ECZEMA – SAFE PRESCRIBING - A TOPICAL ISSUE

- USE SOAP SUBSTITUTES
- EMOLLIENTS ARE ESSENTIAL
- USE CORTICOSTEROIDS APPROPRIATELY
- IDENTIFY AND MANAGE UNDERLYING TRIGGERS IF POSSIBLE
- REFER IF NECESSARY

Eczema is a chronic relapsing itchy inflammation of the skin affecting approximately 20% of New Zealand children. Skin with eczema has altered integrity and an increased risk of infection with bacteria and viruses.

General management principles include: daily moisturising, appropriate use of topical steroids, avoidance of possible irritants, and education about signs of infection to ensure prompt treatment. Most children with eczema can be managed with topical treatment in primary care.

USE SOAP SUBSTITUTES

Soaps can be drying and irritating to the skin, so ‘soap-free’ washes should be used. Lukewarm baths of 10-20 minutes are best; small amounts of bath oils may be used to increase hydration. Note: bath oils can make the bath very slippery.

To reduce staphylococcal colonisation and reduce eczema severity, antiseptic baths can be used 2-3 times per week. Prepare by adding 2ml of bleach (2.2% hypochlorite Budget Household Bleach, not Janola®) to 1 Litre of bathwater – approximately 150ml of bleach to a 10cm-deep full-sized bath. Ideally the child should stay in the bath for 5-10 minutes and then rinse with fresh water. Antiseptic baths should not be used if there are extensive areas of broken skin. Children should be supervised to avoid ingestion of bath water.

EMOLLIENTS ARE ESSENTIAL

Emollients are the mainstay of therapy but are often underused. They should be applied even when eczema is well controlled, ideally several times a day. To encourage daily moisturising, bathing and washing, approximately 250-500g of emollient should be prescribed each week. Ointments are preferred for dry skin, creams for flexures, face and exudative skin, and lotions are useful over hairy areas.

Ointment-based emollients are best but they are very greasy. Cream-based alternatives may be used (eg cetomacrogol cream), although they are slightly less effective. Oily creams such as HealthE® fatty cream are usually acceptable.

Note: Regular aqueous cream and emulsifying ointment both contain sodium lauryl sulphate which can cause irritation and damage to the skin barrier. Regular aqueous cream is no longer recommended as a leave-on emollient, however, SLS-free aqueous cream is thought not to have the same problems with irritation.

USE CORTICOSTEROIDS APPROPRIATELY

Parents may worry about steroid-related adverse effects; reassure them that when used appropriately, the benefit will outweigh the harm. Facial and flexural eczema should be treated with a low-potency topical steroid in all age groups. Moderate-potency topical steroids can be used as a second line treatment for short periods of less than 2 weeks.

Infants under 1 year with eczema on the body or trunk can usually be managed with a low or occasionally moderate-potency topical steroid. Pre-schoolers may require a moderate or potent topical steroid and school age children usually require a potent topical steroid. Improvement typically occurs within 1-2 weeks. Short bursts of more potent topical steroids are more effective than long-term continuous lower potency agents. Once daily dosing of may be as effective as twice daily.

Apply to all areas with active eczema; when the skin is no longer red and itchy, the steroid cream may be stopped, but continue with emollients.

If there is no benefit within 1-2 weeks, check adherence, the need for a more potent topical steroid, and the diagnosis; infection or allergy could be the cause. Consider referral to a dermatologist if there is recurrent treatment failure.

---continued---
Table 2 - Topical corticosteroids

<table>
<thead>
<tr>
<th>POTENCY</th>
<th>SUBSIDISED EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>Hydrocortisone 1% (Pharmacy Health)</td>
</tr>
<tr>
<td>Subsidised Examples</td>
<td>Hydrocortisone BP cream</td>
</tr>
<tr>
<td>Moderate (25x hydrocortisone 1%)</td>
<td>Triamcinolone acetonide (0.02%) Aristocort cream / ointment</td>
</tr>
<tr>
<td>Potent (50-100x hydrocortisone 1%)</td>
<td>Betamethasone valerate (0.1%) Beta cream / ointment / application</td>
</tr>
<tr>
<td></td>
<td>Methylprednisolone aceponate (0.1%) Advantan cream / ointment</td>
</tr>
</tbody>
</table>

Table adapted from Oakley A. BPJ 2009;23:9-13

Note: Very potent steroids such as Dermol® (clobetasol propionate 0.05%) should not be used for childhood eczema.

Make sure adequate amounts of topical steroid are used; suboptimal use early on can lead to poor control.

Use the fingertip unit (FTU) [one FTU is the amount of cream that will cover an adult index finger from the tip to the metacarpophalangeal joint]; it is approximately 0.5g.

See The New Zealand Formulary for Children website: for more information.

Always specify which areas to avoid (e.g., the face). Encourage the continued use of emollients during acute flares.

Note: A useful patient guide developed by the Paediatric Society of New Zealand is available here.

IDENTIFY UNDERLYING TRIGGERS IF POSSIBLE

Advise to avoid any likely irritants such as soaps, detergents, chemicals, abrasive clothing and extremes of temperature.

• Wash new clothes before use
• Use mild liquid detergents and a second rinse cycle
• Shower after swimming in chlorinated pools and apply emollients afterwards
• Dress children in loose cotton clothing, avoiding wool and synthetics next to the skin
• Use fragrance-free hypoallergenic products
• Avoid topical products containing alcohol or other astringents

Frequent follow-up is needed to assess response to therapy and compliance.

REFER IF NECESSARY

If the condition is severe, involves eyelids/hands or is refractory to first-line treatments, consider further assessment by either a nurse specialist or paediatrician, or consultation with a dermatologist. The following conditions should be referred:

• Erythroderma or extensive exfoliation
• Serious infectious complications
• Ocular complications
• Eczeema requiring hospitalization
• Eczeema causing persistent loss of sleep, school absenteeism or psychosocial effects
• Persistent topical steroids
• Uncertain diagnosis

Eczeema has multiple triggers. Referral for assessment by a paediatrician, paediatric immunologist or dermatologist should be considered if food is thought to be a significant trigger.

Keep in mind that many children ‘outgrow’ eczeema, but for 20-40% it can continue into adulthood.

KEY REFERENCES


ACKNOWLEDGEMENTS

We would like to thank Dr Diana Purvis, Paediatric Dermatologist, Starship Children’s Health, Auckland for her valuable contribution to this bulletin.

For further information on other high-risk medicines visit our website at: www.saferx.co.nz