to be on a diet for a prolonged period, then reintroduction of cows' milk, should be attempted at one year. This should be done with caution. For those children who have not had an obvious reaction to cows' milk and for those who have had some dairy products, a small quantity of formula milk (5ml) should be given initially and the amount slowly increased over a period of 2-4 weeks. Thereafter other dairy products can slowly be re-introduced.

For children who have had an allergic reaction to cows' milk then a formal milk challenge test needs to be performed in hospital under medical supervision. If there is a positive reaction to cows' milk (on skin testing or when taking a small quantity by mouth), then the diet should be continued and the child subsequently re-evaluated annually.

Most children with eczema "grow out" of their cows' milk allergy in the first 3 years. Other allergies, such as eggs and peanuts, can continue as a lifelong problem.

What about weaning?

It is important not to introduce solids before 4 months of age.

Each item of food should initially be given one at a time, in small quantities and gradually increased, slowly varying the diet. The relative risk of an allergic reaction is shown in the Table overleaf. Allergic reactions to foods occur only in a small proportion of children with eczema and the majority will be able to tolerate a normal diet.

As a matter of routine, for children with eczema (even without any history of food allergy), eggs (fried, boiled or scrambled) should not be introduced until after the age of one year.

Allergic potential

Foods (ranked in order)

Rarely cause a problem

baby rice,

puréed potato, mashed carrots, swedes, turnips, green beans, parsnips, cabbage, broccoli, cauliflower,

puréed apple, pear, banana.

oats, wheat (rusks, biscuits, cereals)

chicken, turkey,

beef, lamb, pork,

fish,

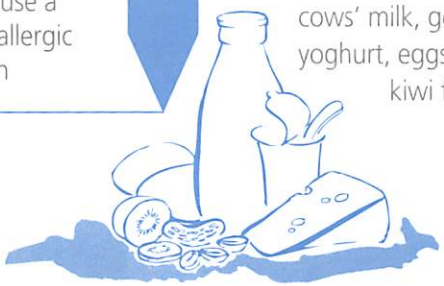
tomatoes, citrus fruit,

strawberries, raspberries,

marmite, honey.

May cause a severe allergic reaction

cows' milk, goats' milk, cheese, yoghurt, eggs, shellfish, kiwi fruit, peanuts.



Eczema on holiday

Eczema usually improves in the sun, especially on holiday.

It is important that children with eczema "keep cool" in the hot weather and wear loose cotton clothes.

It is sometimes helpful for the child to wear a loose wet T-shirt in hot weather to cool down the skin and relieve the itching.

It is advisable to protect the skin from burning, using a suitable high factor sun-screen product. There are now swimwear products which are almost 100% sun-protective.

Small children enjoy playing in a paddling pool (with sea water) on the beach – ideally in the shade under an umbrella – and this can be highly beneficial for eczema. A paddling pool can be taken flat-packed in the suitcase and inflated on the beach.

Children with eczema are prone to insect bite reactions and, depending on where you travel, you may wish to use an insect repellent applied to the cuffs, socks and shoes – not directly on the skin as it may cause an irritant reaction.

Swimming

Swimming in the sea is excellent for eczema.

In a pool, the chlorine may irritate the skin. In an attempt to prevent this, apply a thick moisturiser, such as vaseline (50/50 mixture of white soft paraffin and liquid paraffin) beforehand, and afterwards soak in a bath with an oily bath additive.

Taking babies with severe eczema into a swimming pool is not a good idea.

Children over 4 years should be actively encouraged to learn to swim and participate in all sporting activities.

Immunizations

Your baby should receive all the routine immunizations, like any other baby. There is no cause for concern.

In children with eczema in whom there is a history of egg allergy, the MMR and measles vaccines are safe, but if there is serious concern then these injections should be administered under medical supervision at the local hospital.

Occasionally any of the immunizations may aggravate eczema for a few days afterwards, but this is not usually a problem.

What things make eczema worse?

Eczema is influenced by many environmental factors, which are important to take into account in the day to day management of eczema.

Aggravating factors include:

Synthetic or woollen fabrics

Children should be dressed in loose cotton clothes. Be careful when cuddling the child that your own clothing does not irritate the skin.

Biological detergents and some fabric conditioners

Use non-biological products.

Irritant foods

Foods such as citrus fruits and tomatoes can cause eczema around the mouth. This is often made worse by lip-licking and dribbling. It is helpful to apply a protective barrier of vaseline around the mouth, 2 to 3 times daily and prior to meals.

Cigarette smoke

In an enclosed room, fumes will irritate the skin. It is best to ban smoking within the home!

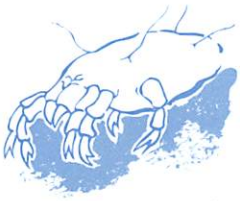
Cats and dogs

Virtually all furry or feathered pets will produce an allergic reaction in a child with eczema.

Cats and dogs leave their dander everywhere and so the child is always at risk, even if the animal itself is not around. Avoid cats and dogs in the house and if necessary get a goldfish!

House dust mites

These are microscopic creatures that are found in large numbers in old mattresses and within the dust on the carpets and other surfaces. When scratched into the skin they will worsen eczema and, if inhaled, will provoke asthma. Simple measures to reduce the risk of house dust mite allergy should include: a newish mattress, regular use of an appropriate vacuum cleaner, damp wipe surfaces and keep furnishings simple to avoid dust traps. Wooden or lino flooring is preferable to carpeting. Another source is old soft furry toys, which should be kept in a cupboard and washed regularly.



Special mattress covers are available to protect against exposure to house dust mites. These are particularly useful for children when they are away from home, for example on holiday, staying with friends or family or at boarding school, when the nature and age of the mattress are unknown.

Grass pollen

Most children with eczema are allergic to grass pollen. This is a problem during the summer months. It is not advisable for children with eczema to be present in the garden when the lawn is being mowed and ideally this should be done in the evening when the child has gone to bed. If the bedroom window faces the garden make sure it is shut. Also keep away from fresh cut grass in the park.

Other practical advice

In addition to the above, nails should be kept short and excessive heat should be avoided. Bed linen should be cotton. Pillows and duvets should be feather-free and covered in cotton. Good general ventilation in the house is important. Damp will encourage the growth of fungi and moulds, which may cause allergic reactions.

School can present problems and it is important to liaise closely with the teacher. It is best if the child is seated in the centre of the class, away from the door, windows and radiators. They must avoid contact with any guinea pigs, hamsters or rabbits in the school. They should take their own special soap and moisturising cream. Most children will apply their own creams at break and lunchtime, but this must be supervised. If properly informed, most schools will co-operate and help in this situation. It is important that children do not miss school because of their eczema.

What is the risk of my child developing asthma?

There is a risk. Children with eczema have a three-fold increased risk of developing asthma compared to other children. This should not cause undue anxiety. In most cases the asthma is mild and easily controlled with appropriate treatment. It is only in the minority that asthma is troublesome.

What is the risk of my child having a severe allergic reaction (anaphylaxis)?

Fortunately this problem is very rare. In exceptional cases a severe and potentially dangerous allergic reaction can be caused by an insect bite (e.g. a wasp or bee sting), a particular food (e.g. peanuts, shellfish, eggs) or a medicine (e.g. penicillin). If a child is at risk parents should have a pre-loaded adrenaline injection at home for emergency use.
This should be discussed with your doctor.

What is the risk of my next child having eczema?

If you have one affected child then the risk of your next child having eczema is of the order of 25%. If both parents are affected the risk rises to 40%.
It is important to remember that the severity of eczema can vary within the same family, so that even if the next child is affected it may well be much less of a problem.

Are alternative or complementary treatments helpful?

HOMEOPATHY

Many parents have already tried homeopathy by the time I first see the child. There is no convincing evidence that homeopathy benefits eczema. However, it is safe and for that reason I have no real objections, apart from the fact that it usually involves stopping conventional treatment and this can result in a deterioration of the eczema.

TRADITIONAL CHINESE MEDICINE (TCM)

There has been a recent interest in the use of TCM for the treatment of eczema.The treatment involves taking a "tea" prepared from 10 or so plants. These medicines can improve eczema, but there is concern about possible side effects, in particular adverse effects on the liver. In my opinion, this type of treatment should be restricted to those children with severe eczema that does not respond to conventional treatment and should be under medical supervision. With future research, it is possible that from these plants new and better standardised treatments for eczema will be developed.

PSYCHOTHERAPY

In eczema, itching is highly susceptible to psychological influences. Relaxation techniques can be used to help eczema sufferers. The aim of treatment is to distract the mind from the skin.

ACUPUNCTURE

It is an integral part of Chinese medicine, but its role in the treatment of eczema is uncertain.

Is there a family support group?

Yes.

Further information and help can be obtained from:

National Eczema Society,
Hill House, Highgate Hill, London N19 5NA

www. eczema.org

Recommended daily skin care regime

Bath/wash containing an oily bath additive Application of treatment cream (usually a topical steroid)	early am
Application of moisturiser	mid-am
Application of moisturiser	mid-pm
Bath containing an oily bath additive Application of treatment cream (usually a topical steroid)	evening
Antihistamine medicine	30 mins before going to bed

Eczema Treatment Chart

Name of medication	Instructions on use	Date started

Keep this chart up-to-date and remember to take it with you when you visit the doctor

Eczema Treatment Chart

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