Atopic eczema in children

NICE CG57: 2007

This guideline covers the management of atopic eczema in children from birth up to the age of 12 years.

Diagnosis – see full guideline for details.

Trigger factors

Allergy
- Most children with mild atopic eczema do not need clinical testing for allergies.
- Advise children and their parents/carers not to have high street or internet allergy tests.

Diet – see full guideline for details.

Assessment
- Take into account the physical severity of the atopic eczema and the child’s quality of life including everyday activities, sleep and psychosocial wellbeing.
- There is not always a direct relationship between the severity of atopic eczema and its impact on quality of life.

Treatment and management

Stepped-care plan
- Treatment is stepped up or down according to the severity of the atopic eczema – see Table 2.
- Treat areas of differing severity independently.
- Explain when and how to step treatment up or down.

Treating flares
- Step up treatment as soon as signs and symptoms appear and continue for 48 hours after symptoms subside.

Infections
- Explain how to recognise the symptoms and signs of bacterial infection and eczema herpeticum.
- Explain how to access appropriate treatment when a child’s atopic eczema becomes infected.

Localised bacterial infection
- Give topical antibiotics including those combined with topical corticosteroids (maximum 2 week course).

Widespread bacterial infection

First-line – flucloxacillin
- Give erythromycin if allergic or resistance to flucloxacillin, or clarithromycin if intolerant of erythromycin.

Table 1 – Physical assessment of atopic eczema

<table>
<thead>
<tr>
<th>Clear</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal skin</td>
<td>Areas of dry skin</td>
<td>Areas of dry skin</td>
<td>Widespread areas of dry skin</td>
</tr>
<tr>
<td>No evidence of active atopic eczema</td>
<td>Infrequent itching (with or without small areas of redness)</td>
<td>Frequent itching</td>
<td>Incessant itching</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Redness (with or without excoriation and localised skin thickening)</td>
<td>Redness (with or without excoriation, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation)</td>
</tr>
</tbody>
</table>

Table 2 – Treatment of atopic eczema: stepped-care

<table>
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<tr>
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<tr>
<th>Body</th>
<th>Emollients</th>
<th>Topical corticosteroids §</th>
<th>Potent *S</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Mild potency</td>
<td>Moderate potency*</td>
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<td></td>
<td></td>
<td>Tacrolimus **S</td>
<td>Bandages</td>
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<td>Systemic therapyS</td>
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<tr>
<th>Face and neck</th>
<th>Emollients</th>
<th>Topical corticosteroids §</th>
<th>Phototherapy</th>
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<td></td>
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</tbody>
</table>

§ Editorial note – see the British National Formulary for Children (BNFC) for a list of topical corticosteroid preparations and potencies.
* use for axillae and groin flares for 7 to 14 days only
** only in children aged 2 years and older
S specialist use only – see over page

- Antiseptics such as triclosan/chlorhexidine can be used as adjunct therapy for decreasing bacterial load in cases of recurrent infected atopic eczema. Avoid long-term use.

Herpes simplex viral infection
- Consider herpes simplex viral infection if atopic eczema fails to respond to antibiotic treatment and an appropriate topical corticosteroid.
- Treat immediately with systemic aciclovir and refer for same-day specialist dermatological advice.
- If skin around the eyes is infected refer for same-day ophthalmological and dermatological advice.
- Treat suspected secondary bacterial infection with systemic antibiotics.
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Prescribing

Emollients

- Always use emollients.
- Offer a choice of unperfumed emollients for everyday moisturising, washing and bathing. Use:
  - often and in large amounts,
  - on the whole body even when atopic eczema is clear,
  - while using other treatments,
  - instead of soaps and detergent-based wash products,
  - instead of shampoos for children under 12 months.
- Products should be available to use at nursery, pre-school or school.
- For children aged over 12 months use a shampoo labelled as suitable for eczema.
- Prescribe leave-on emollients in large quantities (250 to 500g weekly).
- Review repeat prescriptions at least once a year.

Topical corticosteroids

- Apply once or twice daily to areas of active atopic eczema.
- Do NOT use potent § topical corticosteroids:
  - on the face or neck,
  - in children under 12 months without specialist dermatological supervision.
- Do NOT use very potent § topical corticosteroids in children without specialist dermatological advice.
- Exclude secondary bacterial/viral infection if a mild or moderately potent topical corticosteroid has not controlled atopic eczema within 7 to 14 days.
- Use potent topical corticosteroids for as short a time as possible and no longer than 14 days.
- In children with two to three flares per month consider treating problem areas of atopic eczema with topical corticosteroids for two consecutive days per week to prevent flares. Review within 3 to 6 months.
- Consider a different preparation of the same potency as an alternative to stepping up treatment if you suspect tachyphylaxis.

Topical calcineurin inhibitors (tacrolimus/pimecrolimus)

- Only specialists with experience in dermatology should start treatment with tacrolimus or pimecrolimus after discussing the risks and benefits of all other options.
- If atopic eczema is not controlled by topical corticosteroids*** or where there is a risk of serious adverse effects treatment options include:
  - tacrolimus (0.03%) for moderate to severe atopic eczema in children aged two years and over,
  - pimecrolimus for moderate atopic eczema on the face and neck in children aged two years and over.
- Consider for facial atopic eczema in children requiring long-term or frequent use of mild topical corticosteroids.
- Do not use topical tacrolimus or pimecrolimus:
  - for mild atopic eczema,
  - as first-line treatment for atopic eczema of any severity,
  - under bandages or dressings without specialist dermatological advice.

*** Unsatisfactory clinical response to adequate use of the maximum strength and potency of topical corticosteroids that is appropriate for the child’s age and the area being treated.

Prescription Points

- Label topical corticosteroid containers with the potency class.
- New supplies of topical preparations should be supplied at the end of treatment for infected atopic eczema.

Bandages and dressings

- Medicated dressings or dry bandages can be used:
  - on top of emollients for areas of chronic lichenified atopic eczema,
  - on top of emollients and topical corticosteroids for short-term treatment of flares (7–14 days) or chronic lichenified atopic eczema.
- Use whole-body occlusive dressings on top of topical corticosteroids for 7–14 days only (or longer with specialist dermatological advice). Continue use with emollients alone until the atopic eczema is controlled.
- Treatment with occlusive dressings or dry bandages should only be managed by a healthcare professional trained in their use.
- Do NOT use:
  - occlusive medicated dressings or dry bandages to treat infected atopic eczema,
  - whole-body occlusive dressings or whole-body dry bandages as first-line treatment.

Phototherapy and systemic treatments

- Consider for severe atopic eczema when:
  - other options have failed or are inappropriate,
  - there is a significant impact on quality of life.
- Treatment should be under specialist dermatological supervision by staff experienced in dealing with children.

Antihistamines

- Do NOT use routinely.
- Give a one month trial of a non-sedating antihistamine § to children with:
  - severe atopic eczema,
  - mild or moderate atopic eczema with severe itching or urticaria.
- Continue while symptoms persist. Review every 3 months.
- If sleep disturbance has a significant impact during acute flares give a 7 to 14 day trial of a sedating antihistamine § to children over 6 months. Repeat for subsequent flares if successful.

§ Editorial note – See BNFC for prescribing information. None of the oral antihistamines are licensed for use in children less than one year.

Counselling

- Explain how much of and how often to apply treatments.
- Apply topical products one at a time with several minutes between applications.
- Explain that topical treatments in open containers act as a source of infection. New supplies should be obtained at the end of treatment of infected atopic eczema.

Emollients

- Show children and their parents/carers how to apply emollients.

Topical corticosteroids

- Explain that:
  - the benefits outweigh the risks when applied correctly,
  - topical corticosteroids should only be applied to areas of active atopic eczema.

Topical calcineurin inhibitors

- Explain that these should only be applied to areas of active atopic eczema including areas of broken skin.

Complementary therapies

- Explain that effectiveness and safety of complementary therapies have not been adequately assessed.
- Topical corticosteroids are added to some herbal products.
- Liver toxicity has occurred with some Chinese herbal medicines.