Background

Eczema is a chronic, relapsing, inflammatory, itchy skin condition. Treatment of an individual patient should be modified according to need and circumstances, and may involve a multi-disciplinary approach.

Diagnosis and Assessment

1) Diagnosis
Must have an itchy skin condition plus 3 or more of the following:
- History of skin crease involvement
- Personal or family history of atopic illness
- Tendency towards dry skin
- Visible flexural eczema
- Onset under the age of 2yrs

“If it doesn’t itch it is unlikely to be eczema” (BAD, 2010)

2) Assess severity
Determine whether Mild, Moderate or Severe, and direct treatment as described.

MILD: Areas of dry skin + infrequent itch (+/- reddening)
MODERATE: Areas of dry skin + frequent itch + reddening (+/- areas of excoriation / thickened skin)
SEVERE: Large areas of dry skin + incessant itch + reddening (+/- areas of excoriation / thickened skin / cracking / oozing). CONSIDER SUPERADDED INFECTION (see 2a)

Consider the impact Eczema has on a child’s and carer’s quality of life.
- Effect on school life (?Missed days)
- Concerns about appearance
- Poor sleep due to itching
- Low mood

Can be quantified using the Children’s Dermatology Life Quality index or the Patient-Oriented Eczema Measure (POEM).
2a) Consider superadded infection

Bacterial infection is suggested by:
- Crusting, weeping, pustule formation
- Surrounding cellulitis with erythema of otherwise normal skin
- A sudden (over days) worsening of skin condition

Eczema Herpeticum (Herpes simplex infection), requires RAPID diagnosis and PROMPT treatment. This should be considered:
- Rapidly worsening, painful eczema (over hours to short days)
- Clusters of vesicles
- Punched-out erosions / depressed ulcers, usually 1-3 mm.
- Consider other viral causes e.g. molluscum, VZV, verruca vulgaris

See 4a) for Management of infected Eczema.

Eczema herpeticum  Bacterial (Staph aureus) infection

Management

3) Every day treatments

AVOID triggers:
- Scratching - advise rubbing in circular motions with fingers, keep fingernails short
- Extremes in temperature
- Irritating clothing (inc. wools, and synthetic fibres)
- Soaps and detergents (replace with emollients)
Focus on keeping skin hydrated at all times with use of EMOLLIENTS:

- Apply LIBERALLY and FREQUENTLY (every 4 hrs or at least 3 - 4 times daily)
- Use a cream base for wet / weeping skin, and an ointment base for dry eczema
- Prescribe in large quantities (250 – 500g weekly). Emollient use should exceed steroid use by 10:1
- Leave 15 – 20 minutes between application of emollients and other skin products. Smooth on skin rather than rubbing in.
- Use of ‘pump’ administration to lower risk of contamination
- Use emollients as soap substitute, in baths and for shampooing

See the BSUH joint primary care formulary for prescribing options

4) Management of flares

Topical steroids provide symptomatic relief and are safe in the short term (should be limited to 1 – 2 weeks in acute flares). See below for recommended drugs.

MILD Eczema management
- Generous emollient use (as above)
- Mild topical steroids to affected areas
  Steroids to continue for 48hrs after resolution of redness

MODERATE Eczema management
- Generous emollient use (as above)
- Moderate potency topical steroids 1 – 2 times daily to affected areas. Continue mild topical steroids on face, flexures, genitals.
- Aim for 1 – 2 weeks maximum duration of use.
- Consider superadded infection, and use of topical antibiotics.
- Potent steroids in < 12 months of age should be guided by Dermatology.
- If no resolution within 7-14 days, should consider superadded infection

SEVERE Eczema management
- Generous emollient use (as above)
- Potent corticosteroids to affected areas (including broken skin) for max 5 days.
- Consider increasing to moderate potency steroids for delicate areas
- Consider super-added infection, and swab any oozing areas (see 4a)
- Wet-wraps (consider starting ASAP) – may require admission for QDS application by trained staff. See ‘useful resources’ section for further advice.
- Sedating anti-histamines may be indicated if sleep is significantly disturbed.
- SEEK URGENT DERMATOLOGY OPINION / GUIDANCE – particularly in regards to consideration of topical tacrolimus or pimecrolimus.
Recommended topical steroids

<table>
<thead>
<tr>
<th>Potency</th>
<th>Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>Hydrocortisone 1%</td>
</tr>
<tr>
<td>Moderate</td>
<td>Betamethasone valerate 0.025% (Betnovate–RD)</td>
</tr>
<tr>
<td></td>
<td>Clobetasone Butyrate 0.05% (Eumovate)</td>
</tr>
<tr>
<td>Potent</td>
<td>Betamethasone valerate 0.1% (Betnovate)</td>
</tr>
<tr>
<td></td>
<td>Mometasone fumarate 0.1% (Elocon)</td>
</tr>
</tbody>
</table>

Use cream base for wet / weeping skin or ointment for dry eczema. One fingertip unit (FTU) = 0.5g steroid

4a) Management of superadded infection – NB. topical steroids can be applied to broken skin / infected areas.

If evidence of bacterial infection (see 2a):
- **Localised areas:** Consider treatment with topical antibiotics (+/- steroid) (1% Hydrocortisone / 2% Fucidic acid topical BD). Use for no longer than 2 weeks.
- **Widespread areas:** give oral antibiotics (Flucloxacillin for 1 week, Clarithromycin if penicillin allergy). Give IV antibiotics if evidence of sepsis (fever, malaise).

If evidence of herpes simplex infection (see 2a):
- If localised, treat with oral aciclovir.
- **If eczema herpeticum is suspected, start IV aciclovir immediately.**
- Consider URGENT Dermatology opinion in all cases of suspected Eczema herpeticum.
- Refer for Ophthalmology opinion if any periorbital involvement.
- Consider concurrent bacterial involvement, and potential for antibiotics in addition to Aciclovir.
- Swab lesions and send for virology.

5) Referral pathways

For urgent issues, contact Dermatology Registrar via switchboard in working hours. Referral letter to Dermatology Consultants, via secretaries
- Dermatology secretaries: ext 2204 (RACH) or at BGH (01273) 665019
- Dermatology CNS (BGH) ext 5074 or 5035
- Nurse led eczema education programme via bsuh.dermatology@nhs.net
Useful resources

PDF guides for wet dressings and advice re: cool compressing from RCH Melbourne:

Wet_dressings_ecze.pdf
Wet_dressings_A3.pdf

Some equipment for wet dressings may be available from level 9 or outpatients department. Ask the senior nurse or CED Consultant for advice.

Cool compressing (for immediate relief of itch)
- Apply to itchy areas for 5 -10 minutes, apply a moisturizer post compressing
- These are also the wet dressing for the face, and are best applied while awake and when feeding

NICE guidelines: CG57: Atopic Eczema in Children: Management of atopic eczema in children from birth up to the age of 12 years: https://www.nice.org.uk/guidance/CG57

Royal Children's Hospital Melbourne Eczema guidelines:
http://www.rch.org.au/rchcpg/hospital_clinical_guideline_index/Eczema_management/


BSUH Dermatology Department (Secretary ext 5019).
http://www-bsuh.nhs.uk/departments/dermatology-opd/