NHS
Central London
Clinical Commissioning Group

Atopic Eczema in Children and Adults

General points

- Atopic eczema is a common disease affecting up to 15% of children
- Involvement of the face frequently occurs in infants with adoption of characteristic flexural distribution by the age of 18 months
- Spontaneous improvement tends to occur throughout childhood with complete clearance by teenage years in 50%
- Realistic treatment aims need to be discussed with the patient and parents

Patient information

- atopic eczema info here
- emollient info here
- topical steroids (includes info about finger tip dosing) here
- triggers and irritants here

Diagnostic criteria for atopic eczema (McHenry et al 1995)

Must have

- An itchy skin condition (or reported scratching/rubbing in a child)

Plus three or more of the following:

- History of itchiness in skin creases
- History of asthma or hay fever
- General dry skin in the past year
- Visible flexural eczema
- Onset in the first 2 years of life
- History of atopy in 1st degree relative

Treatment

General treatment measures

- Avoid soaps and detergents including bubble bath and shower gels
- Cotton clothing should be used and avoid wool next to the skin
- Fingernails should be kept short to reduce skin damage from scratching
- Regular bathing is beneficial as long as an emollient is used
- Nurse specialists may be needed to train patients / parents in topical treatments

Emollients

- Emollients should be prescribed in all cases with generous applications at least 2-3 times daily
- Emollients are often under-used. If a rash is florid 2 hourly application during the day is needed
    - this equates to 500g of cream / ointment per week for both an adult's arms
    - for twice daily application this equates to 200g / week
- Different products have different levels of greasiness – try greasier therapies at night and lighter creams in the daytime
- Some patients have a preference and you may have to supply several until the patient finds something they like and will therefore use.
- Some combination preparations have extra benefits e.g. Dermol 500 and Oilatum plus have antiseptic properties

Bath Oils

e.g. Oilatum, Diprobath, Hydromol

Soap Substitutes

e.g. Dermol, Diprobase cream, Emulsifying ointment, Epaderm, Doublebase gel

Topical Corticosteroids

- Use once daily
- Ointments should be the vehicle of choice as they are more effective and do not contain preservatives which can irritate the skin
- For cosmetic reasons patients may prefer creams especially if the face is involved

Examples (see BNF for more details)

Mild - *Hydrocortisone*

Moderate - *Eumovate*

Potent – *Betnovate or Elocon*

Very Potent – *Dermovate (avoid in children)*

Within each group of potency there is no evidence that any preparation is better than another

Treat in a step up – step down approach use

- mild potency for mild atopic eczema
- use moderate potency for moderate atopic eczema
- use potent for severe atopic eczema
- 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
- avoid repeat prescriptions for potent strength corticosteroids

Although potent preparations can cause skin atrophy with long term use, topical steroids are often under-used due to concerns about side-effects

- for twice daily application for a week for both an adult's arms 30-60g is needed

Antihistamines

Can be useful to help itch especially at night

e.g. chlorphenamine (piriton), hydroxyzine (licenced from 6 months)

Consider infection if

- weeping, pustules, crusts
- failure of response to therapy
- rapidly worsening of eczema
- fever / malaise

If in doubt swab for microbiology

Use topical for mild or systemic antibiotics for more severe infections – avoid repeat prescribing – resistance risk

Use pump dispensers (rather than pots which can harbour bacteria)

The development of vesicopustules in an feverish ill child might indicate eczema herpeticum.

Treat with oral Aciclovir or seek specialist advice especially near the eyes.

Tacrolimus and pimecrolimus

- Are useful steroid sparing agents in delicate areas such as flexures / face / neck
- Don't have to be started in secondary care

- There is a theoretical cancer risk in long term use
- Can burn for the first few applications and can pre-dispose to widespread viral warts (stop use if molluscum, chicken pox, skin infection or multiple viral warts develop)
- Limit continuous use to 1 year.

Bandaging

- Zinc paste bandages used alone or over topical corticosteroids can result in rapid improvement of resistant, particularly lichenified, eczema
- Wet wrap dressings may also be helpful, particularly at night in small children
- Caution is required when using any type of occlusive bandaging in conjunction with topical steroids because the potency of the steroid can be increased by occlusion
- All occlusive bandaging should be avoided in infected eczema
- Comfifast garments (vests and leggings) are easier to use than bandages and useful at night to cover the creams and prevent overnight scratching. They are prescribable for different ages and can be washed and re-used.

Allergy testing

- No tests are available to confirm or refute food allergy as a cause of worsening eczema
- RAST tests and skin prick tests are not helpful
- House dust mite can worsen eczema in some children

Food allergy

- Food allergy e.g. to egg or dairy is RARELY a cause of worsening eczema
- Consider exclusion diets only in refractory eczema and abandon if no improvement after 2-4 weeks
- If exclusion required for more than 2 – 4 weeks then dietetic advice is needed
- Food allergy is often temporary so the foodstuff should be rechallenged every few months
- Dermatologists do not perform food allergy tests. Food allergy referrals should be sent directly to the Allergy Clinic.

Patch testing

Patch testing is used to investigate specific contact allergic eczema, a rare occurrence in children with atopic eczema.

Evening Primrose Oil

No evidence of benefit

Chinese Herbs

No product licences – not recommended (often contain potent steroids)

Referral criteria

Only cases of severe or difficult eczema usually need to see a Dermatologist

- For consideration of second line treatment such as photochemotherapy, cytoxic drugs and topical immunomodulators
- Eczema herpeticum
- If contact allergic dermatitis is suspected for patch testing