October 2009
No.10

NICE Bites

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 2 – Treatment of atopic eczema: stepped-care

Clear	Mild	Moderate	Severe
← *Step treatment up or down* →			
Body			
← **Emollients** →			
	← **Topical corticosteroids §** →		
	Mild potency	Moderate potency*	Potent *S
		Tacrolimus **S Bandages	Tacrolimus**S Bandages PhototherapyS Systemic therapyS
Face and neck			
← **Emollients** →			
	Topical corticosteroids §		Tacrolimus**S PhototherapyS Systemic therapyS
	Mild potency	Mild potency or moderate potency for severe flares (3 to 5 days only).	
		Tacrolimus or pimecrolimus**S	

§ 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.

Table 1 – Physical assessment of atopic eczema

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

Produced for healthcare professionals by North West Medicines Information Service, The Pharmacy Practice Unit, 70 Pembroke Place, Liverpool, L69 3GF.
Editor: Lindsay Banks. Telephone 0151 794 8117. E-mail: druginfo@liv.ac.uk

Atopic eczema in children

NICE CG57; 2007

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.