Eczema

Key facts:

- Eczema (also known as **atopic eczema or atopic dermatitis**) is a common, chronic, relapsing, inflammatory skin disorder.
- There are different subtypes of eczema – see page 3.
- It is key that people/parents of children with eczema understand and can **self-manage** their condition. There are evidence-based resources to help.
- There is an unjustified fear of TOPICAL steroids among health care professionals! **When used correctly, the benefits of topical steroid outweigh the harms**, including in children. It is important to start topical steroids early in a flare and to use adequate potency and duration.
- Eczema most commonly presents in childhood but **about one third of all new cases arise in adults.**
- Most children will grow out of eczema: ~65% children eczema has gone by age 7y; 74% by age 16y.

Clinical features of eczema

There is a quite a lot of variation in the appearance of eczema related to the presence/ absence of infection, the age of the person, their ethnic origin and the treatments used

- Often a personal/family history of atopy (eczema, allergic rhinitis, asthma)
- Itch and dry, scaly skin
- Poorly-defined areas of darkening/redness
- The face is a common site in infants & extensor surfaces
- Typically mainly flexural involvement as get older (elbow/knee creases, neck)
- In black/Asian skin, often on extensor surfaces with follicular involvement +/- oedema
- Quality of life and sleep may be severely affected!

Severity of eczema

Mild:	Some areas of dry skin, infrequent itching +/- small areas of inflamed skin, monior impact on life
Moderate:	Some areas of dry skin, frequent itching, inflammation +/- excoriations and skin thickening
Severe:	Widespread areas dry skin, incessant itching, inflammation, excoriations, skin thickening, bleeding, oozing, cracking, alteration of pigmentation. Severe limitations everyday activities, psychosocial function and sleep

Differential diagnosis

Chronic plaque psoriasis
Well-demarcated, bright red plaques covered by silvery-white scales affecting any body site, usually symmetrical. Especially found on scalp and extensor surfaces of limbs

Tinea (fungal skin infection) could be mistaken for discoid eczema (p3).
If unsure, discuss with consultant.
Safer to treat first with antifungal cream (rather than topical steroid) and then reassess.

Clinical assessment

History – holistic approach is essential!

- Age of onset
- Family /social history – atopy, smoking, pets/animals
- Growth and development
- Distribution and symptoms
- Impact on quality of life for patient and caregivers (sleep, schooling, family dynamics, mood)
- What treatments are being and have been used, how long for, what helped and what did not
- Expectations and specific questions

Examination

- Vitals and general appearance
- Child – weight/height ?failure to thrive, ?signs of rickets
- **Check all of skin** including nails, scalp, nappy area, between toes
- Distribution and severity of eczema ?signs infection

Investigations - if atypical presentation check HIV status

Discussion with consultant:

- Systemically unwell
- Severe eczema
- Possible eczema herpeticum
- Suspicion of secondary bacterial infection in a child
- Widespread secondary bacterial infection in an adult
- Recurrent secondary infection
- Diagnostic uncertainty
- Poor response to standard treatment
- Steroid atrophy or concerns regarding the amount of topical steroids being used
- Possible contact allergic dermatitis

Management of eczema – ABCD

A = ADVICE & AVOID TRIGGERS

- **Self management is key!** Discuss the condition (chronic, recurrent, treatable, often resolves in children), explain the A,B,C of treatment and danger signs. Show online information if access to internet and happy with English: https://eczemacareonline.org.uk; Support group: https://eczemasocietyofkenya.or.ke
  Give written information and a printed management plan if possible
- AVOID TRIGGERS: *Common* - Soap and detergents, overheating (do not overdress), rough clothing (avoid wool), stress, skin infection, cigarette smoke; *In some people:* animal fur/hair, house-dust mite (e.g. worse facial eczema on waking), food, pollens. Keep nails short!
- At review - always check use of emollients, understanding of condition and management plan

B = BLAND MOISTURISERS/ EMOLLIENTS (fragrance & colouring free)

- Emollients are **absolutely essential** and without them it is not possible to manage eczema effectively
- The more emollients are used, the less topical steroids are needed
- **Ideally applied 3-4 times daily, so will need large quantities** (250-500g/week) – it is therefore essential to find an emollient which the patient/family can afford and is comfortable with!
- Apply over **entire body** (not just affected areas) in **single strokes, in direction of hair growth;** warn that it may sting for 2-3d before soothing the skin; explain to **continue with emollient (at least once per day), even when eczema is under control**
- **Type of emollient** (patient choice!)**:**
  - Specific emollients bought from a pharmacy e.g. Epimax, Aveeno, cetaphil, zerobase, epimol cream…. BUT expensive!
  - Emulsifying ointment available from KH pharmacy very useful if severe dryness – ointments often less well tolerated than creams but less likely to cause contact dermatitis as they don't contain preservatives; good as soap substitute
  - Petroleum jelly is an affordable option (can cause folliculitis – do not rub in, but apply in direction of hair growth!)
  - Other cheaper alternatives to try are: sunflower oil, coconut oil, cooking vegetable fat (refined palm oil) e.g. Kimbo.
  - Aqueous cream should not be used
- Ointments in tubs can become cross infected so advise to use a spoon rather than hands to scoop out the ointment
- **Order of application:** if top. steroids are being used, apply emollient first & allow to dry for 20min, then apply top. steroid
- **Bathing/showers:** no need for specific products. Daily short (5 min) showers/baths in lukewarm water help to remove crusts and scales. Use **same emollient as usual as a soap substitute** (or unfragranced baby oil/coconut/sunflower oil). Pat off excessive water after showering/bathing (do not rub dry) – then apply emollient over entire body while still slightly wet

C = CONTROL INFLAMMATION

- Match the potency of topical steroid to the severity of eczema and anatomical site. *It is more effective and safer to 'hit hard' using more potent steroids for a few days that it is to use less potent steroids for a longer period of time*

Topical steroid potency			
Mild	**Moderate** (2x stronger)	**Potent** (10x stronger)	**Very potent** (50x stronger)
*Hydrocortisone ACETATE 1%	Betamethasone 0.025% (in *extraderm* cream*) Alcometasone Clobet**asone** (Eumovate)	*Betamethasone 0.1% Hydrocortisone BUTYRATE 0.1% Fluticasone Mometasone	Clobet**asol** 0.05% (Dermovate) * available at AIC Kijabe Hospital pharmacy
Face, neck (avoid around eyes); mild eczema elsewhere	For moderate eczema; can use on face of adult for short periods if necessary	Moderate/severe eczema on trunk/limbs adult Can use on child if severe eczema	Occasionally necessary e.g. pompholyx Discuss with consultant

- Creams generally less potent and more chemicals than ointments, but often preferred. Will also depend on availability.
- **Do not** use oral steroids! **Do not** prescribe steroid/antibiotic combination creams! **Do not** use topical antihistamines!

How to use topical steroids:

- Use thin layer on affected areas once daily until eczema is settled (usually <2w), then reduce/stop topical steroid:
  - If infrequent flare-ups (e.g. every 4-8w) go back to just using emollient
  - **If more frequent flares/severe eczema, consider 'weekend treatment'**: decrease to alternate days for 2w then use the treatment on two consecutive days (e.g. weekends) to the areas that tend to flare. Use even if skin is not inflammed. Review strategy within 3m. Discuss with consultant if this is still not achieving control.
- **Step-up use to once daily again during a flare**, then wean back down to usual maintenance therapy

Other considerations in management of eczema

1. **Sedating anti-histamines short-term** may aid sleep and break the itch-scratch cycle (e.g. chlorpheniramine, promethazine). No evidence of benefit of non-sedating antihistamines or topical antiantihistamines.
2. **Bandages and dressings** - applying steroids under bandages/plastic foodwrap increases potency and can be helpful for some patients. Put bandage/foodwrap on top of emollient and topical steroids at night for 7-14d during flare-ups. Do not use on wet, infected eczema!
3. In general, **antibiotics** have a limited role in eczema. Weeping/crusting can occur without infection. If concern for secondary infection in a child, d/w consultant. In a well adult, use flucloxacillin/clarithromycin; ensure cont. usual eczema treatment
4. In infants – eczema in nappy area, scalp, armpits usually seborrheic (see below)
5. **Bleach baths** (capful of 'Jik' into bath water) – no strong evidence to support this but can consider trying twice weekly if severe eczema in children or if recurrent infection
6. If a given treatment is felt to be causing a reaction, test on a small area of unaffected skin e.g. inner forearm

Sub-types of eczema		
Discoid eczema	Single or multiple round, coin-like patches, often mistaken for fungal infection, sometimes weepy; extremely itchy	Discuss with consultant if suspect Can be mistaken for tinea Emollient regime++ Often needs prolonged courses of potent steroid (up to 6 w) and recurrence common
Contact dermatitis	Worsening eczema at defined sites secondary to contact allergen	As standard treatment but take detailed history of job and hobbies and avoid allergen if can identify
Pompholyx	Very itchy, small clear vesicles on hands and feet - rupture to leave flaky, peeling skin	Emollients++ Very potent steroids (if possible) for two weeks - may need to use under occlusion (clingfilm) at night. Then twice weekly maintenance. Treat any co-existing tinea pedis
Periocular and perioral rashes	May be caused by eczema BUT there are may other causes, including use of topical steroid	Discuss with consultant
Chronic lichenified eczema	Thickened excoriated skin with increased skin markings	Potent steroid + occlusion (bandages or clingfilm wrapped around the limb at night) once daily for up to 2 w then review, then step-down if improvement noted
Seborrheic eczema/dermatitis	Scaly rash affecting areas rich in sebaceous glands such as the face, scalp, ears, eyes, flexures and centre of the chest. Not always itchy. Atches are more sharply defined than in typical eczema and scales are greasy-looking and yellowish. More common with HIV and parkinson's disease. Linked to commensal yeast.	Check HIV status Scalp – ketoconazole shampoo 2-4 times /week the every two weeks for maintenance (or imidazole creams) Skin – clotrimazole/miconazole cream Extensive disease – oral ketoconazole 200mg OD for 7d Topical steroids can be added during flare-ups (only 1-2d if used on face) Stop vaseline/greasy moisturisers
Venous/varicose eczema	Scaly, pruritic rash of lower legs, often with oedema, no systemic signs of infection Likely signs of venous disease	Full emollient regimes Consider potent topical steroid 2-4 weeks then step down to twice weekly or stop Compression stockings

References

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