

Guidelines for the management of Atopic eczema in Primary Care

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These guidelines should not replace clinical judgement but are meant as an aid/resource in the management of patients in City and Hackney with Atopic Eczema

Atopic Eczema

Atopic eczema (atopic dermatitis) is a chronic inflammatory itchy skin condition that develops in early childhood in the majority of cases. It is typically an episodic disease of exacerbation (flares, which may occur as frequently as two or three times per month) and remissions. In some cases it may be continuous. Atopic eczema often has a genetic component that leads to the breakdown of the skin barrier. This makes the skin susceptible to trigger factors, including irritants and allergens, which can make the eczema worse. Images can be viewed on the Primary Care Dermatology Society website.

Diagnosis and assessment of severity

Atopic eczema is likely if the following criteria are fulfilled (although other conditions may need to be excluded):

- An itchy skin condition (or parental report of scratching) in the last 12 months, plus three or more of the following:
- A history of involvement of the skin creases (fronts of elbows, behind knees, fronts of ankles, around neck, or around eyes).
- A personal history of asthma or hay fever (or history of atopic disease in a first degree relative if a child is less than 4 years of age).
- A history of generally dry skin in the last year.
- Onset under the age of 2 years (this criterion should not be used in children aged under 4 years).
- Visible flexural eczema (including eczema affecting cheeks or forehead and outer aspects of limbs in children less than 4 years of age).

Note that these criteria apply to all ages, social classes, and ethnic groups. However, in children of Asian, black Caribbean, and black African ethic groups, atopic eczema can affect the extensor surfaces rather than the flexures, and discoid or follicular patterns may be more common.

For more information on diagnosis and management of children under 12 see NICE CG 57

Healthcare professionals should adopt a holistic approach when assessing a child's atopic eczema at each consultation

Table 1 holistic assessment

Skin/Physical Severity		Impact on quality of life and psychosocial wellbeing	
Clear	Normal skin, no evidence of active atopic eczema	None	No impact on quality of life
Mild	Areas of dry skin, infrequent itching (with or without small areas of redness)	Mild	Little impact on everyday activities, sleep and psychosocial wellbeing
Moderate	Areas of dry skin, frequent itching, redness (with or without excoriation and localised skin thickening)	Moderate sleep	Moderate impact on everyday activities and psychosocial wellbeing, frequently disturbed
Severe	Widespread areas of dry skin, incessant itching, redness (with or without excoriation, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation)	Severe	Severe limitation of everyday activities and psychosocial functioning, nightly loss of sleep

General Advice

- In children, reassure parents that eczema often improves with time.
- In adults, explain that eczema is a chronic illness characterised by flares, but that these can usually be controlled with appropriate treatment.
- Spontaneous improvement tends to occur throughout childhood with complete clearance by teenage years in 50% of patients.
- > Consider a diagnosis of food allergy in infants and young children with moderate or severe atopic eczema that has not been controlled by optimum management, particularly if associated with colic, vomiting, altered bowel habit or failure to thrive.
- Provide patients with City and Hackney leaflet and <u>British Association Dermatologist Avoid leaflet</u>
- > Advise the person or carer:
 - o To avoid scratching their eczema (if possible), and simply rub the area with their fingers to alleviate itch
 - o To keep nails short (and use anti-scratch mittens in babies with eczema) and keep cool.
 - To avoid trigger factors known to exacerbate eczema, such as clothing (they should avoid wearing synthetic fibres), soaps or detergents (use emollient substitutes), animals, & heat (keep rooms cool).
 - House-dust mite avoidance strategies are generally not recommended as they are time consuming and of limited benefit.
- > Complementary therapies are not recommended. Healthcare professional should be informed if used.
- Not to alter their diet unless under specialist advice
- Discuss any OTC cream use as there is a high prevalence of illegal creams being used that contain high potency steroids.

Referral

- Before Referral:
 - 3 weeks of topical steroids, and Infection excluded
 - Soap substitute and 500g moisturiser 2 weeks

Referral criteria:

- > Only cases of severe or difficult eczema usually need to see a dermatologist.
- Lack of adequate progress despite use of adequate quantities of emollients/topical steroid preparations (confirm that patients are applying these correctly) (see table 1 for further information).
- > Treatment of bacterially infected atopic eczema has failed.
- Management has not controlled eczema satisfactorily based on a subjective assessment by the child/parent/carer (e.g child is having 1-2 weeks of flares per month or is reacting adversely to emollients).
- Child/parent/carer might benefit from specialist advice on treatment options.
- > Dry bandages and medicated dressings including wet wrap therapy may be needed.
- > Patient requires referral for dietary investigation/advice.
- Atopic eczema is causing significant social or psychological problems for the child/parent/carer e.g. sleep disturbances, poor school attendance.
- Failure to thrive.
- > Atopic eczema is associated with severe & recurrent infections, especially deep abscesses or pneumonia.
- For consideration of second line treatment such as photo/chemo therapy and for consideration of longer term topical immunomodulators.
- > If diagnosis has become uncertain: e.g contact dermatitis would require patch testing.
- Referral for psychological advice children whose atopic eczema has responded to optimum management but for whom the impact on quality of life and psychological wellbeing has not improved.

Urgent Referral

- Eczema Herpeticum (signs include: rapidly worsening, painful eczema, clustered blisters consistent with early-stage cold sores) punched-out erosions uniform in appearance, possible fever, lethargy or distress
- Rapid or severe exacerbation

Treatment: **Emollients**

- There is no evidence from controlled trials to support the use of one emollient over another.
 Recommendations are based on the known physiological properties of emollients together with pragmatic considerations.
- 2. Use emollient liberally and frequently, even when skin appears improved or is clear.
- 3. Intensive emollient use will reduce the need for topical steroids.
- 4. Generally for very dry skin, application of an emollient every 2–3 hours should be considered normal.
- 5. In general, ointments should be used on dry skin.
- 6. Creams and lotions on more moist skin.
- 7. Ointments are usually poorly tolerated compared to creams.
- 8. Offer patients better tolerated products (such as creams and lotions) during the day, and recommend ointments at night.
- 9. Emollients should be applied by smoothing them into the skin along the line of hair growth, rather than rubbing them in.
- 10. Do not prescribe aqueous cream as it is thought to cause a disproportionate amount of skin reactions.
- 11. Prescribe emollients to replace soap in people with dry skin requiring treatment.
 - a. Ointments dissolved in hot water are suitable soap substitutes.
- 12. Pump-dispensers should be prescribed when large quantities of a cream or lotion are required.

Table 1. Quantities of emollients that should be prescribed for adults with eczema, per week

Area affected	Creams and ointments (g)	Lotions (mL)
Face	15-30	100
Both hands	25-30	200
Scalp	50-100	200
Both arms or legs	100-200	200
Trunk	400	500
Groin and genitallia	15-25	100

For children, about half this amount is suitable.

Quantities based on twice daily applications.

Approximate: emollient prescribed will vary depending on the size of the person, and extent and severity of the eczema.

Data from Dermatology UK, 2007

City and Hackney's First Choice emollients

For full information please refer to C&H full guidelines. Available <u>Here</u>

	Ointments	Creams	Lotion	Soap Substitute
	Zeroderm [®]	Epimax [®] , Aquamax [®]	E45 [®] lotion, QV [®]	Emulsifying ointment (whisk with warm
Formulary	ointment,Emulsifying	Zerocream®,	Skin Lotion	water or disperse in bath)
choice	Ointment (T)	Zerodouble® Gel		

Treatment: Corticosteroid prescribing guide

Medicine name	Brand	Potency	Position in formulary
Hydrocortisone 1% cream and ointment	Generic	mild	1st line
Fluocinolone acetonide 0.0025%	Synlar 1/10®	mild	2nd line
Betamethasone (as valerate) 0.025%	Betnovate RD®	moderate	1st line
Clobetasone butyrate 0.05%	Eumovate®	moderate	2nd line
Betamethasone (as valerate) 0.1%	Betnovate®	potent	1st Line
Mometasone furoate 0.1%	Generic	potent	2nd line
Clobetasol propionate 0.05%	Dermovate®	Very potent	1st line

Selecting a corticosteroid.

- Topical corticosteroids are available in four potencies: mildly potent, moderately potent, potent, and very potent
- For normal skin on the body (not the face, genitals, or axillae), prescribe a strength of topical corticosteroid to match the severity of the eczema e.g.
 - o For mild eczema prescribe a mild topical corticosteroid.
 - o For moderate eczema prescribe a moderately potent corticosteroid.
 - o For severe eczema prescribe a potent topical corticosteroid.
- For flares on the face, genitals, or axillae, consider prescribing a mild potency topical corticosteroid and increase to a moderate potency corticosteroid only if necessary.
- Topical corticosteroids should be used at the first sign of an exacerbation (redness, inflammation and itching) and continued until eczema has resolved.
- Prescribe ointments, except in areas of weeping eczema or moist areas of the body (a cream is more suitable).

Prescribing Information

- Topical steroids are usually only needed once a day for 7–14 days.
- If the response to once daily application is inadequate, increase to twice daily.
- Counsel patients to apply steroids thinly.
- Step down treatment when possible: prescribe the lowest potency and amount of topical corticosteroid that controls the condition.
- consider avoiding topical corticosteroids on repeat prescription
- Do not prescribe potent or very potent steroids on repeat.

Quantity

- For children, a maximum of 5 days treatment are recommended for the face and neck, and 14 days for the body (30g)
- The age and size of the child needs to be considered, less than 5 or 14 days treatment may be appropriate.
- Prescribe adequate quantities using fingertip dosing (1FTD=AREA COVERED BY 2 CLOSED HANDS).

Intermittent treatment

- Consider a 1 week gap of steroid use for every 3 weeks of continuous use. Or
- Advise the use of topical corticosteroids on two consecutive days, once a week (weekend therapy); Or
- The use of topical corticosteroids twice a week, for example every 3-4 days (twice weekly therapy).

Potent steroids

- Chronic lichenified eczema may require prolonged treatment with a potent corticosteroid (for example for 4–6 weeks, depending on response). In some cases, a very potent corticosteroid may be indicated.
- Seek specialist advice before prescribing a very potent corticosteroid.
- Use a mild topical corticosteroid for chronic eczema of the face, genitals, or axillae. If this is insufficient, consider referral.
- Do not prescribe potent topical corticosteroids in children under 12 months without specialist advice.

Oral Corticosteroids

- Prolonged use of systemic corticosteroids is associated with serious adverse effects, including growth retardation in children, diabetes mellitus, high blood pressure, and osteoporosis.
- Refer patients to dermatologist if you believe oral steroids are required.
- Do not initiate oral steroids for eczema in primary care without specialist input.
- Use of topical corticosteroids is not necessary while oral prednisolone is being used. Emollients should still be used.

Treatment: Antihistamines

- Oral antihistamines should not be routinely used in children (NICE guidelines 57).
- One month trial of a non-sedating antihistamine should be offered to children with severe atopic eczema or children with mild to moderate atopic eczema where there is severe itching or urticaria (this should be reviewed monthly).
- A 7- 14 day trial of a sedating antihistamine can be offered to children over 6 months during acute flares if sleep disturbance is significant.
- Sedating antihistamines at night can be useful in adults but should not be used on a long-term basis.
- There is no clear evidence that topical treatment containing anti-pruritics have any benefit.

Treatment: Immunomodulatory treatments

- Are not recommended as first-line treatments for atopic eczema of any severity
- Topical calcineurin inhibitors (tacrolimus and pimecrolimus) are a **second-line option** in moderate to severe atopic eczema in patients over the age of 2 years.
- The risks and benefits of treatment should be discussed with parents and or carers.
- Topical calcineurin should be considered when symptoms have not been controlled by topical corticosteroids and there is a serious risk of adverse effects from further topical corticosteroid use, particularly irreversible skin atrophy.
- Treatments should not be prescribed in the presence of infections (bacterial or viral).
- They should only be **initiated** by a specialist (including GPs with a specialist interest in dermatology).
- Immunomodulatory treatments should only be initiated after careful discussion with the person about the potential risks and benefits of all appropriate second-line treatment options.
- In primary care prescribing should be for short term intermittent treatment.
- Patients and carers should be advised to only use topical calcineurin in areas of active atopic eczema.
- Tacrolimus 0.03% and pimecrolimus are licensed in patients over 2 years of age.
- Tacrolimus 0.1% is licensed over 16 years of age.
- Tacrolimus should not be applied within 2 hours of the use of an emollient. An emollient should be applied 2 hours after the application of tacrolimus.
- Treatments should be reviewed after 12 months.
- Advice should be given about wearing sun protection if going outside following the application of these treatments.

Bacterial Infection

- Crusting, weeping, pustulation and/or surrounding cellulitis with erythema of otherwise normal-looking skin suggests bacterial infection.
- Routine swabbing of skin is not recommended. Consider swapping if you suspect microorganisms other than Staphylococcus or if antibiotic resistance is relevant.

Antibiotic	Duration
Flucloxacillin	Usually 7 days; maximum 14 days see BNFc/BNF for full doses
Prescribers should warn parents	
of the importance of compliance.	
In children unable to tolerate	
oral flucloxacillin oral suspension	
due to taste consider prescribing	
co-amoxiclav oral suspension.	
Penicillin allergic: Erythromycin	Usually 7days; maximum 14 days BNFc/BNF for full doses
Fucidin H cream, Fucibet cream	In localised area of infection maximum 2 weeks

- Consider referral if patients do not respond to two courses of antibiotics.
- Emollient/antibacterial combinations encourages resistance and does not improve healing
- Provide new topical creams to avoid cross contamination after treatment

Dietary factors

- Consider food allergy in children with atopic eczema who have reacted previously to a food with immediate symptoms.
- In infants and young children with moderate or severe atopic eczema that has not been controlled by optimum management, particularly if associated with gut dysmotility or failure to thrive consider one of the following:
 - Trial of an alternative milk formula (extensively hydrolysed protein formula or amino acid formula) for bottle-fed infants aged under 6 months.
 - A trial of an allergen-specific exclusion diet in breast feeding mothers should be considered under dietary supervision if food allergy is strongly suspected.
 - In exclusively breastfed babies, advise the mother to exclude cows' milk protein from her diet. Consider prescribing a daily supplement of 1000 mg of calcium and 10 micrograms of vitamin D to the mother to prevent nutritional deficiencies.
- Healthcare professionals should refer children with atopic eczema who follow a cow's milk-free diet for longer than 8 weeks for specialist dietary advice.
- For further information see <u>NICE recommendations</u> and City and Hackney Guideline for <u>Prescribing</u>
 <u>Specialist infant formula in primary care</u>

City and Hackney Quick treatment Summary Guide Atopic Dermatitis in primary care

Atopic eczema (atopic dermatitis) is a chronic inflammatory, relapsing, itchy skin condition. Provide patients with Patient information leaflet link
See full guidance for further information.

Stepwise approach to treatment. Treatment to be stepped up and down according to clinical need

General Recommendations

Patient leaflet: link

Avoid irritants and triggers

Avoid scratching; keep nails short and rub area to alleviate

Complementary therapies not recommended Do not alter diet unless specialist advice

Maintenance

- 1. Prescribe emollients liberally
- 2. Emollients mainstay of treatment should be used 3-8 x a day

Flare

- Prescribe emollients liberally
- Prescribe lowest potency steroid to control condition (intermittent treatment)
- 3. Immunomodulators. (specialists only)
- 4. No improvement: secondary care referral
- 30 min gap between application of emollient and steroid

Antibacterial

Crusting, weeping, pustulation cellulitis with erythema of otherwise normal-looking skin. Consider swapping only if MO other than Staphylococcus aureus suspected.

1st line antibiotic: Flucloxacillin**

Penicillin allergic Erythromycin

Localised area of infection: Fucidin H®/Fucibet® Antibiotics courses usually 7 days max 14 days

** Prescribers should warn parents of the importance of compliance. In children unable to tolerate oral flucloxacillin oral suspension due to taste consider prescribing co-amoxiclay oral suspension.

Urgent Referral Eczema Herpeticum Signs include: worsening, painful eczema, blisters.

Emollients

No clinical evidence to support one emollient over another. Patient choice and cost

Avoid aqueous cream due to skin reactions

Ointments better for dry skin then creams, but less acceptable to patients.

Any emollient can be added to bath, by melting in some warm water first

Use pump dispensers / remove from pots with clean spoons Bath additives are NOT recommended in C&H CCG.

Consider food allergy in infants and young children with moderate/severe eczema not controlled with optimum management particularly if associated with colic, vomiting, altered bowel habit or failure to thrive.

Topical Steroids

- Once or twice daily depending on clinical need. Generally start with od and up titrate.
- Use early in flares. Continue for 48 hours after flare has been controlled
- Very potent topical corticosteroids should usually only be prescribed by specialists
- Consider Intermittent treatment
- Prescribe cautiously in flextures as potency is increased
- Avoid steroids on repeat prescriptions
- For normal skin on the body match the severity of the eczema:
 - $\hspace{0.5cm} \circ \hspace{0.5cm} \text{For mild eczema -- prescribe a mild topical corticosteroid.} \hspace{0.5cm} \textbf{Hydrocortisone 1\%} \\$
 - For moderate eczema prescribe a moderately potent corticosteroid.
 Betnovate RD */mometasone 0.1% ointment
 - o For severe eczema prescribe a potent topical corticosteroid. Betnovate ®

1st Line emollients
Ointments:
Zeroderm®/
Emulsyfying
ointment

Creams: Epimax®/Aquamax®

Soap Subs/Bath: Emulsifying ointment.

Antihistamines

Not routinely used in *children*. One month trial if used of non-sedating 1st, review use every 3 months. Sedating antihistamines can be used for 7-14d if sleep disturbed in an acute flare. Beware of overuse/tolerance review every 3 months.

Cows Milk allergy <6 months

In formula fed infants consider alternative milk formula (extensively hydrolysed) for 6-8 weeks. >8 weeks specialist advice

Referral Criteria

Before referral offer pts 3 weeks topical steroids, exclude infection

Diagnostic uncertainty

Lack of progress despite standard topical treatment

Specialist advice and or second line therapy needed i.e. bandaging, unable to step down therapy Failure of 2 courses of antibiotics and or reaction to multiple emollients

Failure to thrive or < 6m with GI symptoms

Significant psycho-social impact

References

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Authors: Dr Hannah Waddingham, GP Clinical Lead, Portia Goldsmith, Consultant Dermatologist. Review: November 2019