Eczema

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Key Amendments

Date	Amendment	Approved by
February 2019	Page 4 Bandages: Fludroxycortide 0.0125% tape applied for 12 hours: moderate e.g. Haelen tape Page 7 name removal Appendix: Eczema Care Plan	Paediatric QIM
19th Nov 2020	Document extended for 1 year	Dr J West/ Paediatric QIM
26th March 2021	Approved with no amendments	Paediatric QIM

Introduction

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 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.

Many cases of atopic eczema clear or improve during childhood, whereas others persist into adulthood. Some children who have atopic eczema will go on to develop asthma and/or allergic rhinitis; this sequence of events is sometimes referred to as the 'atopic march'. Although atopic eczema is not always recognised by healthcare professionals as being a serious medical condition, it can have a significant negative impact on quality of life for children and their parents and carers.

Diagnosis

To aid management of atopic eczema in children, healthcare professionals should take detailed clinical and drug histories that include questions about:

- time of onset, pattern and severity of the atopic eczema
- response to previous and current treatments
- possible trigger factors (irritant and allergic)
- the impact of the atopic eczema on children and their parents or carers
- dietary history including any dietary manipulation
- growth and development
- personal and family history of atopic diseases.

Atopic eczema should be diagnosed when a child has an itchy skin condition plus three or more of the following:

- visible flexural dermatitis involving the skin creases, such as the bends of the elbows or behind the knees (or visible dermatitis on the cheeks and/or extensor areas in children aged 18 months or under)
- personal history of flexural dermatitis (or dermatitis on the cheeks and/or extensor areas in children aged 18 months or under)
- personal history of dry skin in the last 12 months
- personal history of asthma or allergic rhinitis (or history of atopic disease in a first degree relative of children aged under 4 years)
- onset of signs and symptoms under the age of 2 years (this criterion should not be used in children aged under 4 years).
- Healthcare professionals should be aware that in Asian, black Caribbean and black African children, atopic eczema can affect the extensor surfaces rather than the flexures, and discoid (circular) or follicular (around hair follicles) patterns may be more common.

Assessment of severity, psychological and psychosocial wellbeing and quality of life

A holistic approach should be used when assessing a child's atopic eczema at each consultation, taking into account the severity of the atopic eczema and the child's quality of life, including everyday activities and sleep, and psychosocial wellbeing (see table below). There is not necessarily a direct relationship between the severity of the atopic eczema and the impact of the atopic eczema on quality of life.

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	Moderate impact on everyday activities and psychosocial wellbeing, frequently disturbed sleep
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

The overall physical severity of a child's atopic eczema should be explained to the child and their parents or carers. All categories of severity of atopic eczema, even mild, can have a negative impact on psychological and psychosocial wellbeing and quality of life. This should be taken into account when deciding on treatment strategies

Trigger factors

When clinically assessing children with atopic eczema, healthcare professionals should seek to identify potential trigger factors including:

- irritants, for example soaps and detergents (including shampoos, bubble baths,
- shower gels and washing-up liquids)
- skin infections
- contact allergens
- food allergens
- inhalant allergens.

A diagnosis of food allergy should be considered in children with atopic eczema who have reacted previously to a food with immediate symptoms, or 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 (colic, vomiting, altered bowel habit) or failure to thrive.

Treatment

MILD ATOPIC ECZEMA	MODERATE ATOPIC ECZEMA	SEVERE ATOPIC ECZEMA
Emollients e.g. cetraban, e45, doublebase, diprobase **Including soap substitutes and emollient bath and shower preparations** e.g. oilatum bath oil, balneum bath oil, dermol 600 bath emollient, dermol200 shower emollient and dermol was emulsion	**Emollients** e.g. epaderm, 50/50 white soft paraffin	**Emollients** e.g. epaderm, 50/50 white soft paraffin
Mild potency topical Corticosteroids e.g. hydrocortisone To be used once or twice daily on areas of active atopic eczema	**Moderate potency topical Corticosteroids** e.g. eumovate To be used once or twice daily on areas of active atopic eczema	**Potent topical Corticosteroids** e.g. betnovate, locoid To be used once or twice daily on areas of active atopic eczema
	Bandages Fludroxycortide 0.0125% tape applied for 12 hours: moderate e.g. Haelen tape	Bandages
	Topical calcineurin inhibitors –under specialist dermatology supervison	Topical calcineurin inhibitors – under specialist dermatology supervison
		Phototherapy – under specialist dermatology supervison
		Systemic therapy - under specialist dermatology supervison

- Aqueous cream should not be used as a leave on emollient as it may cause skin irritation
- Leave-on emollients should be prescribed in large quantities (250–500 g weekly) and easily
  available to use at nursery, pre-school or school.
- Emollients and/or emollient wash products should be used instead of shampoos for the children aged under 12 months with atopic eczema

- Emolients should be smoothed on to the skin rather than rubbed in.

- For topical corticosteroids:
  - use mild potency for the face and neck, except for short-term (3–5 days) use of moderate potency for severe flares
  - use moderate or potent preparations for short periods only (7–14 days) for flares in
    vulnerable sites such as axillae and groin
  - do not use very potent preparations in children without specialist dermatological advice.

- Secondary bacterial or viral infection should be excluded if a mild or moderately potent topical corticosteroid has not controlled the atopic eczema within 7–14 days.
- A different topical corticosteroid of the same potency should be considered as an alternative to stepping up treatment if tachyphylaxis to a topical corticosteroid is suspected in children with atopic eczema
- Children with atopic eczema and their parents or carers should have information provided on
  - how much of the treatments to use
  - how often to apply treatments
  - when and how to step treatment up or down
  - how to treat infected atopic eczema.

Antihistamines

- Oral antihistamines should not be used routinely in the management of atopic eczema in children.
- A 1-month trial of a non-sedating antihistamine (e.g. cetirizine or loratidine)should be offered to children with severe atopic eczema or children with mild or moderate atopic eczema where there is severe itching or urticaria. Treatment can be continued, if successful, while symptoms persist, and should be reviewed every 3 months.
- A 7–14 day trial of an age-appropriate sedating antihistamine(e.g. chlorphenamine, alimemazine, hydroxyzine) should be offered to children aged 6 months or over during an acute flare of atopic eczema if sleep disturbance has a significant impact on the child or parents or carers. This treatment can be repeated during subsequent flares if successful.

Treatment for infection

- Symptoms and signs of bacterial infection with staphylococcus and/or streptococcus infection include:
  - weeping, pustules, crusts, atopic eczema failing to respond to therapy, rapidly worsening atopic eczema, fever and malaise
  - parents and carers should be advised to look for these signs

- Flucloxacillin should be used as the first-line treatment for bacterial infections in children with atopic eczema for both Staphylococcus aureus and streptococcal infections for 1–2 weeks according to clinical response

- Erythromycin should be used in children who are allergic to flucloxacillin or in the case of flucloxacillin resistance. Clarithromycin should be used if erythromycin is not well tolerated.
- The use of topical antibiotics in children with atopic eczema, including those combined with topical corticosteroids, should be reserved for cases of clinical infection in localised areas and used for no longer than 2 weeks.
- Infection with herpes simplex (cold sore) virus should be considered if a child's infected atopic eczema fails to respond to treatment with antibiotics and an appropriate topical corticosteroid.

Eczema herpeticum

- If a child with atopic eczema has a lesion on the skin suspected to be herpes simplex virus, treatment with oral aciclovir should be started even if the infection is localised.
- Signs of eczema herpeticum are:
    - areas of rapidly worsening, painful eczema
    - clustered blisters consistent with early-stage cold sores
    - punched-out erosions (circular, depressed, ulcerated lesions) usually 1–3 mm that
    - are uniform in appearance (these may coalesce to form larger areas of erosion with crusting)
    - possible fever, lethargy or distress.
- Children with atopic eczema and their parents or carers should be offered information on how to recognise eczema herpeticum
- If eczema herpeticum (widespread herpes simplex virus) is suspected in a child with atopic eczema, treatment with systemic aciclovir should be started immediately and the child should be referred for same-day specialist dermatological advice. If secondary bacterial infection is also suspected, treatment with appropriate systemic antibiotics should also be started.
- If eczema herpeticum involves the skin around the eyes, the child should be treated with systemic aciclovir and should be referred for same-day ophthalmological and dermatological advice.

Complementary therapies

Children with atopic eczema and their parents or carers should be informed that:

- they should be cautious with the use of herbal medicines in children and be wary of any herbal product that is not labelled in English or does not come with information about safe usage
- topical corticosteroids are deliberately added to some herbal products intended for use in children with atopic eczema
- liver toxicity has been associated with the use of some Chinese herbal medicines intended to treat atopic eczema.

- if they plan to use complementary therapies, they should keep using emollients as well and be asked to inform their healthcare professionals if they are using or intend to use complementary therapies.

Children with atopic eczema and their parents or carers should be advised that regular massage with emollients may improve the atopic eczema.

Indications for referral

- Immediate (same-day) referral for specialist dermatological advice is recommended if eczema herpeticum is suspected
- 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.

- Referral for specialist 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 forthe 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.

- Children with atopic eczema that has responded to optimum management but for whom the impact of the atopic eczema on quality of life and psychosocial wellbeing has not improved should be referred for psychological advice.
- Children with moderate or severe atopic eczema and suspected food allergy should be referred to paediatric allergy clinic or to a consultant with an interest in allergy.
- Children with atopic eczema who fail to grow at the expected growth trajectory, as reflected by UK growth charts, should be referred to a consultant paediatrician

Appendix 1

Eczema Management Plan

Name	
Date of Birth	
Hospital Number	
Date Issued	

This care plan is to help you and your child manage their eczema. It will help you know what treatments to use, when to use them and where to put them.

What is eczema?

Eczema is an inflammation of the skin, which tends to flare-up from time to time. It usually starts in early childhood. The severity can range from mild to severe. There is no cure, but treatment can usually control or ease symptoms. Emollients (moisturisers) and steroid creams or ointments are the common treatments.

Be careful not to run out of cream!

Please give your GP at least 48 hours notice for repeat prescriptions

Everyday Treatment Use me every day even when your skin is good

Moisturisers

Bath time	 Morning	 Noon	 Afternoon	 Bedtime
Everywhere				

Soap substitute

Active Eczema Affected areas are red and itchy

Medicated creams/ointments

Face		
Body		
Arms		
Legs		

Other medication

Further information

Eczema Flare Sudden worsening of your eczema

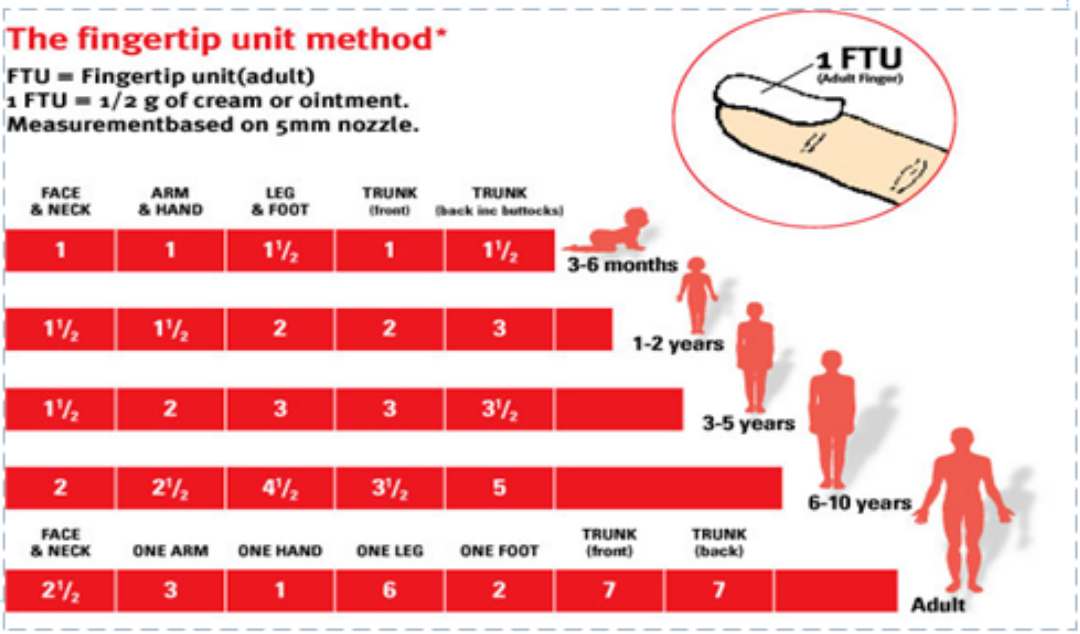
Medicated creams/ointments

		
Face		
Body		
Arms		
Legs		

Other medication

Further information

The Fingertip Unit Steroid creams are measured in adult fingertip units



Useful Information

Things to avoid

Anything that bubbles is bad! Anything that smells nice should also be avoided. Soaps and soap-based products make the skin dry and thin so it is best to use soap substitutes for bathing and washing hands. Don't use cosmetic body washes.

Moisturisers (emollients)

- Use **every day**, even when the skin looks good
- Apply liberally, all over the body
- Apply in the direction of hair growth to avoid blocking pores
- Pat yourself dry after a bath, then apply your moisturiser

Steroid Creams

Reduce the inflammation of the skin. They come in different strengths.

- Only use on affected areas
- Use until the flare up has settled and then use less often or change to a lower strength until clear
- Use the lowest strength that clears the flare up
- Measured in fingertip units

Infection

During a flare up patches of eczema can become infected. This can look like weeping blisters or pustules that crust and will often not respond to your normal treatment. You can also develop a high temperature or feel unwell.

Please seek medical advice if you have any of these symptoms as you may need a course of antibiotics.