Childhood Eczema Flowchart

EXCLUSIONS
- Over 15 years of age
- Contact dermatitis
- Seborrhoeic Eczema
- Mild and Moderate Eczema

MODERATE
Every day Management
- Refer Guidelines

SEVERE
Every day Management
- Refer Guidelines

Assess Eczema Severity

Eczema Flare Up
- Continue Everyday Management
- Topical Steroids (Refer Guidelines)

Infected Eczema
- add oral antibiotics

Non-infected eczema

REVIEW

Not responding to treatment.
Consider CPO

CPO FUNDED VISITS

No Improvement
- Refer Paediatrics HBDHB

Responding to treatment.

Continue Everyday Management
Childhood Eczema Pathway

Eczema is a dry, itchy, inflammatory, chronic skin disease that typically begins in early childhood. The onset of eczema is usually before 12 months of age and it follows a remitting and relapsing course. Most children will "grow out of" eczema in childhood. There is no cure for eczema, however if treated and managed well the disease has less impact on daily living and is less likely to have a negative effect on quality of life for the patient and family.

This Pathway should be used only for patients in which it will influence the patient management. It is to be used as a guide and doesn't replace clinical judgement.

Qualifying Patients for CPO Funding

CPO is intended to reduce acute admissions to secondary care. Refer to eczema flowchart Funding is available for:

Children under 15 years with
- infected/flared eczema that is NOT responding to treatment OR
- SEVERE eczema requiring intensive management/ clinical input.

Not included under CPO:

Assessment and management of:
- contact dermatitis/eczema - includes irritant and allergic contact dermatitis
- seborrhoeic eczema
- Mild and Moderate Eczema
- Everyday management of eczema

Consider differential diagnoses

Differential diagnoses include:
- seborrhoeic dermatitis
- scabies and other infestations
- contact dermatitis - allergic and irritant
- psoriasis
- fungal infection

RED FLAGS

Refer to hospital for admission for:

Eczema herpeticum
- rapidly worsening, painful eczema (e.g. less than 12 hours)
- uniform, punched out erosions
- often associated with fever and malaise

Severe, infected eczema
- fever and/or
- severe, widespread pustules or weeping lesions

Under 4 months old +
- Weight loss
- Diarrhoea and vomiting

Contact on-call Paediatric Registrar at HBDHB via switchboard 06 8788109.
Eczema Characteristics

Consider using the Patient Orientated Eczema Measure (POEM) to measure severity of eczema
https://www.nottingham.ac.uk/research/groups/cebd/documents/methodological-resources/poem-for-proxy-completion.pdf

<table>
<thead>
<tr>
<th>Eczema</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild eczema</td>
<td>• areas of dry skin</td>
</tr>
<tr>
<td></td>
<td>• infrequent itching</td>
</tr>
<tr>
<td></td>
<td>• small localised areas of redness</td>
</tr>
<tr>
<td></td>
<td>• little to no impact on everyday activities and sleep</td>
</tr>
<tr>
<td>Moderate eczema</td>
<td>• areas of dry skin</td>
</tr>
<tr>
<td></td>
<td>• frequent itching</td>
</tr>
<tr>
<td></td>
<td>• areas of redness involving joint flexor or extensor surfaces with or without:</td>
</tr>
<tr>
<td></td>
<td>• excoriation</td>
</tr>
<tr>
<td></td>
<td>• skin thickening</td>
</tr>
<tr>
<td></td>
<td>• occasional sleep disturbances</td>
</tr>
<tr>
<td>Severe eczema</td>
<td>• widespread dry skin</td>
</tr>
<tr>
<td></td>
<td>• intense/constant itching</td>
</tr>
<tr>
<td></td>
<td>• widespread redness with or without:</td>
</tr>
<tr>
<td></td>
<td>• excoriation</td>
</tr>
<tr>
<td></td>
<td>• skin thickening</td>
</tr>
<tr>
<td></td>
<td>• cracking</td>
</tr>
<tr>
<td></td>
<td>• sleep disturbance</td>
</tr>
</tbody>
</table>

Paediatric Referral

Refer to Paediatrics if not responding or

- Concerns regarding food intolerance/allergy contributing to eczema
- Child on severely restricted diet
- Child with eczema and type 1 food allergy (immediate reaction with urticaria)

Referral to include

- History
- Height and weight
- Present emollient regime
- Steroid creams being used
- Antibiotic use in last 6 months
- Present weekly bath management regime
- Psycho-social issues e.g. effect on sleep, days off school, limitation of activities
Everyday Management Plan
For Mild, Moderate and Severe Eczema (Not CPO)

Baths/Showering
Bathing:
- check with family that they have a bath
- bathing is recommended once daily, or twice daily during acute flares
- bath needs to be warm (not hot) and for no more than 10-15 minutes
- avoid soap and shampoo
- emollient can be used as a soap substitute
- antiseptic bath twice per week

Antiseptic bathing:
- add normal household bleach e.g. Budget brand regular bleach (Pak n Save, New World) to bath
- use a full cup (250mls) for 20cm deep adult bath
- use 2mls/litre for a baby bath
- if using Home Brand bleach (Countdown), half the dosage
- do NOT use commercial bleach. We do not recommend Janola as the fragrance can cause further irritation
- use antiseptic baths twice per week
- the scalp and face should also be washed whilst bathing
- this does have a tendency to dry the skin so should not be used every day
Oilatum Plus or QV Flare up are good antiseptic bath oils. However, they are not funded.

Emollients
Emollients are essential:
- they should be applied several times a day to keep the skin well hydrated even when the eczema is well controlled
- ensure adequate quantities are prescribed (at least 500g per fortnight)
- funded emollients include:
  - fatty cream
  - sorbolene + 10% glycerine
  - cetomacrogol
- pump packs (sorbolene) are preferable due to ease of dispensing and prevention of contamination
- if an emollient irritates, then an alternative should be offered
- aqueous cream and emulsifying ointment should not be prescribed as leave-on emollients as they contain sodium laurel sulphate (SLS) however they can be used as a soap substitute
- SLS can cause chronic irritation
- SLS-free aqueous cream is available but not funded

Helpful Hints
Itch
The Itch can be difficult to control, but adequate use of emollients will relieve
Occasional use of antihistamines may be appropriate.
- First choice is cetirizine for a two-four week trial. If no change, do not continue
- Promethazine should be reserved for severe itch for one or two nights. Caution in children under two years. Do not continue long term.
Avoid environmental triggers
These include:
• Heat
• Viruses
• soap
• shampoo or bubbles in the bath
• fabric softener
• perfumed washing powder
Wool against the skin, including merino
Nails should be cut short and cotton clothes should be worn.
Some children might be triggered by:
• pollen, grass or trees
• pet dander
• house dust mite

Infected Eczema
Check they are following everyday management plan, particularly with regards to bleach baths. The usual organism is Staphylococcus aureus. Swabs are usually unnecessary unless poor response to treatment or chronic, severe patient. See red flags with regards to eczema herpeticum.
Consider infection if:
• pustules
• weeping
• crusted
• sudden generalised flare of eczema
• increased itch

Oral Antibiotics
Oral antibiotics in order of preference:

<table>
<thead>
<tr>
<th>1. Flucloxacillin orally:</th>
<th>250mg (under 30kg) per dose. 500mg (over 30kg) per dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>four times daily for seven days</td>
</tr>
<tr>
<td></td>
<td>Use if able to take capsules</td>
</tr>
<tr>
<td>2. Cephalexin orally:</td>
<td>25mg/kg bd for seven days</td>
</tr>
<tr>
<td></td>
<td>liquid if cannot swallow flucloxacillin tablets</td>
</tr>
<tr>
<td>3. Erythromycin orally:</td>
<td>20mg/kg bd (max 500mg/dose)</td>
</tr>
<tr>
<td></td>
<td>use if penicillin-allergic</td>
</tr>
</tbody>
</table>

Do not give IV antibiotics in the community to children with eczema.

Consider MRSA
Consider MRSA if not responding or with strong risk factors, e.g.:
• frequent courses of antibiotics for eczema
• previous MRSA
Prescribe co-trimoxazole 1.5-3mg/kg bd. Max 80-160mg per dose.
Topical Steroids:

- apply adequate topical steroids to affected areas once per day (maximum twice).
- reassure parents that topical steroids are safe when used correctly
- apply a thin layer (not sparingly)
- use lowest strength required to clear red and itchy eczema.
- use appropriate strength corticosteroid for body site and severity. Sites and ages usually require these potencies
- use of a stronger preparation for short bursts is generally preferable to ongoing use of a milder preparation
- reassess in 1-2 weeks. Increase potency if not effective
- topical steroids should not be used every day for weeks of months. If not responding, needs review
- steroid side effects on the skin are rarely seen in children. They are more likely to be seen with use of very potent preparation use under occlusion (including in the flexures) or with continuous use for months at a time (even of mild preparations)

**Clobetasol propionate 0.05% (Dermol) and oral steroids should never be used in paediatric eczema.**

**Potency of Topical Corticosteroid Creams**

<table>
<thead>
<tr>
<th>Steroid</th>
<th>Relative Potency</th>
<th>Potency</th>
<th>Fully Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocortisone (1%)</td>
<td>1</td>
<td>Mild</td>
<td>Yes</td>
</tr>
<tr>
<td>Eumovate (Clobetasone butyrate 0.05%)</td>
<td>25</td>
<td>Moderate</td>
<td>No</td>
</tr>
<tr>
<td>Aristocort (Triamcinolone acetonide 0.02%)</td>
<td>5</td>
<td>Moderate</td>
<td>Yes</td>
</tr>
<tr>
<td>Advantan (Methylprednisolone aceponate 0.1%)</td>
<td>100</td>
<td>Potent</td>
<td>Yes</td>
</tr>
<tr>
<td>Locoid® (Hydrocortisone butyrate 0.1%)</td>
<td>100</td>
<td>Potent</td>
<td>Yes</td>
</tr>
<tr>
<td>Beta® (Betamethasone valerate 0.1%)</td>
<td>100</td>
<td>Potent</td>
<td>Yes</td>
</tr>
<tr>
<td>Diprosone (Betamethasone dipropionate 0.05%)</td>
<td>100</td>
<td>Potent</td>
<td>No</td>
</tr>
<tr>
<td>Elocon® (Mometasone furoate 0.1%)</td>
<td>175</td>
<td>Potent</td>
<td>Yes</td>
</tr>
<tr>
<td>Dermol® (Clobetasol propionate 0.05%)</td>
<td>600</td>
<td>Very Potent</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Eczema Management Plan Handout**


See below. Can be printed and folded into a brochure as a take home plan

*For further information regarding Cellulitis refer to: Eczema in Children Clinical Pathway on Map of Medicine.*
Handy Hints
• Wash your hands before and after applying creams.
• Let your child help to apply their own creams.
• Choose products without added fragrance and perfume.
• Keep your child’s fingernails and toenails clean, filed and short.
• Don’t dress your child too warmly and keep the bedroom cool.
• Avoid putting scratchy fabrics next to their skin.
• Damp dust and vacuum the house regularly.
• Chlorinated swimming pools may worsen some children’s eczema. Apply moisturiser before swimming, shower afterwards and apply moisturiser again. Some children prefer saltwater pools or the sea.
• The best sun protection is shade and clothing. Sun creams can be used on areas without eczema. Choose one for sensitive skins with an SPF 30 or more.
• Videos demonstrating eczema care
  www.kidshealth.org.nz/eczema

Skin care plan
Moisturise, moisturise, moisturise
• Apply lots of moisturiser to the whole body many times during the day. Use even when there is no eczema.

Steroids
• Apply steroid cream once a day to areas of itchy red active eczema.
  • Face and neck: _____________________________
  • Body: ___________________________________
• Stop steroids when redness and itch has gone. Start if eczema returns. See your doctor or nurse if steroids are not working.

Bath
• Do not use soap. Use a soap-free wash.
  __________________________________________
• Antiseptic baths twice a week if infection is a problem.

Other
_____________________________________________
_____________________________________________
_____________________________________________

Doctor/nurse contact number:
__________________________________________

Caring for your child’s eczema

The Eczema Clinical Network of
The Paediatric Society of New Zealand
What is eczema
Skin with active eczema becomes dry, red, itchy and inflamed. It can easily get infected. Eczema can affect any part of the body and can change a lot from day to day. Eczema can usually be controlled by good skin care and avoiding triggers. The treatment your child needs will change with time. A few children still have bad eczema despite good care and need specialist review.

Triggers
Skin with eczema is more likely to be irritated by things in the environment. These triggers may include:
• Soap and detergent
• Infections
• Dust, house dust mites, pet fur
• Overheating
Food allergy can occur in children with eczema, however removing foods usually does not improve eczema. See your doctor or nurse for assessment if you are concerned.

Infection
Infection is the most common cause of flares of eczema. Infected eczema may be bright red, weeping and crusted. See your doctor or nurse for antibiotic treatment. The cold sore virus can cause severe painful infection – avoid contact with cold sores. See your doctor if infection occurs.

Skin care
Good skin care with appropriate creams and ointments is very important.

Baths
Bath every day in warm (not hot) water for up to 10 minutes. Twice a day during flares. DO NOT USE SOAP. Use a soap substitute, moisturiser or soap-free wash and rinse well. A bath oil can help moisturise the skin. Shampoo should be rinsed off over a basin or at the end of the bath.
After the bath pat the skin dry, do not rub. Do not share towels. Now apply creams. Antiseptic baths twice a week can help prevent infection and improve eczema.
• Bleach baths: add 2ml plain bleach (2% hypochlorite Budget Household Bleach) to 1L of bathwater. This is about 1 cup to a 20cm deep adult bath, 4 caps to a full baby’s bath. Rinse off with water afterwards. (Janola now has detergent so is not recommended)
• Antiseptic bath oils (QV Flare up) can be used instead but are not funded. Follow the instructions.

Moisturisers (Emollients)
Moisturisers should be applied many times a day – the more often the better. Apply generously all over and smooth in the direction of hair growth until it has soaked in. Regular use of moisturisers reduces the need for steroid creams. Aim to use a 500g tub or more every 2-4 weeks, and a lot more during flares. Do not put your hands into tubs of cream as this can introduce infection. Instead spoon out the amount you need onto a clean dish or tissue.

Steroid creams
Apply steroid creams once a day to all areas with active eczema - inflamed, red and itchy skin. Don’t wait for the eczema to get really bad before you use steroids. Eczema needs steroid creams to improve – these are very safe and effective when used correctly. Apply steroid creams immediately after the bath, before or after moisturising. Apply a thin layer to make the skin shine. When eczema is not active (not red and itchy) stop using the steroid cream and continue to moisturise. Restart steroids whenever eczema comes back.

See your doctor/nurse
• If eczema is infected – weeping, yellow crusts, painful
• If the eczema doesn’t go away with using steroids everyday for 2 weeks
• If steroids creams are needed most days of most weeks
• If your child is not sleeping or missing school because of eczema