



# THE CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME



This module is suitable for use by pharmacists as part of their continuing professional development. After reading this module, complete the learning scenarios and post-test at [www.pharmacymag.co.uk](http://www.pharmacymag.co.uk) and include in your CPD portfolio. Previous modules in the Pharmacy Magazine CPD Programme are also available to download from the website

## MODULE 184

Welcome to the one hundred and eighty fourth module in the *Pharmacy Magazine* Continuing Professional Development Programme, which looks at childhood atopic eczema. It is valid until January 2014.

Continuing professional development (CPD) is now a legal requirement for pharmacists. Journal-based educational programmes are an important means of keeping up-to-date with clinical and professional developments and form a significant element of your CPD. Completion of this module will contribute to the nine pieces of CPD that must be recorded a year.

Before reading this module, test your existing understanding of the topic by completing the pre-test at [www.pharmacymag.co.uk](http://www.pharmacymag.co.uk). Then after studying the module in the magazine, work through the six learning scenarios and post-test on the website. Record your learning and how you applied it in practice using the CPD report form, available online and on p viii.

### Self-assess your learning needs:

- What are the diagnostic signs of eczema?
- Can you describe what is meant by a stepped-care treatment plan?
- What are the clinical benefits of complete emollient therapy?

This module supports the following CPD competences: C1a, C1b, C1c, C1d, C1f and C3c. More details on p vii

## CURRENT THINKING ON...

# CHILDHOOD ATOPIC ECZEMA

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### Introduction

Atopic eczema is diagnosed in about 20 per cent of children in the first year of life in England and Wales<sup>1</sup>. While many will grow out of the disease during childhood, it persists into adulthood for two to 10 per cent of the population. Atopic eczema is a chronic, inflammatory, itchy skin condition that often results in reddened, sore, excoriated areas of skin. The prevalence of atopic eczema has steadily increased over the past 30 years<sup>2</sup>.

Atopic eczema can have a substantial negative impact on quality of life for both patients and families – an Australian study showed that caring for children with moderate to severe atopic eczema was more stressful than caring for children with type 1 diabetes<sup>3</sup>. Severe itching often disturbs sleep and this in turn disrupts schoolwork and home life for the whole family. Some people perceive eczema as the result of poor childcare and criticise parents accordingly, and children with eczema are often bullied by

other children. In addition, some people still believe that eczema is contagious.

There are many clinical variants of eczema but the common features are red, itchy, sore and inflamed skin. Atopic eczema is the commonest form of eczema in childhood and is commonly associated with asthma and allergic rhinitis later in life. The terms “eczema” and “dermatitis” are now used interchangeably.

### Pathophysiology

Atopic eczema appears to be caused by primary genetic defects in the skin barrier, which increase the susceptibility of the skin to damage from environmental agents. The impaired skin barrier allows the entry of allergens and irritants that trigger immune and inflammatory responses. Eczema is sometimes described as a being the result of a gene-environment interaction for this reason.

In individuals with atopic eczema, the intercellular lipids of the stratum corneum, the

## FOR THIS MODULE

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**GOAL:** To provide an overview of current thinking on the management of childhood eczema.

**OBJECTIVES:** After completing this module you should be able to:

- List three diagnostic features of eczema
- Describe the stepped-care approach for the management of eczema
- Assess whether treatment is being used appropriately
- Educate patients and/or carers about effective management of eczema.



uppermost layer of the epidermis, are not formed normally<sup>5</sup>. As a result the epidermal barrier is weakened and there is increased water loss from the stratum corneum causing perceptibly dry skin, which can neither retain water effectively nor prevent the entry of irritants or allergens. Two genetic variations have been identified recently that go some way towards explaining these changes.

The first is a genetic filaggrin deficiency which leads to a weakened stratum corneum that is prone to water loss and noticeable dryness. Filaggrin gene defects are estimated to affect one in 10 Europeans<sup>6</sup>.

Another genetic defect associated with atopic eczema causes high levels of a skin protease called stratum corneum chymotryptic enzyme (SCCE). This leads to abnormally rapid shedding of skin cells and its activity is increased by raising the skin pH. Thus, for example, washing with soap, which can raise skin pH from 5.5 to 7.5, results in a doubling of protease activity<sup>5</sup>.

Similar changes can also be seen in normal skin when epidermal lipids are removed by repeated exposure to surfactants or solvents. The use of soap not only removes natural oils from the skin, making it feel dry, it also increases shedding of skin cells.

People with atopic eczema are more sensitive to the detrimental effects of soap than people without the condition. The absence of visible eczema does not alter this – a lower threshold for irritation remains even if the skin appears “normal”.

Current thinking suggests that when irritants and allergens penetrate the weakened epidermal barrier they trigger immune responses,

### “The atopic march...”

Atopic eczema often occurs as part of a wider pattern of atopic conditions that appear in a recognised sequence known as the “atopic march”. Gastrointestinal symptoms (commonly due to allergy to milk and eggs) occur in the first few months of life. Atopic eczema also develops, often starting within the first three months. Later during childhood this is followed by the onset of asthma and then allergic rhinitis. The factors responsible for the atopic march are not fully understood but it is thought that the defective skin barrier seen in atopic eczema could play a key role<sup>4</sup>.

**Table 1: NICE assessment of atopic eczema in children<sup>1</sup>**

Grade	Physical assessment	Impact on quality of life and psychosocial wellbeing
Clear/none	Normal skin No evidence of active atopic eczema	No impact
Mild	Areas of dry skin Infrequent itching (with or without small areas of redness)	Little impact on everyday activities, sleep and psychosocial wellbeing
Moderate	Areas of dry skin Frequent itching Redness (with or without excoriation and localised skin thickening)	Moderate impact on everyday activities and psychosocial wellbeing; frequently disturbed sleep
Severe	Widespread areas of dry skin Incessant itching Redness (with or without excoriation, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation)	Severe limitation of everyday activities and psychosocial functioning; nightly loss of sleep

including the release of proinflammatory cytokines. The problems are further exacerbated by scratching, which relieves itching temporarily but further damages the skin and can itself trigger another release of inflammatory mediators, thereby increasing inflammation and itching and perpetuating the damaging “itch-scratch cycle”. Infant skin, being thinner than adult skin, is even more susceptible to the damaging effects of these processes.

### Diagnosis

Eczema is diagnosed when a child has an itchy skin condition plus three or more of the following<sup>7</sup>:

- Visible flexural dermatitis involving the skin creases (or visible dermatitis on the cheeks or outer aspects of the limbs in children aged 18 months or under)
- Personal history of flexural dermatitis (or dermatitis on the cheeks or outer aspects of the limbs in children aged 18 months or under)
- Personal history of dry skin in the past 12 months
- Personal history of asthma or allergic rhinitis (or history of atopic disease in a first-degree relative of children under four years)
- Onset of signs and symptoms under the age of two years (this criterion should not be used in children under four years of age).

Acute eczema can be accompanied by exudation and crusting, while chronic eczema lesions tend to be dry, lichenified and cracked.

Other dermatological conditions can be mistaken for eczema. The rash that often occurs with scabies can look like eczema and the severe itching that accompanies established scabies infestation adds to the confusion. Scabies and headlice can also cause local flare-up of eczema. Psoriasis and fungal infections can also sometimes mimic the appearance of eczema.

### Monitoring and assessment

Assessment of a patient with eczema should embrace both the physical aspects of the condition and its impact on quality of life. The NICE guideline for the management of atopic eczema in children includes severity grading schemes for both physical and quality of life assessments (see Table 1)<sup>7</sup>.

Clinicians should always conduct both physical and quality of life assessments because even mild eczema (for example, on the face) can affect a patient’s wellbeing.

### Clinical course

Atopic eczema follows a relapsing and remitting course with the severity often varying from day to day. On average, patients experience nine flares per year, each lasting for 15 days, according

to the International Study of Life with Atopic Eczema (ISOLATE)<sup>8</sup>. Overall, patients spent an average of 136 days per year experiencing flares.

### Complications

Bacterial infection with *Staphylococcus aureus*, which can cause impetigo, is a common complication. Eczematous skin is almost always colonised with *S. aureus* but treatment is only required when there is evidence of infection (e.g. worsening inflammation, weeping, pustules, crusting, eczema failing to respond to treatment, rapidly worsening eczema or, in severe cases, fever and malaise).

Children with eczema are more susceptible to viral infections, such as those causing warts and molluscum contagiosum.

Infants and young children with eczema can develop widespread lesions if infected with *Herpes simplex*. This condition, known as eczema herpeticum, requires urgent referral for medical attention because it can be life-threatening. It is associated with:

- Areas of rapidly worsening, painful eczema
- Possible fever, lethargy or distress
- Clustered blisters that look like early-stage cold sores
- Uniform, punched-out erosions (usually 1-3mm in diameter), which may coalesce.

Parents of young children with eczema should be advised to avoid contact with anyone who has *Herpes simplex* or cold sores.

### Management of eczema

The objective of management is to protect the skin and prevent relapses as far as possible and to treat flares promptly when they do occur. This involves:

- Identification and avoidance of trigger factors
- Implementation of a stepped-care programme – tailoring the treatment to the severity of the disease, stepping up if there is deterioration and stepping down once the flare has been brought under control
- Referral for specialist care when conventional measures are ineffective.

### Avoidance of trigger factors

A key measure in eczema management in children in primary care is avoiding, as far as possible, factors that can trigger a flare-up. Helping people to identify their own or their children's trigger factors is an important part of supporting self-management (see Table 2) and pharmacists can help in this. However, it is not always possible to identify or avoid trigger factors.

### Stepped-care plan

NICE guidance for atopic eczema in children<sup>7</sup> recommends the use of a stepped-care plan (see Table 1), analogous to that recommended for the management of asthma. The thinking behind this, as already stated, is that treatment needs to be matched to the severity of the disease and then stepped up if there is further deterioration and stepped down once the flare has been brought under control. It does not mean always starting at the bottom and stepping up if treatment is unsuccessful.

### Emollients

Emollients are the mainstay of treatment. They restore integrity of the skin barrier and should be used to keep the skin in good condition, even when clear of eczema. If used correctly, emollients can help maintain or restore the suppleness and pliability of the skin, reduce corticosteroid requirements and improve cosmetic appearance. Emollient products include creams, ointments, lotions, bath additives and soap substitutes.

Although there is a lack of good quality evidence to support the use of emollients for the treatment of eczema, there can be little doubt about their usefulness. An emollient forms an oily layer over the skin that prevents water evaporation. The water, trapped in the stratum corneum, passes into the corneocytes, which swell, closing intercellular gaps. Emollients can also penetrate deep into the stratum corneum and mimic the barrier effects of deficient lipids.

### Complete emollient therapy

To be effective, emollients need to be applied often and generously. Many dermatologists recommend "complete emollient therapy"<sup>9</sup>. This involves the frequent application of emollient creams or ointments, the use of bath oil when bathing or showering, and the routine use of an emollient soap substitute.

Soaps and detergents (especially bubble baths) must be avoided at all times because they remove natural skin lipids and can undo the effects of emollients. Emollient wash products should be used instead for washing, bathing and

**Table 2: Trigger factors for atopic eczema**

Factor	Mechanism/comment
<b>Irritants</b>	
Soaps and detergents	Removal of lipids from skin/activation of skin proteases
Toiletries and cosmetics	Perfumes, preservatives
Abrasive clothing	Direct physical irritation due to scratchy texture
Extremes of temperature or humidity	Drying effect on skin
<b>Psychological stress</b>	
Psychological stress caused by life events, disease	Some people respond with habitual scratching, which exacerbates eczema
<b>Food hypersensitivity</b>	
Cow's milk, eggs, soya, wheat, fish and nuts	Only likely to be a significant factor in around 10 per cent of children, mainly under three years of age
<b>Inhaled antigens</b>	
House dust mite	Allergens in house dust mite faeces
Animal dander	Allergens in animal saliva
Moulds and pollens	Plant or mould allergens
<b>Other</b>	
Skin infections	



## Atopic eczema: key points

- The terms eczema and dermatitis are interchangeable
- Atopic eczema is the commonest form of eczema
- The common clinical feature is red, itchy, inflamed skin
- Eczema can have a significant impact on quality of life
- The severity of eczema often varies from day to day
- Acute eczema can be accompanied by exudation and crusting, while chronic eczema lesions are dry, lichenified and cracked

in children under 12 months, as a shampoo. Sometimes for young children one emollient product can be used both as a leave-on and a wash product. Education for patients and their carers on how to use the emollients is essential.

Emollients need to be applied frequently and children should have a supply to take to nursery or school.

To ensure that emollients are used on a regular basis, finding a product that matches a patient's needs and preferences is essential – children with eczema often complain that the worst aspect of the disease is “the creams”. Finding the most suitable emollient is usually a matter of trial and error. Children should be encouraged to try a range of emollients to help them find those they like best. Some hospitals have now developed “trial kits” of emollients specifically for this purpose.

### Formulation considerations

Greasier emollients are harder to spread and more occlusive compared with lighter (mainly water-based) formulations.

Lanolin is a good emollient and, contrary to popular belief, is a weak contact sensitiser. Large studies have shown that the true incidence of lanolin sensitivity is very low. Modern lanolin-containing products use highly purified, hypoallergenic lanolin that is well tolerated. One product (Evolve) contains highly purified lanolin in a spray form, which may be particularly useful for those who dislike the feel of creams.

In addition to the basic ingredients, many emollient products also contain other therapeutically active substances.

■ Humectants attract water from the dermis into the epidermis. They can improve epidermal barrier function and increase hydration of the

stratum corneum. Emollients that contain humectants are particularly useful for rehydrating dry, flaky skin. Commonly used humectants include urea (e.g. Eucerin), glycerin, polyethylene glycol and lactic acid

■ Colloidal oatmeal is added to some emollients (e.g. Aveeno) for its soothing and antipruritic properties

■ Some emollients are free from common sensitisers and irritants (e.g. Diprobase)

■ Lauromacrogols also have antipruritic effects and are present in products such as Balneum Plus and E45 Itch Relief

■ Emollients with added antiseptics are believed to be helpful in reducing the bacterial load in children who have frequent flares. Such products (e.g. Oilatum Plus, Dermalol, Skinsure) do not replace specific treatments for infected eczema.

Some emollients contain potential irritants (e.g. benzyl alcohol) that can exacerbate eczema; a list of sensitising excipients is available in the British National Formulary. For young children, preservative-containing products (i.e. creams) should be avoided as far as possible because of the potential for exacerbating their eczema.

Aqueous cream is unsuitable as a leave-on

emollient because it has a low lipid content and contains the anionic surfactant sodium lauryl sulfate, which has well documented irritant effects. It also contains chlorocresol or phenoxyethanol, which can contribute to the irritation further. Children often complain of stinging when it is applied. Recent work has shown that it can increase transepidermal water loss from healthy skin<sup>10</sup>. Despite this, aqueous cream can be used as a wash-off product (i.e. as an emollient soap substitute)<sup>11</sup>.

Carers should always test a new product on a small area of a child's skin before using it on large or sensitive areas.

### Emollients and corticosteroids

Correct emollient use can reduce a patient's requirement for topical corticosteroids (i.e. they have a steroid-sparing effect)<sup>12</sup>. It can be helpful to point this out to parents and carers who are apprehensive about using corticosteroids. As a general rule, about 10 times as much emollient as topical corticosteroid preparation is required. Application should be separated by about 20 minutes but there is no evidence to guide the order in which they are applied.



Atopic eczema seen on the ankle of a five-month-old baby

DR P. MARAZZI / SCIENCE PHOTO LIBRARY

### Topical corticosteroids

Flares of eczema should be treated with topical corticosteroids, which inhibit the production and action of inflammatory mediators, reducing inflammation and itch.

The least potent corticosteroid to produce the required effect should be prescribed. However this does not mean that treatment should be started with the weakest topical corticosteroid – the strength selected should match disease severity. In general, a short burst of treatment with a potent or moderate corticosteroid is preferable to protracted under-treatment.

Where the skin is thin, such as on the face, genitals and flexures, a mild corticosteroid (e.g. hydrocortisone) should usually be used. Infants younger than one year of age should only be treated with a mild potency preparation such as hydrocortisone ointment 1%. It is important to remember that the potency of a topical corticosteroid depends on both the formulation and the corticosteroid itself. A full list of the relative potencies of topical corticosteroid preparations is available in the British National Formulary.

Topical corticosteroids should be applied once or twice a day. Ointments are suitable for dry, thick or scaly lesions, whereas creams are more appropriate when the skin is oozing or infected (because the area should not be occluded).

Community pharmacists can provide OTC topical corticosteroids for eczema as follows:

■ **Hydrocortisone 1% cream and ointment:** To treat mild to moderate atopic eczema. These products are useful to treat flare-ups, but should not be used for more than one week without medical advice.

Patients who have not previously been diagnosed with atopic eczema should be referred to their GP, as should any patients whose condition is widespread or severe. It is inappropriate to supply topical hydrocortisone for children under 10 years of age (unless it has been recommended by a GP or other doctor, who has not provided a prescription for it).

■ **Clobetasone butyrate 0.05% cream:**

Can be provided over the counter for the short-term treatment and control of small patches



Parents need to understand what is meant by a finger-tip unit for steroid application

of atopic eczema for patients who are over 12 years of age.

The possible local and systemic side-effects of corticosteroids are well recognised but often exaggerated. Side-effects usually only occur after using potent corticosteroids for a long time. The incidence and severity of side-effects are determined by the area treated, thickness of the skin, potency of the preparation and duration of treatment. Greater absorption occurs where the skin is damaged and raw.

#### Practice points for topical corticosteroids

- Topical corticosteroid preparations should not be used as emollients – emollient use should continue when corticosteroids are started
- Explain the difference between potency and concentration
- Explain how much topical corticosteroid to apply. One 'finger-tip unit' (i.e. the amount of cream that covers from the tip of the index finger to the first crease of the finger when squeezed

from the tube) is sufficient to cover an area twice the size of the flat of an adult hand

- Apply topical corticosteroids only to the affected skin and not to normal skin
- The PIL may say "not to be applied to broken skin"; but bleeding scratch marks are often present on eczematous skin and this should not prevent use of the corticosteroid
- Topical corticosteroids should not be used under dressings or bandages without supervision from a suitably trained healthcare professional
- The time to step down is 48 hours after the flare has subsided.

#### "Weekend" treatment

Children who experience frequent flares can be treated with potent topical corticosteroids for two consecutive days per week to prevent flares instead of treating flares when they arise, once the initial episode has been controlled<sup>7</sup>. Such an approach is sometimes known as 'weekend' or 'pulse' treatment.



Pharmacists should always take care not to confuse clobetasol (very potent) with clobetasone (moderate) and should be vigilant for this kind of mix-up on computer-generated prescriptions.

### Anti-infective agents

Prompt treatment of infected eczema is important when managing flares. Moderate to severe bacterial infection with *Staphylococcus aureus* (identified by redness, pustules with or without crusting) should be treated using oral antibiotics such as flucloxacillin or erythromycin. Oral antibiotics should only be used in short courses of about seven days to minimise the risks of resistance and sensitisation.

### Sedating antihistamines

Sedative antihistamines (e.g. promethazine, alimemazine or hydroxyzine) used short-term (seven to 14 days) can be helpful for some children when night-time itching and sleep disturbance are debilitating. They are taken at night and help by reducing the itching and allowing the patient (and therefore also the carers) to get a good night's sleep. Neither promethazine nor alimemazine is licensed for

use in children under two years of age but hydroxyzine is licensed for use in babies of six months and older.

### Bandages and dressings

Bandages and dressings are sometimes used on top of emollients or topical corticosteroids for the short-term treatment of extensive flares or for management of lichenified eczema. 'Wet-wrapping' is sometimes used for young children with extensive eczema. It involves the application of a generous layer of emollient or mild topical corticosteroid cream, which is then covered with a wet cotton tubular bandage. This bandage is then over-wrapped with a dry bandage. The bandages can be applied over the whole body, apart from the scalp, and can be left in place overnight.

Close supervision is required when a topical corticosteroid is used because the occlusion increases the likelihood of absorption and the risk of systemic adverse effects.

### Severe atopic eczema

Children with atopic eczema that fails to respond to emollients, topical steroids and avoidance of trigger factors should be referred to a specialist for ongoing management.

## Practice points for topical calcineurin inhibitors

- Apply topical calcineurin inhibitors only to the affected skin, including broken skin, and not to normal skin
- Topical calcineurin inhibitors should not be used under dressings or bandages without supervision from a suitably trained healthcare professional
- When tacrolimus is used for long-term intermittent maintenance treatment, applications should be separated by two to three days

### Topical calcineurin inhibitors (TCIs)

Topical calcineurin inhibitors (tacrolimus and pimecrolimus) have a place in the treatment of atopic eczema when appropriate first-line treatment has failed. Tacrolimus and pimecrolimus are both inhibitors of calcineurin phosphatase, a key enzyme in the activation of T-cells and propagation of the inflammatory response.

NICE guidance recommends that TCIs may be used if atopic eczema is not controlled by topical corticosteroids or if there is a risk of important adverse effects from topical corticosteroids. Tacrolimus (0.03%) can be used for moderate to severe atopic eczema in children aged two years and over. Pimecrolimus may be used for moderate atopic eczema on the face and neck in children aged two to 16 years.

Tacrolimus 0.03% is also approved for maintenance treatment in children (applied twice a week, two to three days apart) for up to 12 months to prevent flares. The main side-effect of tacrolimus and pimecrolimus is a burning sensation on the skin. Patients should be advised to persevere with treatment because this effect usually only lasts a few days.

### Phototherapy and systemic treatments

Children with severe or unresponsive atopic eczema may be offered phototherapy or systemic treatments under the supervision of a dermatologist.

Phototherapy involves controlled exposure to ultraviolet (UV) light; UVA or UVB can be used. Because UVA alone has little effect, it is always administered in combination with a psoralen photosensitiser. The mechanism of action for phototherapy is not fully understood but it is



Bandages are sometimes used on top of emollients or steroids in severe eczema cases

believed to involve immunosuppression. Long-term UV exposure is associated with an increased risk of skin cancer and so this type of treatment is reserved for the most severely affected patients and should be given by specialists with close supervision and monitoring. Tanning beds cannot provide the same controlled exposure and are not suitable for treatment of severe eczema.

Ciclosporin, azathioprine, methotrexate or systemic corticosteroids can be used for the treatment of severe atopic eczema. Most published data relate to ciclosporin. In general, the doses used are lower than those given after organ transplantation and, for this reason, it is sometimes described as immunomodulatory treatment (rather than immunosuppression). Patients receiving these treatments must be closely supervised and monitored by specialists. Before starting treatment with azathioprine, a patient's thiopurine methyltransferase enzyme activity should be checked because deficiency increases the risk of myelosuppression.

Behavioural therapy is another form of treatment that can be helpful for some people. A variety of techniques (including hypnotherapy, cognitive behavioural therapy and autogenic training) has also been used as an adjunct to conventional treatment for eczema, often with good results<sup>13</sup>.

### Patient education

NICE guidance recommends that all healthcare professionals should spend time educating people with atopic eczema (and their parents or carers) about the condition and its treatment. Such information should be reinforced at each consultation, with emphasis on factors that affect adherence.

To ensure prompt and appropriate treatment of flares, information must be given about:

- How to recognise a flare (increased skin dryness, itching, redness, swelling and, for infants, general irritability)

## CPD competences

This module supports the following community pharmacy competences:

Competence	Where this module supports competence development
C1a, C1b, C1c, C1d, C1f	The module addresses the appropriate selection and effective use of pharmacological treatments in the management of atopic eczema in children
C3c	The health and medication needs of children with atopic eczema are addressed

- How to manage a flare according to the stepped-care plan

- The importance of starting treatment for flares as soon as signs and symptoms appear and the need to continue treatment for approximately 48 hours after symptoms subside.

Pharmacists can support patients and their carers by providing information and explanations about atopic eczema and the available treatments; when appropriate, patients should also be directed to their GPs.

Pharmacists should consider providing all patients with eczema with written and verbal information on the following:

- Choice of emollients

- The use of emollients for moisturising and bathing

- Application techniques for topical treatments

- Appropriate use of eczema treatments (i.e. how much, how often, and when to step up and step down)

- Identification and management of eczema flare

- Identification and management of trigger factors

- Recognising infected atopic eczema

- Details of patient support groups (e.g. the National Eczema Society).

In addition, the NICE guidance recommends that topical corticosteroid products should be labelled with a description of their potency and that patients may require separate (small) original packs, usually of emollients, for use at school or nursery.

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# ASSESSMENT QUESTIONS

## CHILDHOOD ATOPIC ECZEMA

- Which of the following is TRUE about atopic eczema?
  - It affects around 20 per cent of the population
  - It is an element of the atopic march
  - It can be caused by poor childcare
  - It has a modest impact on quality of life
- Which is NOT a diagnostic feature of eczema?
  - A personal history of flexural dermatitis
  - A history of atopic disease in a first-degree relative
  - An itchy rash
  - A history of dry skin in a first-degree relative
- The NICE stepped-care programme:
  - Starts with emollients and adds treatments until eczema resolves
  - Matches treatment to disease severity
  - Uses the same treatments and doses for both face and body
  - Matches disease severity to quality of life
- Which is TRUE regarding emollients for atopic eczema?
  - Emollients should be rubbed in thoroughly
  - Aqueous cream is a good all-round emollient
  - About 10 times as much emollient as topical corticosteroid is needed
  - Emollients should only be used in eczema flares
- Which statement is TRUE?
  - Topical corticosteroids should be used for 48 hours to control a flare of eczema
  - The potency of topical steroid should be matched to the severity of the eczema and the area to be treated
  - When a flare starts, treatment should be switched from emollient to topical corticosteroid
  - Corticosteroid treatment should always start with the lowest available potency product and work upwards
- Which is NOT usually a feature of an eczema flare?
  - Increased dryness
  - Increased itching
  - General irritability
  - Increased sweating
- Identify the common cause of infected eczema:
  - Staphylococcus epidermidis*
  - Staphylococcus aureus*
  - Pseudomonas aeruginosa*
  - Streptococcus faecalis*
- Topical calcineurin inhibitors can:
  - Cause skin thinning
  - Be used for first-line treatment of severe eczema
  - Be used continuously
  - Block a key step in the inflammatory process

## PHARMACY MAGAZINE CPD RECORD – FEBRUARY 2011

USE THIS FORM TO RECORD YOUR LEARNING AND ACTION POINTS FROM THIS MODULE ON CHILDHOOD ATOPIC ECZEMA OR DOWNLOAD FROM WWW.PHARMACYMAG.CO.UK AFTER COMPLETING THE ONLINE LEARNING SCENARIOS

Activity completed. (Describe what you did to increase your learning. Be specific) (Act)

Name/date:

Time taken to complete activity:

What did I learn that was new in terms of developing my skills, knowledge and behaviours? Have my learning objectives been met? (Evaluate)

How have I put this into practice? (Give an example of how you applied your learning. Why did it benefit your practice? How did your learning affect outcomes?) (Evaluate)

Do I need to learn anything else in this area? (List your learning action points. How do you intend to meet these action points?) (Reflect)

\* If as a result of completing your evaluation you have identified another new learning objective, start a new cycle – this will enable you to start at **Reflect** and then go on to **Plan, Act and Evaluate**. This form can be photocopied to avoid having to cut this page out of the module. Complete the learning scenarios at [www.pharmacymag.co.uk](http://www.pharmacymag.co.uk)

## MODULE 184 ANSWER SHEET

**ENTER YOUR ANSWERS HERE** Please mark your answers on the sheet below by placing a cross in the box next to the correct answer. Only mark one box for each question. Once you have completed the answer sheet in ink, return it to the address below together with your payment of £3.75. Clear photocopies are acceptable. You may need to consult other information sources to answer the questions.

- |    |                             |    |                             |    |                             |    |                             |    |                             |    |                             |    |                             |    |                             |
|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|----|-----------------------------|
| 1. | a. <input type="checkbox"/> | 2. | a. <input type="checkbox"/> | 3. | a. <input type="checkbox"/> | 4. | a. <input type="checkbox"/> | 5. | a. <input type="checkbox"/> | 6. | a. <input type="checkbox"/> | 7. | a. <input type="checkbox"/> | 8. | a. <input type="checkbox"/> |
|    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |    | b. <input type="checkbox"/> |
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Name (Mr, Mrs, Ms) \_\_\_\_\_

Business/home address \_\_\_\_\_

Town \_\_\_\_\_ Postcode \_\_\_\_\_ Tel: \_\_\_\_\_ GPhC/PSNI Reg no. 

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I am a PM subscriber  I confirm the form submitted is my own work (signature): \_\_\_\_\_

Please charge my card the sum of £3.75 Name on card \_\_\_\_\_  Visa  Mastercard  Switch/Maestro

Card No. \_\_\_\_\_ Start date \_\_\_\_\_ Expiry date \_\_\_\_\_

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**Processing of answers**  
Completed answer sheets should be sent to Precision Direct Marketing, Precision House, Bury Road, Bury, Bury St Edmunds IP30 9PP (tel: 01284 718918; fax: 01284 718920; email: [cpd@precisiondm.com](mailto:cpd@precisiondm.com)), together with credit/debit card/cheque details to cover administration costs. This assessment will be marked and you will be notified of your result and sent a copy of the correct answers. The examiners' decision is final and no additional correspondence will be entered into.