Ashford and St. Peter's Hospitals
NHS Foundation Trust

Guideline into the management of eczema in children 2 months -17 years presenting to A&E and outpatients.

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Guideline History		
Date	**Comments**	**Approved By**
16/4/2021	Antibiotic prescribing in infected eczema changed: Was erythromycin if penicillin allergy now for clarithromycin and if flucloxacillin is not tolerated as per NG190 2021 update	
15/3/2024	Pimecrolimus licenced for children as young as 9 months	

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Documents to be used in conjuction:

Can be found in Eczema Attachments Folder

1) CDLQI From
2) Eczema Action Plan
3) Cow's milk protein and Soya free breastfeeding leaflet
4) Eczema advice leaflet
5) Emmolients Leaflet
6) Steroids in Eczema Leaflet
7) Cradle cap advice leaflet

References:

- SIGN 125 Management of atopic dermatitis
- NICE clical guideline 57
- National Eczema Society www.eczema.org

Ratified:
Reviewed March 2024

Next due to be reviewed: Jan 2028

Atopic Eczema

Atopic eczema is increasingly common affecting some 20% of children. It often starts on the face in babies and then spreads to the flexural areas of the limbs and body. In black children it is often extensor rather than flexural and it may have a popular component. Diagnosis is clinical and does not need investigation in paediatric A&E.

Treatment guide

These will only work if families have adequate explanations (use an interpreter as necessary) – compliance is the key! Treatment will *control*, not *cure*.

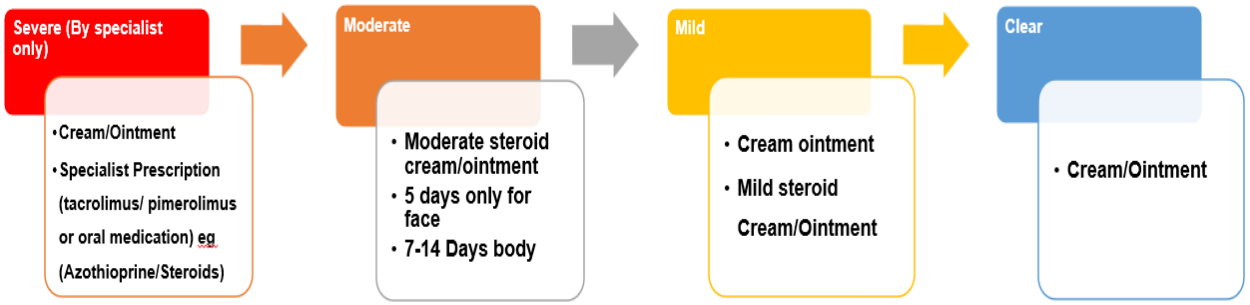
If despite an Eczema Action Plan and compliance to treatment there are still concerns:

Consider referral to Dermatology Nurse Specialist nancy.mulligan@nhs.net or if conventional treatment is not working and they would benefit from being seen in the Paediatric Allergy/Dermatology Joint clinic (clinics run every 3 months-spaces limited) then e-mail: Fiona.maccarthy@nhs.net

General Measures

- Cotton clothing & bedding is least irritant
- Children should be kept cool at night (aiming for 18 degrees)
- Regular application of moisturizer 3-5 times a day or more
- Air rooms daily
- Use damp cloth when dusting
- Avoid feather duvets
- Use non-biological washing powders. Temp over 58 degrees kill house dust mites. Extra rinse
- Toys in plastic bag overnight kills house dust mites
- Vacuum regularly
- Keeping moisturizer in the fridge
- Try to keep a note of trigger factors
- Applying frozen peas (wrapped in tea towel) or cooling pack
- Tapping area
- Distraction techniques and toys
- Not co-sleeping
- Cotton garments
- Wet wrapping (can be organized through GP also taught on education workshop)

The Steps of Treatment



Recognition in dark skin:

Triple therapy consists of:

1. **Skin cleansing:** Daily bath/ shower recommended (lukewarm water, no longer than 20 minutes)
   a. Bath oils no longer recommended, use emollient creams/ointments instead (see below)
   b. Recommend to use usual emollient cream or ointment 3-5 times a day or more

> Use between 250-500grams of emollient per week.

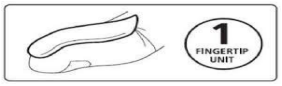
2. **Leave on emollient (moisturiser):** Use the greasiest tolerated (see guidance below). Needs to be applied frequently and in sufficient amounts, smoothed on not rubbed, in a downwards direction with hair growth.

   a) Apply emollient first and steroid creams after about 30min.
   b) If using an emollient from a tub use a spoon to scoop it out as fingers introduce bacterial contamination to the tub

3. **Topical steroids:** Weaker preparations on face & nappy area, stronger on body. There is a degree of unnecessary fear about their use. Providing they are used at the right strength in the right body area they are safe for long term intermittent use. They are not significantly absorbed (no systemic side effects).
   - Use when the skin is itchy & red and slowly withdraw as the skin improves Face: Hydrocortisone 0.5%- 1% once a day
     Body: Eumovate OD– for more moderate

Initially apply to face for 5 days if indicated and body 10-14 days once a day. Persistent patches of eczema may require "Weekend therapy" where the steroid cream is only applied to those areas twice a week on Saturdays and Sundays to prevent recurrent flares.

How to apply: **Give parents the "Eczema Leaflet"** and teach on Fingertip units (FTU)

Fingertip unit chart FTU 

Age	Face &Neck	1 Arm & Hand	1 Leg &Foot	Trunk (Front)	Trunk (Back)including buttocks
3-6 Months	1	1	1.5	1	1.5
1-2 Years	1.5	1.5	2	2	3
3-5 Years	1.5	2	3	3	3.5
6-10 Years	2	2.5	4.5	3.5	5
10+ Years	2.5	4	8	7	8

Adjunct therapies

1) When to consider food allergies:

If a child presents with eczema under the age of 3 months this makes the likelihood of a dietary trigger more likely. In an exclusively breastfed infant the mother could consider a 4-6 week Cow's milk protein and Soya elimination diet. Followed by **reintroduction** of these products into the diet. It is very important to re-introduce the food to make sure that the eczema did not improve due to the other measures started.

Patient information leaflet on CMP and Soya free breastfeeding to be given to the mother and to be referred for follow up. If there is concerns about other foods being a possible trigger refer to Allergy clinic for further assessment where they may also be seen by the Dietician.

PLEASE note that only 30-35% of children with eczema have a food allergy and dietary restriction should not be routinely performed as can cause nutritional harm as well as change a non- IgE reaction into IgE (potentially triggering anaphylaxis).

2) Bacterial Infections:

- Eczema may appear weeping and crusted and yet not be caused by bacterial infection and evidence is that resistance can occur with frequent prescriptions of antibiotics.
- Most children with eczema have colonization of the skin with Staphylococcus and this is not necessarily causing the flare of their skin condition
- Guidance NG190 sets out that routine skin swabs are not indicated but to do one if not responding to treatment
- Consider topical antibiotic treatment if in a small area
- If systemically unwell or rapid flare of eczema consider oral antibiotics
- Use oral flucloxacillin as the first-line and Clarithromycin if unable to administer flucloxacillin (palatability).
- In penicillin allergy use Clarithromycin/Erythromycin. Do not prescribe topical antibiotics unless the infected area is extremely localized as there is widespread resistance when used routinely. Admit for IV treatment if systemically unwell or concerns of Herpes Simplex infection. Take viral and bacterial swabs (do not delay treatment if concerns of HSV)

Table of Medication from NG190 NICE guideline

Children and young people aged from 1 month to under 18 years

Treatment	Antibiotic, dosage and course length
For secondary bacterial infection of eczema in people who are not systemically unwell	Do not routinely offer either a topical or oral antibiotic
First-choice topical if a topical antibiotic is appropriate (see prescribing considerations on the first page of this summary)	**Fusidic acid 2%:** Apply three times a day for 5 to 7 days For localised infections only. Extended or recurrent use may increase the risk of developing antimicrobial resistance.
First-choice oral if an oral antibiotic is appropriate (see prescribing considerations on the first page of this summary)	**Flucloxacillin** (oral solution or capsules): **1 month to 1 year**: 62.5 mg to 125 mg four times a day for 5 to 7 days **2 to 9 years**: 125 mg to 250 mg four times a day for 5 to 7 days **10 to 17 years**: 250 mg to 500 mg four times a day for 5 to 7 days
Alternative oral antibiotic for penicillin allergy or if flucloxacillin is unsuitable (for people who are not pregnant)	**Clarithromycin:** **1 month to 11 years:** under 8 kg: 7.5 mg/kg twice a day for 5 to 7 days 8 to 11 kg: 62.5 mg twice a day for 5 to 7 days 12 to 19 kg: 125 mg twice a day for 5 to 7 days 20 to 29 kg: 187.5 mg twice a day for 5 to 7 days 30 to 40 kg: 250 mg twice a day for 5 to 7 days **12 to 17 years:** 250 mg twice a day for 5 to 7 days. The dosage can be increased to 500 mg twice a day for severe infections
Alternative oral antibiotic for penicillin allergy in pregnancy	**Erythromycin:** **8 to 17 years**: 250 mg to 500 mg four times a day for 5 to 7 days Erythromycin is preferred if a macrolide is needed in pregnancy, for example, if there is true penicillin allergy and the benefits of antibiotic treatment outweigh the harms. See the Medicines and Healthcare products Regulatory Agency (MHRA) Public Assessment Report on the safety of macrolide antibiotics in pregnancy.
If meticillin-resistant *Staphylococcus aureus* is suspected or confirmed	Consult a microbiologist

a) Staphylococcal skin infection in eczema (weeping/ yellow crust appearance)

Viral Infections: think about eczema herpeticum in any child with a vesicular rash on a background of eczema – will require admission for IV acyclovir. The child will most likely also need iv co-amoxiclav (discuss with Consultant). Stop topical calcineurin inhibitors and steroids for a minimum of 24 hours and discuss with Dermatology.

b) Eczema herpeticum –punched out lesions –requires emergency admission and IV treatment

Referral for follow up to Paediatric Allergy or Dermatology:

1. Refractory cases despite optimal topical treatment
2. Children who presented with moderate/ severe eczema under the age of 6 months are more likely to have a food trigger for their eczema
3. Psychological upset with poor sleep
4. Recurrent secondary infections

Checklist before discharge from A&E/ Ward
All leaflets can be downloaded under "Eczema Attachments"

☐	Provide parent with information on what eczema is, possible triggers and that it is NOT infectious GIVE ECZEMA INFORMATION LEAFLET
☐	Give written ECZEMA ACTION PLAN
☐	GIVE Leaflets as appropriate: Emollient factsheet Steroid factsheet SWIMMING Cradle Cap
☐	Explain how to identify infection
☐	Lack of evidence of complementary therapies

a) **Soap Substitutes (some patients sensitized to lanolin)**

Soap Sub	Light	Less Greasy	Greasy	Very Greasy
(Aqueous Cream) Not to be used as moisturiser	Aveeno cream	Cetraben cream	Oily cream (lanolin)	Epaderm
Dermol 500 lotion		Cetomacrogol cream	Doublebase	50/50 WSP/LP
(Benzalkonium choloride 0.1%)		Diprobase cream	Epaderm cream	Diprobase ointment
Doublebase emollient wash gel		E45 (lanolin) Unguentum M		Emulsifying ointment
		Oilatum Cream		Hydromol ointment
		Hydromol cream		

Emollient and barrier preparations

Preparation	Proposed change	Additional information
50/50 Liquid Paraffin/White Soft Paraffin ointment	Keep on formulary as Ist line very greasy ointment	Surrey CCGs' Ist line very greasy ointment. Note it is highly flammable-advise parents
White soft paraffin	Keep on formulary as 2nd line very greasy ointment	Surrey CCGs' 2nd line very greasy ointment.
Zeroderm ointment	Add to formulary as 1st line greasy ointment. Remove Epaderm ointment (similar product)	Surrey CCGs' 1st line greasy ointment. • Similar to but cheaper than Epaderm ointment
Emulsifying Ointment BP	Keep on formulary as 2nd line greasy ointment	Surrey CCGs' 2nd line greasy ointment.

Aquamax cream	Add to formulary as 1st line cream.	Surrey CCGs' 1st line cream. • Higher emollient content than Aqueous Cream • Does not contain sodium lauryl sulphate • Similar in effect to Aqueous Cream and Diprobase cream • Diprobase cream to be kept on formulary for patients for whom a pump dispenser would be more appropriate
Cetraben cream	Currently on formulary. Restrict to dermatology.	Not recommended for prescribing by Surrey CCGs Requested to keep on formulary by ASPH dermatologists.
Dermol 500 lotion	Add to formulary. Restrict to dermatology.	Currently no antibacterial-containing emollient preparation on formulary
Hydromol (2.5% sodium pyrrolidone carboxylate) cream	Keep on formulary. Restrict to dermatology.	
(Liquid paraffin 13.8%)		
Unguentum M	Add to formulary.	Surrey CCGs' 1st line rich cream.
Zerobase cream	Add to formulary.	Surrey CCGs' 2nd line rich cream emollient product. Doublebase to remain on formulary as an alternative to Zerodouble for patients who are allergic to acrylates. This will also be a useful choice for patients who are unable to use the "squeezy" Zerodouble bottle (restricted to dermatology)

Note that Zeroguent contraindicated if Nut or soya allergy.

b) **Bath Additives**

A Cochrane review identified a small number of diverse studies and found no benefit for antibacterial soaps, bath additives or topical antibiotics/antiseptics in the treatment of atopic eczema. 2

Normal	Antimicrobial
Oilatum fragrance free	Emulsiderm (benzalkonium chloride)
Diprobath	Oilatum plus (benzalkonium chloride/triclosan)
Cetraben bath emollient	Dermol 600 (benzalkonium chloride)
Balneum (Contains Soya)	Dermol 200 shower lotion
Alpha Keri (fragrance)	
Hydromol	
Aveeno bath oil (fragrance)	
Oilatum shower gel	

c) **Topical steroids (as per BNF)**

Mild	Moderate	Potent	Very Potent (Specialist only)
Hydrocortisone 0.5%	Eumovate	Betnovate	Dermovate
Hydrocortisone 1%	Betnovate	Elocon	Nerisone oily
Hydrocortisone 2.5%	RD	Locoid	cream (L)

Synalar 1:10 cream	Modrasone	Cutivate	
Daktacort (1%hydrocortisone/mico nazole)	Trimovate (eumovate/ nystatin)	Diprosone	
Canestan HC (1%hydrocortisone/clotri mazole)		Fucibet (betnovate/ fusidic acid)	
Timodine (0.5% hydrocortisone/fusidic acid) Fucidin H 1%			
Hydrocortisone/fusidic acid			
Vioform-HC (1%hydrocortisone,3% Clioquinol)			

d) **Topical Calcineurin inhibitors (Specialist only)**

Mild	**Moderate**
Pimecrolimus (Elidel) 0.03%	Pimecrolimus 0.1%
Tacrolimus (Protopic) 0.03%	Tacrolimus 0.1%

Topical tacrolimus should be considered, in patients aged two years and older, for short term, intermittent treatment of moderate to severe atopic eczema that has not been controlled by topical corticosteroids or where there is a serious risk of important adverse effects from further topical corticosteroid use, particularly skin atrophy.

As a precaution against the possibility that the normal immunological response to infection may be suppressed, topical calcineurin inhibitors should not be applied to skin which appears actively infected

Useful Links

- National Eczema Society www.eczema.org
- www.Itchysneezywheezy.co.uk
- For advice and support on the impact eczema has on your child's life contact: Changing Faces www.changingfaces.org.uk
- For advice and support of bullied children contact: Kidscape www.kidscape.org.uk
- E-learning for parents https://eczemacareonline.org.uk/en/landing-page-my-child

References:

- SIGN 125 Management of atopic dermatitis
- NICE clinical guideline 57/NG190
- National Eczema Society www.eczema.org

- **Document Checklist**

To be completed (electronically) and attached to any document which guides practice when submitted to the appropriate committee for approval or ratification.

Title of the document:
Policy (document) Author:
Executive Director:

		Yes/No/ Unsure/NA	Comments
1.	**Title**		
	Is the title clear and unambiguous?	**Yes**	
	Is it clear whether the document is a guideline, policy, protocol or standard?	**Yes**	
2.	**Scope/Purpose**		
	Is the target population clear and unambiguous?	**Yes**	
	Is the purpose of the document clear?		
	Are the intended outcomes described?	**Yes**	
	Are the statements clear and unambiguous?		
3.	**Development Process**		
	Is there evidence of engagement with stakeholders and users?		

		Yes/No/ Unsure/NA	Comments
	Who was engaged in a review of the document (list committees/ individuals)?		
	Has the policy template been followed (i.e. is the format correct)?		
4.	**Evidence Base**		
	Is the type of evidence to support the document identified explicitly?		**NICE 57, NG190 (2021)**
	Are local/organisational supporting documents referenced?	**Yes**	
5.	**Approval**		
	Does the document identify which committee/group will approve/ratify it?	**Yes**	
	If appropriate, have the joint human resources/staff side committee (or equivalent) approved the document?	**Yes**	
6.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?		
	Does the plan include the necessary training/support to ensure compliance?	**Yes**	
7.	**Process for Monitoring Compliance**		
	Are there measurable standards or KPIs to support monitoring compliance of the document?	**Yes**	
8.	**Review Date**		
	Is the review date identified and is this acceptable?	**Yes**	
9.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for coordinating the dissemination, implementation and review of the documentation?		
10.	**Equality Impact Assessment (EIA)**	**Yes**	**Included darker skin recognition of eczema**
	Has a suitable EIA been completed?		

Committee Approval (Neonatal Guidelines Committee)			
If the committee is happy to approve this document, please complete the section below, date it and return it to the Policy (document) Owner			
Name of Chair		**Date**	**16/4/21**

Ratification by Management Executive (if appropriate)
If the Management Executive is happy to ratify this document, please complete the date of ratification below and advise the Policy (document) Owner
Date: n/a