The diagnosis of atopic eczema is usually fairly obvious, with the child presenting within the first year or two of life with generally dry, itchy skin and a red, scaly rash, mostly in the flexures of the limbs and around the neck. Secondary features such as excoriation and infection may mask some of the typical signs of atopic eczema. There is often a personal or family history of atopy with the patient or other first degree relatives suffering from eczema, asthma, allergic conjunctivitis or allergic rhinitis. There is good evidence to suggest that good care of atopic eczema may prevent a child from progressing to allergic rhinitis and/or asthma (‘the atopic march’). If the rash is not itchy, reconsider the diagnosis – could it be seborrhoeic dermatitis or psoriasis?

The basic underlying problem in atopic eczema is a genetic defect that causes a reduced skin barrier function, causing the child to have dry, itchy skin and making them susceptible to irritants (soaps, shampoos, bubble baths, perfumes, etc.) allergens, and infections.

Atopic eczema is usually dry and itchy. If the skin becomes wet and sore, it is almost certainly infected and it should be treated with systemic antibiotics. Topical antibiotics such as Fucidin or Fucidin H can help mild infected eczema, but should only be used for a maximum of 14 days, as resistance develops rapidly to topical antibiotics. If there is evidence of intertrigo (a nappy rash or weepy rash in the folds of skin under the chin in a small baby) an imidazole anti-fungal (which also has some anti-bacterial properties) combined with 1% hydrocortisone such as Daktacort or Canesten HC can be very helpful.

A sudden flare of a vesicular rash in a child with atopic eczema may be due to disseminated herpes simplex (Kaposi varicelliform eruption), which will need high dose oral or IV antiviral medication.

A stepwise (step up/step down) approach should help simplify the management of atopic eczema in general practice (see Table 1). The first and most important step in managing atopic eczema is a good moisturiser (emollient). The best moisturiser is the greasiest one the patient can tolerate. Small children are not too fussy, so a greasy moisturiser such as emulsifying ointment, Epaderm ointment or paraffin gel will usually help. This should be applied at least twice a day. Sufficient quantities should be supplied (250g/month for a one year old, 500g/month for an eight year old and 1,000g/month for an adult) and the parents should be told and shown how to rub the moisturiser downwards only, as rubbing upwards against the direction of the hairs can cause folliculitis, especially on hairy parts of the body such as the limbs. Specific bath oil such as Oilatum Junior Bath Emollient or Aveeno bath powder also help moisturise the skin.

All patients with atopic eczema should avoid soaps and other irritants, such as shampoos, bubble baths, washing up liquids, detergents etc. There are many safe, effective alternatives to soap and shampoos now available in pharmacies, such as Elave wash, Elave shampoo and Aveeno wash. A cheap alternative to soap is aqueous cream, which can be used as a wash-on, wash-off skin cleanser. However, this should never be left on the skin as a moisturiser as it contains a preservative (1% sodium lauryl sulphate) that can irritate the skin. Written instructions on how to use emollients and soap substitutes are very helpful for parents.

Moisturisers and soap substitutes may be all that is required for a child with mild atopic eczema. In more moderate atopic eczema, a specific treatment such as topical steroids may be required for the itchy rash (see Table 2). Only mild and moderately potent topical steroids should be used in children under the age of 12 years old. One per cent hydrocortisone ointment is the only topical steroid that should be used on the face in children and adults.

The biggest difficulty in managing children with atopic eczema is not overuse but underuse of topical steroids, which have to be openly discussed with the parents, writes David Buckley.
Topical steroids should be openly discussed with the parents and their pros and cons should be thrashed out. It is important to reassure the parents that mild and moderately potent topical steroids have been on the market for over 50 years and are perfectly safe in children, when used under careful medical supervision. However, like all medications, instructions need to be given about how to apply the steroids, which area of the body to apply it, and how much to use. The most useful way to quantify the usage is to tell the parents the maximum amount of a particular topical steroid that can be used per month (see Table 3).

In mild cases of atopic eczema, 1% hydrocortisone ointment is very safe and effective and can be used on the face and body. Ointment preparations are more effective and safer (containing fewer preservatives) than creams. Once daily application (usually at night) has been shown to be as effective as twice daily applications and is much more convenient, as it allows extra time to apply moisturisers at other times of the day.

For more troublesome atopic eczema on the body, it is safe to step up to using a moderate potent topical steroid such as Eumovate ointment once daily in children under 12 years of age. A child aged three to 12 months can safely use 30g/month (see Table 3). I sometimes start with a moderately potent topical steroid on the body when I first see a child with moderate eczema and step down to 1% hydrocortisone after a month of two if the eczema improves.

Some children can have more troublesome eczema that will not respond to moderately potent topical steroids. The temptation is to prescribe the potent topical steroid, but this should be avoided in children under the age of 12 years. Neither should oral steroids be used for atopic eczema in general practice.

Fortunately, we now have tacrolimus (Protopic), which is a topical immune modulator that is steroid-free but is as potent as a potent topical steroid without the risk of skin atrophy or adrenal suppression. Protopic 0.03% is licensed for children aged two to 12 years of age, and Protopic 0.1% is licensed for those over 12 years old. Protopic should not be used on infected eczema. Protopic is considered a monotherapy, which means it can be used on all parts of the body, including the face and flexures, which simplifies the treatment regimes for parents. However, the child will also have to be moisturised regularly with a greasy moisturiser and they will need to avoid soaps and other irritants.

Protopic is slower to work than topical steroids and can cause a transient redness and irritation which can appear to make the eczema worse in 50% of patients in the first week of use. All parents should be warned that this could happen. If it does, they should persist with the treatment as the eczema usually settles down in the second and subsequent weeks. A small number of people are allergic or intolerant to Protopic and it should be stopped if there is no improvement after two weeks of use.

Protopic should be used twice a day for the first three weeks and then once a day after that until the eczema is brought under control. It can then be used twice a week long-term to prevent relapse. The most difficult children to manage with atopic eczema are those under the age of two.
with severe eczema. Although Protopic is not licensed in this age group, paediatric dermatologists and skin specialists sometimes use Protopic ‘off licence’ in children under two years old with severe eczema.

The 0.1% strength, which is only licensed for adults and children over the age of 12 years, is sometimes used ‘off licence’ by skin specialists in younger children. Protopic 0.1% is probably safer than a potent topical steroid in a child. Children should avoid the sun when using Protopic on exposed areas. Wet wraps were popular in the past but now are rarely used since the widespread use of Protopic.

Many parents worry about food allergies in children with atopic eczema. However, food allergies are only worth considering in very young children with severe, extensive eczema not responding to the step-wise approach outlined above. With these children, a careful history and allergy testing such as a RAST test, skin prick testing or an exclusion diet may be necessary. However, these should be only carried out by doctors experienced in allergy testing, as interpretation of the results can be difficult. Other allergens to consider and possibly remove include animal dander, house dust mite and pollen.

Non-sedating antihistamines will not help atopic eczema. However, the sedating antihistamines can help relieve itch at night but it is important to realise that they work primarily by their sedative effects rather than their antihistamine effects.

A small percentage of children (approximately 15%) have such severe unresponsive eczema that they need to be referred to hospital for systemic treatments, such as UVB, cyclosporin or azathioprine. However, the vast majority of children with atopic eczema can be safely and effectively managed in general practice by following this simple step-wise approach.

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