# MANAGING CHILDHOOD ECZEMA IN PRIMARY CARE: A 10-MINUTE UPDATE

Atopic eczema in children is a common presentation in general practice. Here, Miriam Santer provides a concise update on consultation and management.

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Childhood eczema is very common, affecting over 20% of children aged five or under at some point.[1] Eczema usually starts before the age of four years and in 75% of cases clears by the teenage years, although relapses may occur. Eczema can cause significant distress to the child and family due to sleep disturbance and itch.[2] Primary care professionals can do a great deal to help families gain control of eczema and reduce impact on quality of life by ensuring that they have a good understanding of how to manage the condition and when to re-consult.

## Diagnosis

Atopic eczema is an itchy red skin condition, which is usually straightforward to diagnose. No investigations are required, although it is useful to remember that eczema may initially appear on the face and neck, rather than flexor surfaces in infants and young children. Formal diagnostic criteria are given in the box below.

### DIAGNOSTIC CRITERIA FOR ATOPIC ECZEMA[3]

**Must have itchy skin condition (or report of scratching or rubbing in a child), plus three or more of the following:**

- History of itchiness of flexor surfaces or around the neck (or the cheeks in children <4 years)
- Visible flexural eczema (or eczema affecting the cheeks or forehead and outer limbs in children <4 years)
- History of asthma or hay fever (or history of atopic disease in a first degree relative in children <4 years)
- General dry skin in the past year
- Onset in the first two years of life (not always diagnostic in children <4 years)

## Treatment

The NICE guideline on Atopic Eczema in Children, 2007 (http://guidance.nice.org.uk/CG57)[4] highlights the importance of educating parents/carers about eczema, as the main cause of treatment failure is non-adherence. The guideline also describes a stepped approach to care: emollients represent the first step of the care plan to be used, even when the eczema is clear, to reduce the frequency of flare-ups. If optimal emollient use is insufficient to control the eczema then mild topical corticosteroids should be used for mild eczema, moderate corticosteroids for moderate eczema, etc.

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### Emollients

In general, greasy ointments (such as Hydromol or Epaderm) are preferable for dry skin or at night, while creams (such as Diprobase) are preferable for inflamed areas and during the day. Several different products may be tried before the most suitable is found and child or carer preference is paramount, as the correct emollient is the one that the family will be happy to use.

Leave-on emollients should be prescribed in large quantities (250–500g weekly) and easily available to use at nursery or school. Some emollients and bath oils, most commonly aqueous cream, may irritate the skin, so although they are suitable as a soap substitute, these products should not be used as a leave-on emollient.

### Topical corticosteroids[4]

Carers need specific information on how to step up treatment during a flare-up – initially with increased frequency of emollient application, then, if necessary, commencing mild topical corticosteroids (such as hydrocortisone 1% ointment).

With corticosteroids, once-daily administration, rather than twice-daily, is recommended as a first step. Mild potency only should be used for face and

neck, or moderate for a severe flare for short term use (3-5 days). Very potent topical corticosteroids should only be used in children in secondary care, and potent preparations only used in babies under one year old in specialist care. In all children, potent topical corticosteroids should be used for short periods only (5-7 days). Those requiring longer treatments or frequent usage should receive dermatological advice.

Most families are cautious about using topical corticosteroids, and sometimes 'steroid phobia' can prevent the family from gaining control of the eczema. It is therefore important to reassure carers that topical steroids, used correctly, are safe to use in children.

## General advice

Another important part of education is to make sure families are aware of commonsense approaches such as avoiding soap, shampoo, or bubble bath; keeping nails short; avoiding wool or nylon clothing (advise cotton as this is less irritating) and keeping bedrooms cool.

### KEY CONSIDERATIONS FOR THE CONSULTATION

- Enquire after itch and sleep disturbance, as this does not always correlate well with the appearance of the eczema
- Emphasise the central role of emollient use in preventing flare-ups
- Advise on avoiding soap and shampoo
- Advise that treatment cannot cure but should improve symptoms
- Encourage re-attendance, if necessary, to ensure adequate explanation and education

## Eczema and allergy

Parents are often very keen to seek dietary solutions for eczema. However, allergy rarely has a role, except in infants and young children with moderate or severe eczema that has not been controlled by optimum management, particularly if associated with gastrointestinal symptoms (colic, vomiting, altered bowel habit) or failure to thrive.[4] In such cases, a 6–8 week cow's milk protein exclusion trial may be indicated (although 2–4 weeks can be sufficient), with subsequent re-challenging to assess response. For breastfed babies, this includes excluding dairy from the mother's diet.

NICE recommends a trial of extensively hydrolysed protein formula (such as Nutramigen or Cow & Gate Pepti) or amino acid formula (such as Neocate) in place of cow's milk formula for bottle-fed infants aged under six months with moderate or severe atopic eczema that has not been controlled by optimal treatment with emollients and mild topical corticosteroids. Healthcare professionals should refer children with atopic eczema who follow a cow's milk-free diet for longer than eight weeks for specialist dietary advice.

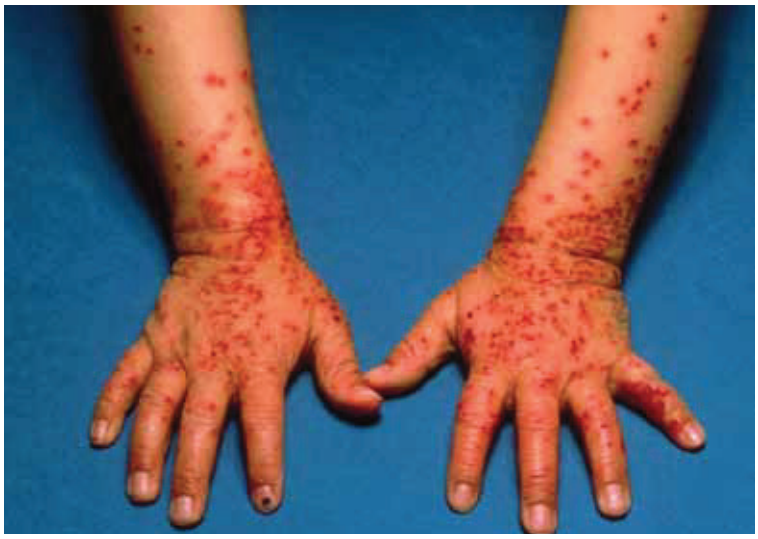

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**Figure 1. Eczema herpeticum affecting the wrist and hands.**

Allergy testing is rarely useful for eczema, as it is a delayed (Type II) reaction.

## Infected eczema

Exudate, crusting or pustules suggests secondary bacterial infection, and topical antibiotics, such as fucidin should be started, with consideration of local resistance. Swabs should be sent if adequate antimicrobial therapy seems ineffective (suggesting an infection other than *Staphylococcus aureus*). Systemic antibiotics, such as flucloxacillin, may be needed in more severe cases or if topical treatment is ineffective.

There is little clarity about the appropriate role of topical and oral antibiotics, and this is currently being investigated in a clinical trial. There is, however, a general consensus among dermatologists and microbiologists that the use of antimicrobials for treatment of eczema in general practice is excessive and that the eczema flare should be treated primarily.

## Communicating with families

In a recent study, Santer et al interviewed families of children with eczema in primary care and found a significant degree of frustration with medical care.[5] Many interviewees felt their child's suffering was not 'taken seriously' and sometimes viewed assurances that their child would grow out of it as a 'fobbing off' (particularly as most people interviewed knew

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someone who hadn't grown out of it). Excessive caution around the use of topical corticosteroids delayed gaining control of eczema in some families, and sometimes this was linked to having received conflicting advice about their safety from different health professionals. Many parents perceived doctors as unhelpful about the aspect of care they were most interested in, i.e. diet and allergy.

Explanations are needed to build concordance with treatment goals. In the context of childhood eczema, this includes being prepared to discuss diet and allergy, explaining the rationale behind regular emollient use, and offering consistent advice about the safe use of topical corticosteroids.

## Referral criteria[4]

Immediate (same-day) referral for specialist dermatological advice is recommended if eczema herpeticum is suspected (see Figure 1). This would be suggested by the appearance of clusters of vesicles in an area of rapidly worsening eczema.

Urgent (within 2 weeks) referral for specialist dermatological advice is recommended for children with atopic eczema if:

- **The atopic eczema is severe and has not responded to optimum topical therapy after 1 week**
- **Treatment of bacterially infected atopic eczema has failed.**

Routine referral for dermatological advice is recommended for children with atopic eczema if:

- **The diagnosis is, or has become, uncertain**
- **Management has not controlled the atopic eczema satisfactorily based on a subjective assessment by the child, parent or carer (for example, the child is having 1–2 weeks of flares per month or is reacting adversely to many emollients)**
- **Atopic eczema on the face has not responded to appropriate treatment**
- **The child or parent/carer may benefit from specialist advice on treatment application (for example, bandaging techniques)**
- **Contact allergic dermatitis is suspected (for example, persistent atopic eczema or facial, eyelid or hand atopic eczema)**
- **The atopic eczema is giving rise to significant social or psychological problems for the child or parent/carer (for example, sleep disturbance, poor school attendance)**
- **Atopic eczema is associated with severe and recurrent infections, especially deep abscesses or pneumonia**

## Summary

The challenge for primary care is to encourage carers to prioritise regular emollient use, while also reassuring them about the safety of topical corticosteroids, if used correctly. Signposting written materials and support groups (see useful resources, below) may save time in the long term by promoting self-care, and can also help to back up key messages about treatment.

## *References*


1 Williams HC, Stewart, A, von Mutius, E, and the International Study of Asthma and Allergies in Childhood (ISAAC) Phase one and three study groups. *Journal of Allergy & Clinical Immunology* 2008;121(4):947-954.

2 Lewis-Jones MS, Finlay AY. *Br J Dermatol* 1995;132:942-949.

3 Williams HC, Burney PGJ, Pembroke AC, et al. *Br J Dermatol* 1996;135(1):12-17.

4 NICE clinical guideline 57. Atopic eczema in children 2007.

5 Santer M, Burgess H, Yardley L, et al. *British Journal of General Practice* 2012;62:192-193.


## KEY LEARNING POINTS

1. Childhood eczema can be very distressing for both the affected child and their carers
2. The main cause of treatment failure is non-concordance with the use of prescribed treatments, frequently through not understanding treatment correctly
3. Regular emollient use should be continued when eczema has cleared to prevent flare-ups
4. Stepped approach to management and clear advice to parents on how to manage flares
5. Health care professionals should give verbal and written information on the above, and how to use treatments

## USEFUL RESOURCES FOR PARENTS

- www.nottinghameczema.org.uk The Nottingham Support Group for Carers of Children with Eczema Includes factsheets, for instance explaining why allergy testing is not useful in eczema.
- www.eczema.org National Eczema Society
- This includes factsheets and also runs a helpline and local groups in England and Scotland
- www.eczemaoutreachscotland.org.uk
- Runs support groups in Scotland