Eczema - Childhood - Full Clinical Guideline - DERBY

Reference no.:CG-DERM/2018/005

1. Introduction

Eczema commonly affects flexural sites, in infants and young children eczema may affect the face or outer limbs. The disease tends to relapse and remit but up to two thirds of children will have cleared by the age of ten. The severity of eczema can vary and optimum treatments are required to reduce the potential negative impact on quality of life for children and their parents or carers.

Patient education is an integral part of managing patients with eczema. Emollients need to be used all the time. They will reduce the amount of steroid required. However they will not be effective in treating acute exacerbations. **Eczema is a chronic disease. Like asthma, steroid is critical in the management. Topical steroids should be available on repeat prescription in sufficient quantities.**

2. Aim and Purpose

These guidelines are aimed at General Practitioners and other health professionals managing patients under 12 years old with atopic eczema.

3. Definitions, Keywords

Atopic eczema
Atopic dermatitis

4. Management of Atopic Eczema

General Measures

- Avoid soaps, detergents and bubble bath. Instead use soap substitutes or emollients to wash with.
- Use cotton clothing next to skin whenever possible.
- Trim fingernails to reduce the damage of scratching.
- Consider contacting the National Eczema Society. Tel: 0870 241 3604 or website: www.eczema.org

Education

Information on the different treatments should be given in verbal and written forms (see appendix 1). The British Association of Dermatologists has developed video links aimed at patients on the use of steroids (https://www.youtube.com/watch?v=tpethgKQB3U)
and emollients (https://www.youtube.com/watch?v=dQaihGo-6gc); these can be given to patients.

Clinicians must address the following factors in each consultation. Any barriers to adherence should be fully explored. How to recognise the symptoms and signs of bacterial infection

- How to recognise and manage flares of atopic eczema
- How much of the treatment to use

- How to apply and how often to apply prescribed treatments, including emollients (250-500g/week), steroids, calcineurin inhibitors and medicated dressings
- When and how to step treatment up or down

Eczema Severity

Management should be titrated according to the severity of the child's eczema (see table 1). Eczema can be classified as mild, moderate and severe.

Mild: areas of dry skin, infrequent itching (with or without small areas of redness)

Moderate: areas of dry skin, frequent itching, redness (with or without excoriation and localised skin thickening)

Severe: widespread areas of dry skin, incessant itching, redness (with or without excoriation, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation).

Stepped Approach to Management

Healthcare practitioners should use a stepped approach to managing atopic eczema in children, which means tailoring the treatment step to the severity of the atopic eczema. Emollients should form the basis of atopic eczema management and should always be used, even when the atopic eczema is clear. Management can then be stepped up or down, according to the severity of symptoms, by adding or withdrawing treatments (Table 1).

Table 1: Summary of stepwise treatment of eczema according to severity of disease

Mild atopic eczema	**Moderate atopic eczema**	**Severe atopic eczema**
Emollients	Emollients	Emollients
Mild-potency topical corticosteroids	Moderate-potency topical corticosteroids	Potent topical corticosteroids
	Topical calcineurin inhibitors	Topical calcineurin inhibitors
	Bandages	Bandages
		Phototherapy
		Systemic therapy

Emollients

Use **at least** twice daily to hydrate the skin and reduce inflammation. Greasy emollients e.g. Epaderm ointment are more effective than creams, but only work if they are cosmetically acceptable. Emollients can be used as soap substitutes. **Usually 250- 500g of emollients are used weekly and sufficient amounts should be prescribed by clinicians**.

Aqueous cream can be used as a soap substitute but should not be used as an emollient.

Paraffin-containing emollient products can come into 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. Patients/parents are advised to avoid naked flames completely, including smoking cigarettes and being near people who are smoking or using naked flames. It is also advisable to wash clothing and bed linen regularly (daily is preferable).

Topical steroid regimes for flares and maintenance

Clinician's and patients tend to be cautious over the use of topical steroids due to concerns of skin thinning, this may lead to under usage. The varied potency of steroids is summarised in Table 2.

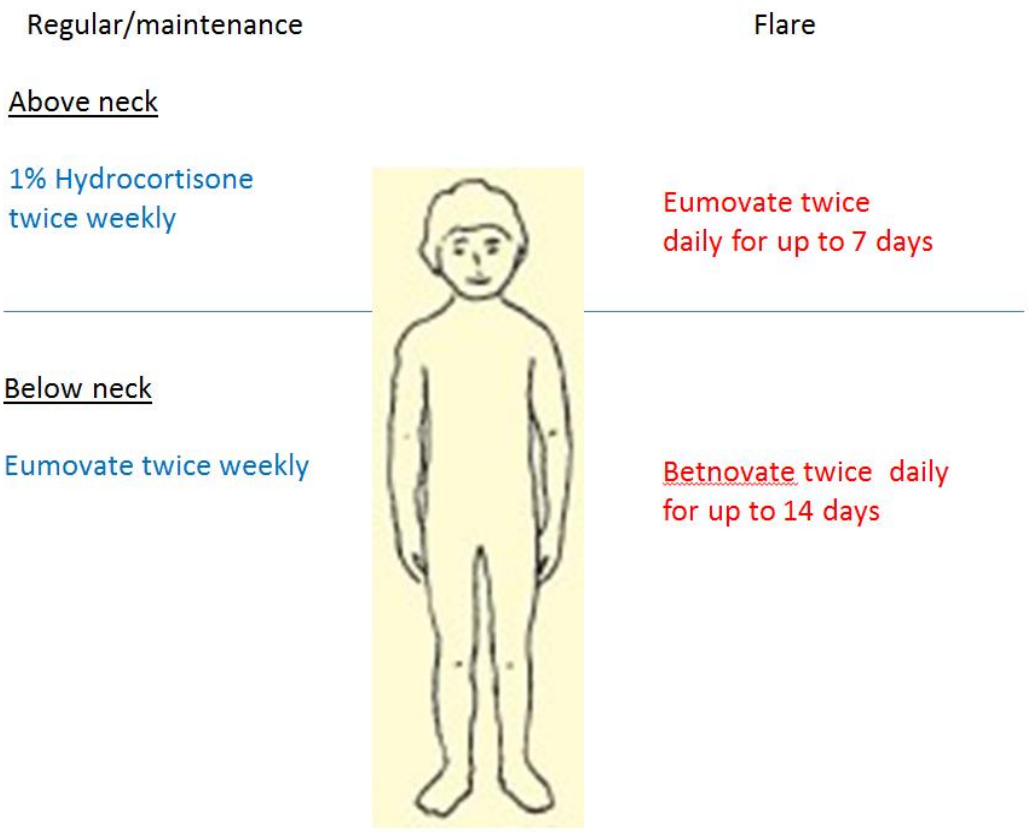
Table 2: The different potency of topical steroids used in eczema, a full summary can be found in the BNF

Mild	Moderate	Potent
Hydrocortisone 1–2.5% Synalar 1 in 10 dilution *(fluocinolone acetonide 0.0025%)*	Betnovate-RD *(Betamethasone 0.025%)* Eumovate (*Clobetasone butyrate 0.05%)* Synalar 1 in 4 dilution (*fluocinolone acetonide* 0.00625%)	Elocon *(Mometasone furoate)* Betnovate *(Betamethasone valerate 0.1%)* Synalar (*fluocinolone acetonide* 0.025%)

Antibiotic/steroid combinations such as Synalar- C (Fluocinolone, Clioquinol) and Fucibet (Fusidic acid 2% and Betamethasone 0.1%) should only be used for short periods (2 weeks).

Clinicians must educate patients on how much steroid they should use, the finger tip unit (FTU) is a useful guide. FTU's vary acording to patient age and area of body. Please see appendix 1 for a full summary of FTU. The suggested steroid regime for flares and maintenece is summarised in figure 1.

Figure 1: Suggested topical steroid regime for the management of atopic eczema. Eczema is a chronic disease and ongoing prescriptions for topical steroids almost always will be required. Ointments are generally more effective than creams.

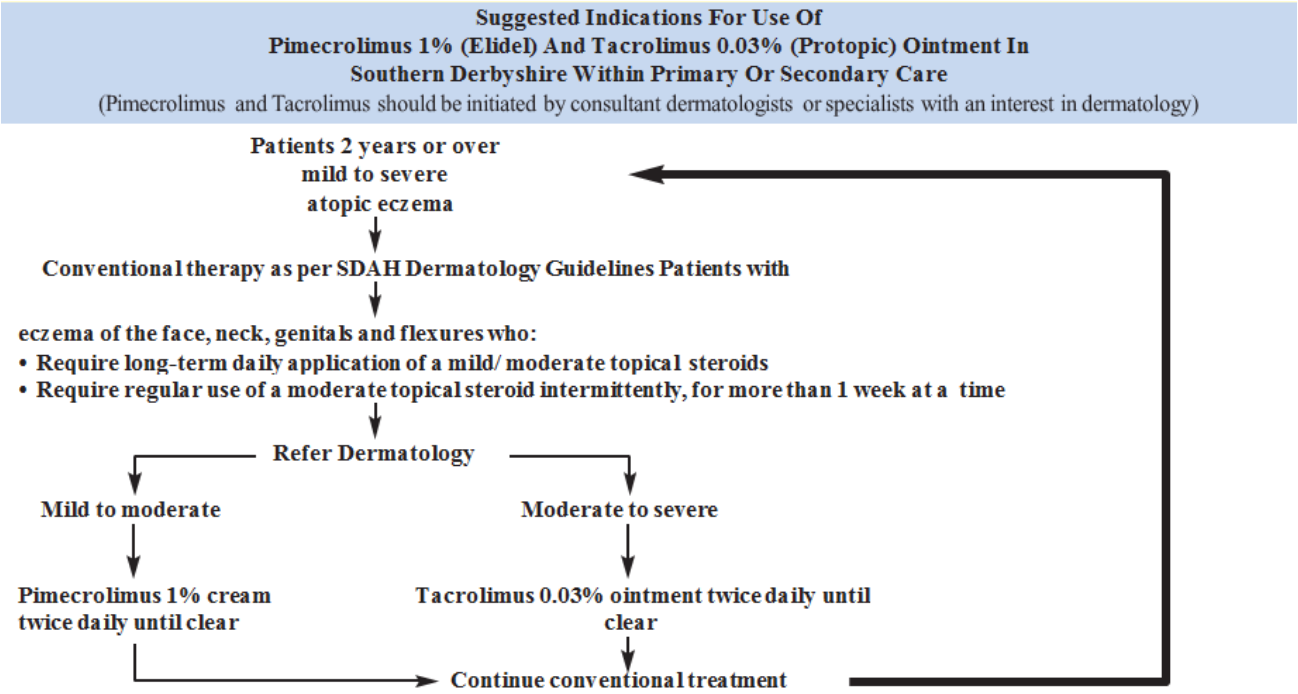


Topical Calcineurin Inhibitors

Pimecrolimus 1% (Elidel) cream and Tacrolimus 0.03% (Protopic) ointment should only be initiated by a specialist in dermatology in accordance with the shared care DPAG guidelines. The indications for topical calcineurin inhibitors and regimes used are summarised in figure 2.

Calcineurin inhibitors should be used twice daily until skin clear and repeat for flares. It should be used on a stop /start basis and not continuously.

Figure 2: Suggested indications for use of topical calcineurin inhibitors in the community.



Bandaging

Wet wrap or ichthopaste bandages can be useful in widespread disease or lichenified eczema. As directed by dermatology team.

Infection

In suspected infection a swab prior to antibiotics is recommended.

Exacerbations are commonly due to Staphylococcal infection and should be treated with oral Flucloxacillin or Erythromycin.

If herpes simplex infection is suspected refer urgent same day to Children's Emergency Department (CED).

Antihistamines

Sedating antihistamines e.g. Chlorpheniramine or Trimeprazine may be of value for short periods at night.

Allergy Testing and Dietary Advice

In general, dietary manipulation is best avoided unless patients have poorly controlled disease, despite optimal medical treatment and if it is undertaken, is best done under hospital/dietician supervision. Allergy testing is not carried out routinely and is not considered to be very useful except in some cases of severe disease.

The most common food allergies for infants and young children with atopic eczema are to cows' milk, hens' eggs and nuts. Referral for investigation of suspected food allergies should be directed to a paediatric allergist according to local guidelines.

Hospital Treatments

In patient admission and 2nd line therapy e.g. UVB, PUVA, Ciclosporin are occasionally used but all these 2nd line treatments have side effects.

Referral may be considered in the circumstances below:

- If the diagnosis is in doubt.
- If the disease is severe.
- Failure to respond to a reasonable trial of the above measures.
- Concern due to social problems e.g. school absenteeism, sleeplessness.
- Use of excessive amounts of topical steroids.
- Infection with herpes simplex virus (eczema herpeticum), refer to CED same day.
- Recurrent infections
- Need for instruction on bandaging.
- Contact dermatitis is suspected (uncommon in childhood)
- Where significant dietary manipulation for skin is contemplated.
- If patient meets criteria for topical calcineurin inhibitors (see Figure 2).

Key Standards in Referral Letter

- Treatment given in past and last consultation
- Expectation from referral - i.e diagnosis, reassurance, treatment or advice.

5. References

https://www.nice.org.uk/guidance/qs44

https://bnf.nice.org.uk/treatment-summary/topical-corticosteroids.html

http://www.bad.org.uk/shared/get-file.ashx?id=69&itemtype=document

https://www.youtube.com/watch?v=tpethgKQB3U

https://www.youtube.com/watch?v=dQaihGo-6gc

6. Documentation Controls

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Appendix 1: Patient information leaflet

Treating atopic eczema in children

What is Atopic Eczema?

Eczema is a very common skin condition. The skin becomes red, dry and very itchy. The commonest type of eczema in children is atopic eczema. This type of eczema affects about 20% of children under 5 years of age.

In babies, atopic eczema usually starts on the face. As the child becomes older, the front of the elbows and back of the knees are often affected. Sometimes it can be more widespread, or have a different pattern.

What is Atopy?

Atopy is group of conditions including eczema, asthma and hay fever. These often run in families.

What causes Atopic Eczema?

We believe atopic eczema is caused by a combination of 'genetic' and 'environmental' factors. These are not well understood. Atopic eczema has become much more common in Britain in the last 40 years.

Does changing diet or allergy testing help?

We have not found changing diet or allergy testing helpful.

Will my child get better?

Most children grow out of atopic eczema.

How do I treat my child's atopic eczema?

We do not have a cure for atopic eczema. We are good at controlling eczema using a combination of moisturisers and steroid creams.

Moisturisers are used all the time. Steroids are used in short bursts when the eczema becomes red and itchy.

Moisturisers

Children with eczema have a dry, red skin. Even when the skin isn't red, the dryness remains. It is thought this dryness is an important part of why children have eczema. Moisturisers (emollients) treat the dryness and also relieve itching.

When eczema flares up, steroid creams are also needed.

How often should a moisturiser be used?

Moisturiser should be applied at least twice a day. It can be used more often if the skin becomes dry or starts to itch.

Unlike steroid creams, which are used for a week or two at a time, moisturisers should be used all the time
Often it helps if you talk to your child's teacher, so some moisturiser can be left at school for your child to put on.

Which moisturiser should my child use?

The moisturiser your GP prescribes for eczema is different from ordinary moisturiser.

Some moisturisers are thin, some thick. Thick moisturisers are good for children with more severe eczema; they need to be used less often than thin moisturisers.

Sometimes your child might not like a particular moisturiser, or it might irritate. Ask your GP for a different moisturiser.

How much moisturiser will my child need?

Moisturiser needs to be used thickly. Children with eczema need at least 250g a week.

You should make sure you have put in a repeat prescription with your GP before the moisturiser runs out.

How to use the moisturiser

Place generous spots of cream evenly all over your child's skin, including the face. Smooth the cream into the skin in a downward direction; this stops pores being blocked and spots forming. The skin should be greasy afterwards.

If the moisturiser is in a tub, it is important to spoon the moisturiser you will need for an application into a separate dish. If you don't do this, bacteria normally found on your child's skin can be transferred to the tub, and their level can then increase to a point where they might cause your child's eczema to become infected.

Baths

The child should be bathed daily or every other day. This gets rid of old skin and moisturiser.

Don't use soap, shower gel, or bubble-bath; they make the skin very dry. Use the moisturiser like a liquid soap. If you need to use a shampoo, use an unscented baby shampoo. Pat the child's skin dry and re-apply the moisturiser.

Steroid creams

What are steroid creams?

Steroid creams are a type of medicine you put on eczema when it flares (becomes red, sore and weepy). They work by reducing 'inflammation' in the skin.

What types of steroid creams are there?

Steroid creams are usually divided according to strength:

- Mild
- Moderate
- Potent
- Super potent

- Hydrocortisone
- Eumavate, Betnovate RD, Synalar 1:4 etc.
- Betnovate, Elocon etc
- Dermovate

These are just some of the steroid creams available. You can ask your GP what strength the steroid is that they have prescribed.

Steroids are also divided into creams and ointments. Creams are white and rub in well; ointments are greasy and a little messy. Ointments work better.

How do I use steroid creams?
Steroid creams are usually used when the eczema flares. They are applied only to the red sore areas.

Steroids may be used once or twice a day and are usually applied 30 minutes before or after applying the moisturiser.

The weakest steroid that will settle the eczema is usually chosen. If the eczema is severe, a stronger steroid may be needed. A mild steroid, such has hydrocortisone, is usually chosen for the face.

How much steroid should I use?
A common reason for eczema not getting better is that not enough steroid cream has been used.

Imagine squeezing a line of cream along the end of your index finger. This is called a fingertip unit (FTU).

A fingertip unit is enough steroid cream to treat an area of skin the size of the front of two adult hands.

Using this measure, you can work out how much steroid is needed.

For a child aged 3 - 6 months

- Entire face and neck - 1 FTU
- An entire arm and hand - 1 FTU
- An entire leg and foot - 1.5 FTU
- The entire front of chest and abdomen - 1 FTU
- The entire back including buttocks - 1.5 FTU

For a child aged 1 - 2 years

- Entire face and neck - 1.5 FTU
- An entire arm and hand - 1.5 FTU

- An entire leg and foot - 2 FTU
- The entire front of chest and abdomen - 2 FTU
- The entire back including buttocks - 3 FTU

For a child aged 3 - 5 years

- Entire face and neck - 1.5 FTU
- An entire arm and hand - 2 FTU
- An entire leg and foot - 3 FTU
- The entire front of chest and abdomen - 3 FTU
- The entire back including buttocks - 3.5 FTU

For a child aged 6 - 10 years

- Entire face and neck - 2 FTU
- An entire arm and hand - 2.5 FTU
- An entire leg and foot - 4.5 FTU
- The entire front of chest and abdomen - 3.5 FTU
- The entire back including buttocks - 5 FTU

You should make sure you have put in a repeat prescription with your GP before the steroid cream runs out.

How long do I use the steroid for?

- Mild steroids can be used on the face, twice a day, for 5 days at a time.
- On the trunk and limbs, steroids can be used twice a day, for up to 14 days at a time.

What do I do if the eczema flares up?
The course of steroid cream should be repeated.

If the eczema comes back almost as soon as the steroid is stopped, you can treat the troublesome areas in-between flares, twice weekly as a preventative.

Will steroids damage my child's skin?
When steroid creams first became available, they were used in very large amounts, daily, for long periods. This caused thinning of the skin.

We now understand how to use steroids safely. If you follow these instructions, your child will not develop skin thinning.

Resources

Birmingham Children's Hospital has made a film that shows how to treat a child's eczema. This is available on the internet at the address below:
www.bch.nhs.uk/story/information-video-parents-children-eczema

National Eczema Society
www.eczema.org