Patients with chronic skin conditions

Coleen Gradwell, Jill Peters, Sara Burr, Susan Maguire

- Evaluating outcomes for patients with chronic skin conditions
- Managing eczema at either end of the age spectrum
- Skin care around leg ulcers: dry skin, varicose eczema and lower leg lesions
- Lumps and bumps: terminology in dermatology

Stratum corneum
Stratum lucidum
Stratum granulosum
Stratum spinosum
Stratum basale
Blood vessels
Sebaceous gland
Hair follicle
Sweat glands
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GENUS PHARMACEUTICALS
PATIENTS WITH CHRONIC SKIN CONDITIONS

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Evaluating outcomes for patients with chronic skin conditions

Coleen Gradwell

When healthcare professionals consider outcomes for patients with skin problems, it is vital to take the patient’s perspective into account. This article considers the concept of the expert patient in relation to chronic skin conditions and uses it to explore the importance of working with patients towards concordance with treatments and achievement of desired outcomes. A number of specific outcome measures are explored and their advantages and disadvantages compared.

Outcomes from a patient’s perspective

When deciding on desirable outcomes for patients with chronic skin conditions, it is very easy for healthcare professionals to assume that the desired outcome is clearance. In a small qualitative study where 20 patients with psoriasis were interviewed about their expectations for treatment outcomes (Ersser et al, 2002), it became clear that the patients included outcomes that were rarely referred to in the dermatological literature. Both patients and doctors thought that appearance and time were important considerations, but patients included much more about the way that their skin felt. Symptoms such as soreness and skin suppleness were important for patients when it came to evaluating outcomes.

The environment within which patients with long-term conditions are being cared for has changed radically over the last 20 years, and this is certainly the case within dermatological care. A review of early nursing literature on looking after patients with psoriasis reveals articles which are based around in-patient care, and, indeed, one article suggested doses of diazepam three times a day (Belk, 1983). The emphasis was on bringing patients into hospital, giving them treatment for their ‘problem’ and sending them home again. As dermatology care becomes more and more outpatient and community focused, this strategy for care is impossible and may be considered inappropriate. The Expert Patient document (Department of Health [DoH], 2001) encourages healthcare professionals and patients alike to accept that patients could and should be experts about their condition, and that treatment plans should be made with the patient in order to maximise the likelihood that they will concord with treatment. Thus, this article is written against a healthcare backdrop of encouraging patients to participate in their care and for them to be vocal about their desired outcomes.

The role of nurses in influencing outcomes

As the environment for caring for dermatological patients has changed, so has the role of the nurse. The increased availability of specialist nurses working in nurse-led environments has meant that patients can access expert services outside the usual boundaries of a dermatologist-led outpatient clinic. Gradwell et al (2002) tackled the difficult question of whether accessing a nurse-led service in addition to the usual dermatologist service in an outpatient clinic made any difference to patient outcomes. There was no difference in quality of life outcome between the group seen just by a dermatologist service in an outpatient clinic and the group seen by both healthcare professionals (the majority of whom were nurses) for patients with psoriasis had significant impacts on a number of outcomes (de Korte et al, 2005). Improvements were seen across all of the outcomes that were considered, namely:

- Disease severity measures
- Satisfaction with care received
- Knowledge about application of treatments, quality of life measures (both a dermatology-related quality of life measure and a general health quality of life measure)
- Overall adherence to treatment plans.

For all the outcomes (except for one of the disease severity measures), the improvement seen between the first and last consultation was significant.

Specific outcome measures

Outcome measures in dermatology can be extremely straightforward or complex. The rest of this article will consider a number of the more common outcome measures used.

Photography

Photographs can be an extremely helpful way of recording the appearance of a specific lesion or lesions, or the distribution of lesions across the body. In terms of evaluating changes in a skin condition and therefore evaluating an outcome, it is vital to have a photograph before the intervention/treatment and the subsequent photographs afterwards.

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If a close-up is being taken, it is always helpful to have a scale next to the lesion so that changes in size can be accurately noted. To be really useful photographs need to be of excellent quality. It is also important that the patient has given permission prior to taking the photograph, and, if it is to be used in a presentation or publication, that specific permission has been given for this purpose and that there is no way of identifying the individual.

All trusts should have a ‘Photography and video recordings of patients confidentiality, consent, copyright and storage’ policy and procedure. The policy states that the trust will ensure that all visual records (VRs) are taken with the informed consent of the patient, are stored securely and are handled in accordance with current legislation.

The NHS policy on confidentiality is based on the principle that any information held about a patient is provided in confidence and is only to be used to support the patient’s own individual healthcare. Patients have a right to object to the use and disclosure of confidential information for any other purposes than that connected with their care and treatment, even if beneficial for society in general, e.g. medical research. Additional efforts to gain consent must be made to ensure that the extended use of patient’s identifiable information is lawful. Further information about gaining and using visual records of patients can be obtained from the General Medical Council website (www.gmc-uk.org/guidance/current/library/making-audiovisual.asp).

Body charts
Body charts are a useful way of pictorially documenting the location of lesions on the body. It is often helpful to mark up the lesions with descriptions as to how they look. Some people develop a pictorial key so that different types of shading indicate different skin changes (e.g. excoriation, dryness, inflammation). Body charts are particularly helpful if they are used by the same person throughout the course of a patient’s care, and are only reliable for showing changes over a period of time if they are completed with extreme care. However, if completed on an initial consultation, they can be helpful for reminding the healthcare professional what the skin was like at the start of the care episode.

Visual analogue scales
These simple scales show how a patient views their own symptoms against a set of pre-determined statements, which are themselves related to a numerical scale. It is generally agreed that visual analogue scales should have an odd number of points. Some scales consist of whole numbers from which people must choose; others, like the self-assessed psoriasis area severity index, require a mark on a line which can fall between whole numbers.

Example
Please circle the number which relates to how you feel about your skin today.

Describe how dry your skin is today.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>As dry as</td>
<td>Not dry at all</td>
<td>I can possibly imagine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Such scales may not be validated and therefore their reliability may be questioned. However, they can be a helpful way of measuring change within a clinical situation. A patient is asked to complete the visual analogue score at their first visit and then at every subsequent visit. It is best not to show the patient how they scored previously until they have completed the score for that visit; they are often surprised to see the change.

Dermatology life quality index (DLQI)
This is a generic life quality index which can be used for any type of skin disease. It has been extensively used, translated into 44 different languages and is a reliable and valid way of assessing outcomes. It consists of 10 questions which patients should be encouraged to complete on their own. Once completed, the questionnaire is scored: the higher the score, the poorer the quality of life.

There is a maximum score of 30 and a minimum of 0. In addition to scoring the questionnaire as a whole, it is possible to subdivide the questions to enable more specific analysis. Thus, questions 1 and 2 relate to symptoms and feelings, questions 3 and 4 to daily activity, 5 and 6 to leisure, question 7 to work and school, questions 8 and 9 to personal relationships and question 10 to treatment. The full questionnaire and instructions for its use can be found online at www.dermatology.org.uk.

Psoriasis area severity index (PASI)
This is a rather more involved outcome measure which has been designed and validated to measure the physical severity of psoriasis. It does this by providing a framework to assess the severity of the body that is covered and the nature of the psoriasis, i.e. how scaley, thick and red it is. These measures are fed into a formula and a figure is produced which indicates the level of severity. PASI scores can rate from 0–72: the higher the number, the more severe the psoriasis (Louden et al. 2004). PASI scores have become increasingly significant because they are used to judge the success of treatment, particularly in relation to expensive therapies such as biologic drugs. For biologic drugs to be considered a success for a patient, there must be an improvement of the PASI score of at least 75%.

An adequate response to treatment at 12 weeks is defined as either:

- A 75% reduction in the PASI score from when treatment first started (PASI 75) or,
- A 50% reduction in the PASI score (PASI 50) and a five-point reduction in the DLQI from when treatment started.


Self-assessed psoriasis area severity index (SAPASI)
This measure, designed in the mid-1990s, aimed to simplify the PASI to allow a patient-completed measure of disease severity. Using the same measures as the PASI (area and severity of symptoms),
patients are asked to draw on a body chart where they believe their psoriasis to be, and then to complete a visual analogue scale in relation to scaling, thickness and redness. Once again, a formula is used to manipulate this data to reach a score indicating disease severity. It has been shown in a multi-centre, blinded trial that the SAPASI correlates with the PASI and that it is, therefore, an effective tool to measure disease severity (Fleischer et al, 1999).

Salford psoriasis index (SPI)
This index provides an opportunity to assess three key outcomes for patients with psoriasis, all within one index. The first is the physical impact of the disease as measured through the PASI score. By its nature, this is a healthcare professional measured outcome. The next score measures psychological disability and is calculated using a visual analogue score with 11 possible ‘grades’ of response: 0 being not affected at all (…by the psoriasis) and 10 being ‘completely affected’. An assessment is also made of the historical severity of psoriasis for an individual by considering their past treatment history. Broadly, this considers systemic treatments given, hospital admission for psoriasis and episodes of erythroderma. The resulting score is given a ratio which is labelled signs, psychosocial impact, and interventions (SPI). A low score would be 1:1:0, whereas a score of 10:10:6 would indicate a patient who has severe physical psoriasis which is having a significant psychosocial impact and has been treated intensively (though not necessarily successfully) in the past (Kirby et al, 2000).

SCORAD — Scoring atopic dermatitis
This measure was designed primarily for use on children in the early 1990s by the European Task Force. It consists of three key components: extent of the eczema, the intensity (i.e. erythema, oedema/population, oozing/crusts, excoriation, lichenification and dryness), each of which is scored from 0 to 3; and subjective symptoms (i.e. itch and sleeplessness) measured on a visual analogue scale from 0 to 10. Some debate has occurred as this system can be complex and relatively time-consuming and, on occasions, leads to errors in interpretation of results (Oranje et al, 2007). Thus, some simpler versions have been generated: one where the subjective symptoms are removed (renamed objective SCORAD), and another which just looks at three items of severity (T1S), erythema, oedema and excoriations, all measured on a 0–3 scale.

Conclusion
There are a number of outcome measures for patients with skin diseases, some of which focus on the severity of disease (assessed by healthcare professionals), and others which focus on quality of life (patient measures), while some combine aspects of both. All of the outcome measures in this article have their place and may be useful, however, care should be taken that they are used appropriately. If a measure is to be used in research (and a general conclusion drawn from the results), it should ideally be validated for that purpose — simpler strategies may be suitable for clinical or audit purposes. The future may see the development of further evaluation tools. One area that may warrant further work is how well an adult patient understands their condition and how this impacts on their ability to manage it.  

References

Key points
» When healthcare professionals consider outcomes for patients with skin problems, it is vital to take the patient’s perspective into account.
» The increased availability of specialist nurses working in nurse-led environments has meant that patients can access expert services outside the usual boundaries of a dermatologist-led outpatient clinic.
» The Expert Patient document (Department of Health [DoH], 2001) encourages healthcare professionals and patients alike to accept that patients could and should be experts about their condition, and that treatment plans should be made with the patient in order to maximise the likelihood that they will comply with treatment.
» The future may see the development of further evaluation tools. One area that may warrant further work is evaluating how well an adult patient understands their condition and how this impacts on their ability to manage it.
MANAGING ECZEMA AT EITHER END OF THE AGE SPECTRUM

Jill Peters

Eczema can occur at any age but is generally found in children under 11 and adults over 60. It accounts for up to one-fifth of all GP consultations and in 2001/2 generated over 60,000 GP referrals to secondary care (NHS Modernisation agency, 2003). Demographic changes in Britain mean that an increasing proportion of people will suffer consequences of skin problems in old age: 20% of the population in 2001 were aged over 60 (12 million) (Associate Parliamentary Group on Skin [APGS], 2000).

Consultations with healthcare professionals should allow enough time to educate patients, thereby improving their ability to manage the presenting skin condition. It is important to recognise the patient as an individual and to listen to what they have to say, understanding their perspective and their previous experience. When planning care, the practical, physical, psychological, social, cultural and spiritual needs of the individual/carer and their families should be considered.

It is also essential to allow the patient/parent/carer the time to ask questions and to give re-enforcing messages about the condition and the treatment, including a physical demonstration on how to apply therapies. With children this may be done through play (Walker, 2003). Management of eczema is multifaceted and does not focus on a single treatment modality.

The burden of carrying out skin care falls on the patient/carer/family, which was acknowledged by the Dermatology Workforce Group (2007) who were asked to look at service models for acute and chronic disease management by the Department of Health Workforce Review Board:

*The facilitation of well-supported self-management of inflammatory skin disease is key to the provision of services.*

(Dermatology Workforce Group, 2007)

Understanding the skin’s barrier role

The epidermis is the true protective layer between the inner body and the environment. It has an average thickness of 0.1mm (variation depends on the location, e.g. it is thickest on the palms of the hands and the soles of the feet, and thinnest on the eyelids).

The cells in the epidermis are called keratinocytes (and then corneocytes in the stratum corneum). These cells are packed with keratin to provide the physical barrier strength that we associate with the skin. Adjacent cells are attached to each other by corneodesmosomes, which are flexible adhesive junctions. These stabilise the epidermis and attach to the dermis. The corneodesmosomes act as rods holding the skin cells together and allowing the skin to resist shear forces (Cork et al, 2005). To enable corneocytes to shed from the surface of the skin, the corneodesmosomes have to be broken down by proteases. This process is called proteolysis and leads to shedding (desquamation) in normal skin.

In patients predisposed to atopic eczema, the corneodesmosomes are broken down excessively by the increased skin protease activity and thus the scaling of the skin is accelerated, especially when soap or surfactants are used. This causes the epidermis to become thinner, which allows irritants and allergens to penetrate the skin, triggering eczema flares.

In atopic eczema, the keratohyalin granules in the granular layer of the outer epidermis are predominately composed of polypeptide profilaggrin, and these polypeptides form part of the dense protein lipid matrix which prevents epidermal water loss. The stratum corneum provides the true protective barrier, defending the body against physical or chemical attacks, but also limiting water absorption and emission by the epidermis. Its water-binding ability is essential to maintain elasticity, distensibility and firmness (Marks, 1997). It has now been identified that there are two filaggrin mutations that lead to complete loss of processed filaggrin product. These null mutations were shown to be the cause of ichthyosis and an overt histological skin barrier defect (Palmer et al, 2006).

Keratin is not the only substance found in the keratinocytes; they also have non-keratin by-products from the keratinisation process. These substances can bind and retain water in the horny layer and are known as the natural moisturising factors (NMFs) (Cork, 1997). The most important NMFs are lactic acid, pyrrolidonecarboxylic acid, urea, urecanic acid and carbohydrates bound to scleroproteins. If the NMFs are removed from the horny layer, this layer loses its capacity to bind water. Some emollients contain ingredients to supplement the effect of these natural humectants.

During the development of keratinocytes, they progressively release lipids into the interstitial space between the cells. These lipids create a barrier that is impermeable to water egress and allergen ingress. The lipid lamellae are incomplete in atopic eczema, which contributes to the barrier breakdown. It is the role of oils and lipids in emollients to supplement these natural lipids.

The skin in the elderly is more likely to be dry because of the physiological changes that occur with ageing (sweat...
and sebum secretion decreases and the hydrolipid film is not as protective).

Over the age of 60, the epidermis thins by 50% and there is a loss of elasticity (the dermis loses its normal fibrous structure) and turgor of the skin (the collagenous fibres can no longer bind water) (Van de Kerkhof, 1997). Excessive exposure to soap and frequency of washing has over time depleted the hydrolipid film, and it is unable to replenish itself sufficiently to maintain a protective barrier (Van de Kerkhof, 1997). Dry skin may also be a symptom of an underlying metabolic disease, such as hypothyroidism, or an adverse drug reaction, such as to lithium (Peters, 2001).

The effect of soap and detergents on damaged skin has long been held to be due to the ability of these agents to wash the natural lipids out of the skin. In addition, it is now known that the high pH of these agents increases the activity of the protease enzymes, leading to premature shedding of corneocytes and thinning of the skin (Kolbe et al, 2000).

The skin in children under two years old is one-fifth thinner than adult skin, and the epidermal corneum is thinner and weaker (Peters, 2001). The keratinocytes are less tightly packed, reducing the skin’s barrier function. This immaturity means that the hydrolipid film and protective acid coating are not fully developed (sebaceous glands do not develop fully until puberty). Children’s skin is therefore less able to protect itself from drying and alkaline products (Peters, 2001).

Atopic eczema has a genetic component and there has been an increase in its prevalence, which suggests environmental factors may also play a part. Frequent washing with soap products, exposure to irritants, bacteria, dust mites and dry environments may all contribute to loss of skin barrier function and exacerbation of existing disease (Holden et al, 2002).

Consultations
Consultations should allow enough time for the healthcare professional to carry out a full history-taking exercise and for the child/family and patient to talk about how the condition affects them so that the healthcare professional can gain an understanding of their experience to date. Use of a poster of the different topical therapies is helpful, as patients often remember packaging rather than the names. A physical skin examination gives a clinical picture of the extent of the condition, the potential damage done to the epidermal barrier and allows the opportunity for any investigations to be carried out, e.g. skin swabbing. This should be done in such a way as to maintain the patient’s dignity and privacy when undressing.

Older people and children require more time to dress and undress and may possibly need physical assistance. Play may be appropriate with children, such as using a doll to illustrate what care needs to be carried out. Written information on how to apply the leave-on creams should be given to all patients/carers and families (Walker, 2003). Consultations can take longer if English is not the patient’s first language, as they may require an interpreter present, or if the conversation has to take place over the telephone.

Factors to consider when prescribing topical therapies
Treatments for the majority of medical conditions are given systemically or intravenously. However, for skin conditions it is mainly topical with the product being ‘worn’ on the skin like ‘make up’ (Stone, 2005). It is important to have an open, unrestricted choice when it comes to moisturisers, as these are the ‘mainstay for managing chronic skin conditions.’

Better outcomes are achieved when time is spent educating patients about their disease and the therapies available (Bentley, 2002; Cork et al, 2003; Peterson and Chan, 2006), including a demonstration on how to apply products to the skin, as, on the whole, skin care is carried out by the patient/carer (Dermatology Workforce Group, 2007). Correct application makes a considerable difference to the efficacy of the product and improved outcome for the patient. Such demonstrations also give the opportunity to discuss how much should be applied to gain remission, as well as a joint discussion about the choice of treatments, thereby empowering the patient/carer.

Emollient therapy should be part of the patient’s hygiene routine with the involvement of home support workers. There are some tools on the market that look like a long-handled paint roller (Magirola) that can be washed easily and enable patients to moisturise their backs and lower legs. Children also have to be empowered to use their emollients at nursery or school. Young children can be involved in decision-making by participating in applying different moisturiser cream samples during the consultation and deciding on which one they like and, thus, will be more likely to use (Carr 2006). Small sample tubes are ideal to place in school bags.

Soap substitutes and bath oils
Emollient bath additives are a generic term to describe bath oils (these are added to the water in a bath or bowl). Soap substitutes are applied to the skin and then washed off, whereas moisturisers are applied to the skin and left on. Any soap product left on the skin can irritate and exacerbate dry skin, hence the necessity to reinforce the message about rinsing well. Patients with dry skin are usually recommended to use products which reduce the drying effects of water by leaving a trace of oil on the skin surface after bathing (Holden et al, 2002).

When considering the efficacy of using bath oils, a recent review in the Drug and Therapeutics Bulletin (DTB, 2007) raised this issue stating that there was no clinical evidence to support their use. The weight of evidence has changed over the last thirty years since bath oils were first introduced for the management of dry skin. There is evidence (Voegeli, 2007; Holden et al, 2002), but it is old and does not stand up to current levels of scrutiny. The review also mentions that there is no comparative data between the effectiveness of bath oils versus soap substitutes and leave-on emollient moisturisers. However, dermatology nurses generally use these treatments collectively, not individually.

Care needs to be taken when measuring the amount of oil to be added to the water to ensure that the bath does not become too greasy and slippery.
Trial and error is needed to gain the right amount for each individual patient.

It is recognised that cosmetic soap products strip the skin of its natural moisturising factors, leaving a tight sensation after use. They also raise the pH of the skin (Kolbe et al, 2000). Soap substitutes or bath oils are recommended instead of these agents.

**Topical, leave-on moisturiser creams**

Emollient creams soften the skin and prevent the loss of water through evaporation, thus keeping the epidermal barrier intact and moist. These creams are left on the skin surface and are not washed off.

On application, creams should leave a light, glistening effect on the skin, and not be so heavily applied that they stick to clothes. This advice may contradict what is written on the Patient Information Leaflet (PIL) and may lead to confusion when the patient has left the consultation, so, either enforce with an additional information leaflet or add to the instructions on the prescription. Application should be by smooth, downward strokes, going with the flow of the hair; thus reducing the possibility of poral occlusion and miliania (Marks, 1997). A topical preparation that sits on the surface of the skin should be applied gently so as not to irritate the skin surface. Rubbing is a form of friction that could cause thickening of the epidermis. Rubbing/massage can also increase localised heat, making the skin itchy. The frequency and technique of application is as important as choosing the right product; if the skin is itchy or scale is present, it is dry and needs another application.

It is often useful to supply emollients in small tubes or pumps so that they can be carried in bags, kept in the drawer at work, or in several locations around the home for easy access. Products should not be shared, if hands are dipping into the tub of cream they can shed skin scales and bacteria, and the latter will easily grow in a moist environment (Davis, 2001). Decant the cream out of pots with a spoon that can be washed after use. Pump dispensers are cleaner and easy to use if you have arthritis and cannot undo the containers.

Involving the child/patient/carer in the choice of emollient can be achieved through direct experience of trying the different products in clinic, supported by a demonstration on the application technique. This increases patient concordance, as the patient/carer will use the product they like best.

Ointments, although not always cosmetically acceptable, are preferable as they are more viscous and occlusive. Cream is used if the skin is moist and sore. Creams contain more potential sensitisers which keep them bacteria-free and chemically stable. Lotions are easy to apply and have less friction if the skin is particularly hairy, thereby avoiding irritation of the hair follicles.

It should be noted that the National Patient Safety Agency (2007) issued a fire hazard notice regarding paraffin-based skin products following a fatality. Paraffin-based products (50/50 liquid/white soft paraffin, emulsifying ointment), when soaked into bandages are easily ignited with a naked flame or cigarette and, thus, all patients should be informed of the risks when they are first prescribed. (This applies to products with greater than 50% paraffin in the formulation.)

The DTB review (2007) outlined that there is consensus among clinicians (Holden, 2002; Ersser et al, 2007), as well as supporting data from a randomised controlled trial to indicate that emollients applied directly to the skin are beneficial and significantly reduce the amount of high-potency topical steroids needed to control atopic eczema (Grimait et al., 2007). Best practice suggests that topical emollients are used as a therapy for atopic eczema and as an adjunct for other treatments of dry skin conditions (Finlay, 1997; Holden et al, 2002; Poyner, 2001).

**Topical steroids (immunosuppressants)**

The potency of the steroid chosen should be based on the severity of the condition and the sites involved. The aim is to suppress the inflammation and pruritis thereby enabling the patient to recover from an acute flare, rather than develop chronic eczema through scratching. The potency may need to be lower for skin that is thinner, as in children or the older person, or, if a high potency is used, a short exposure is sufficient. Newborns and infants have a greater ratio of surface area to body weight than older children or adults, and absorption of topical medications will be more rapid in intertriginous areas of skin (flexures and genitalia) and skin folds. Thus, these areas have higher rates of percutaneous absorption that can enhance the effects of topical medication. Weaker steroids are used in the flexures or on the face, where there is a higher concentration of blood vessels. One study showed no significant difference between using a potent topical steroid beclomethasone valerate ointment for three days versus a weak potent topical steroid 1% hydrocortisone ointment twice daily for seven days (Thomas et al, 2002).

There is no evidence from randomised clinical trials that steroids applied twice daily are more effective than those applied once daily. The British National Formulary (BNF, 2007) recommends that they should not be applied more than twice a day.

To be effective, topical steroids should be used consistently. Very potent steroids should not be applied for more than three weeks, and moderate-to-mild steroids for no more than three months at a time without review (Greaves and Gatti, 1999). Regular review of the patient is essential, as if atrophy occurs the topical steroids should be stopped to allow the skin to recover. Topical steroids should only be applied to the affected, not normal skin. If a high potency steroid is used in excessive amounts or over a prolonged period of time, the dermis will lose its elasticity and skin stretch marks, which will be permanent, will appear (striae) (Greaves and Gatti, 1999). Hydrocortisone, a group one steroid, used alone never causes atrophy and is safe to use in babies (Atherton, 1994). Table 1 lists the cutaneous side-effects that can occur.

The risk of significant skin atrophy from brief treatment with a mild or moderately potent topical steroid appears extremely low. Epidermal thinning, however, does occur within one
to three weeks of treatment with potent or very potent topical steroids on normal skin, but reverses within four weeks of stopping treatment (O’Donoghue, 2005). Lichenified eczema shows the epidermis has thickened to protect itself from the mechanical damage caused by scratching or rubbing, and so thinning of the epidermis is expected as part of treatment. Care should be taken if occlusive dressings are used, such as impregnated medicated bandages.

Topical steroids should be applied to the affected areas approximately every 30 minutes (Flohr and Williams, 2004) after the topical emollient, or bathing with a bath oil or soap substitute. The topical emollient can then be reapplied a minimum of 60 minutes later (Flohr and Williams, 2004). Only one area of immunosuppressant interaction with emollients has been studied with the newer topical immunomodulating agents, tacrolimus and pimecrolimus. The National Institute for Health and Clinical Excellence (NICE, 2004) states that emollients should not be used two hours before or after the application of tacrolimus, but there is no restriction with pimecrolimus (Voegeli, 2007).

The patient can develop tolerance and a possible allergy to a topical steroid preparation (tachyphylaxis) if they remain on it for a long time. Changing the steroid to another within the same potency group, but made with a different formula, may improve the situation. Preservatives in the vehicle in which the steroid is based can also be potential allergens.

**Topical immunomodulating agents**

Tacrolimus and pimecrolimus are non-steroidal preparations that are applied topically. They are immunomodulators and reduce inflammation by suppressing the T-lymphocyte response in active atopic eczema, and are licensed for children as young as two years old. Long-term side-effects (less than 10 years of data) are not yet known, but they are not thought to cause skin atrophy, making them an option for treatment in individuals at risk of, or with irreversible skin atrophy (NICE, 2004). They should not be used as first-line treatment for mild-to-moderate eczema. Both can cause a range of side-effects, most common being a burning/tingling sensation, pruritis, erythema, folliculitis, herpes simplex, acne, increased sensitivity to hot or cold and alcohol intolerance. However, the United States of America’s Food and Drug Administration (FDA, 2005) issued a public health advisory warning about an increased potential for cancer associated with tacrolimus and pimecrolimus, based on animal study and a small number of skin cancers and lymphomas in adults and children. It is known that in patients on systemic ciclosporin (transplant patients), there is an increased risk of lymphoproliferative diseases and skin cancers (Peterson and Chan, 2006).

**Conclusion**

The successful management of eczema is based on the therapeutic relationship between the patient/family/carer and the healthcare professional. The burden of care falls on the patient/carer/family, but, if they are well supported by the healthcare professional with knowledge of self-care strategies through education and access to medication to treat the condition, it can prove successful as they become experts in the management of their condition (Dermatology Workforce Group 2007; DoH, 2007). Self-care is recognised as a key feature of long-term conditions, such as eczema. Remission from eczema can be achieved and often children become clear, although they retain the potential to have dry skin and flares may reoccur; for example, at time of stress. For the older person who develops eczema late in life, it is often confusing and frustrating and they may require support to carry out their treatments via families, carers and community nurses.

The dry skin that occurs at these extremes of the age spectrum have different aetiologies, but the same treatment regime is needed as the underlying problem is the same, i.e. a thinner than normal epidermis with a defective lipid barrier. Emollients are effective, but the overriding factor that ensures management of this condition is the education of the patient/parent/carer in the use of treatments, and the prescription of adequate quantities of

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**Table 1**

<table>
<thead>
<tr>
<th>Pharmacological actions of topical steroids</th>
</tr>
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<tbody>
<tr>
<td>Telangiectasia</td>
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<tr>
<td>Atrophy</td>
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<tr>
<td>Striae</td>
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<td>Peri-oral dermatitis</td>
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<td>Mild depigmentation</td>
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emollient products in appropriately sized containers.

**References**


Food and Drug Administration Public Health Advisory (2005) Press release: Elidel (pimecrolimus) cream and Protopic (tacrolimus) ointment. 10 March, Rockville MD, USA


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**Key points**

- Eczema can occur in any age but is generally found in children under 11 and adults over 60.

- It is important to recognise the patient as an individual and to listen to what they have to say, understanding their perspective and their previous experience.

- The skin in the elderly is more likely to be dry because of the physiological changes that occur with ageing.

- The skin in children under two years old is one-fifth thinner than adult skin, and the epidermal corneum is thinner and weaker:
  - Use of topical emollient therapy should underpin any treatment plan for the management of dry itchy skin regardless of age.
This article will summarise the main causes of leg ulceration and how the management of the surrounding skin can contribute or compromise the progress and improvement of the ulcer. There is a lack of evidence about the most effective preventative measures and treatment interventions, but it is recognised that the prevention of skin breakdown should be addressed by all nurses.

The importance of skin assessment and then subsequent management of dry skin and varicose eczema will be discussed. The appropriate use of topical treatments, both emollients and topical corticosteroids will be explained. The identification of other lower leg lesions will also be touched upon.

In the past there may have been a tendency for the management of the skin around leg ulcers to have had a lower priority than treating the wound itself. It can be seen that if the skin’s integrity upon the lower leg and, indeed, around a leg ulcer, is not maintained, the impact may be multifactorial and will influence the progression of wound healing. All healthcare professionals should have knowledge of the structure and function of the skin and an awareness and ability to plan appropriate interventions to reduce the risk of skin breakdown. This will subsequently reduce the risk of infection and unnecessary discomfort and pain.

Leg ulceration

Leg ulcers are a leading cause of morbidity among older people, especially women in the Western world. It is said that Hippocrates himself had a leg ulcer and wrote: ‘In case of an ulcer it is not expedient to stand, especially if the ulcer be situated on the leg’ (Sarkar and Ballantyne, 2000). The best treatment of any leg ulcer depends on the accurate diagnosis of the underlying aetiology.

It has been suggested that the population prevalence of leg ulceration varies between 11/1000 and 31/1000 in studies from western Europe and Australia (Moffatt et al, 2004). The management and care of patients suffering with leg ulcers costs the NHS about £600 million a year (Smith and Nephew Foundation, 2007). This does not take into account the cost to the individual with the leg ulcer, who may suffer reduced quality of life, have to pay prescription charges for dressings, or take time off work (Simka and Majewski, 2003).

In the Western world, leg ulcers are mainly caused by venous or arterial insufficiency, neuropathy and diabetes, with infection, tumours, metabolic or haematological disorders, trauma or a combination of these factors also resulting in lower leg ulceration.

This article will not go further into the aetiology of ulceration but there is much published in the nursing and medical press for further reading.

Age-related skin changes

Skin structure changes with age (see below), making it vulnerable to drying out and breaking down. This has implications for injury, such as tears which may lead to leg ulceration. These natural, age-related changes compromise the effectiveness of the skin, which thus requires supplementary help to function. All carers and nurses are well placed to recognise compromised skin, especially on the lower leg, and to implement simple measures to restore it and prevent breakdown.

The following changes which occur with age contribute to the occurrence of leg ulceration in the elderly population:

- Epidermal cell replacement: the rate of cell turnover slows down, resulting in quicker cell loss than replacement. The skin becomes much thinner, and injury and bruising become more prominent. This damage can be amplified if the individual has had previous conditions which have required topical steroid treatments for any length of time.
- The production of lubricating substances by the skin’s sebaceous glands, which make the skin soft, decreases. The reduction in these substances, which contain fatty acids, changes the pH and moisture of the skin’s surface. This reduces the skin’s chemical barrier function and its defence against bacterial and fungal growth, especially as it dries out and starts to crack more easily.
- The skin starts to lose its layer of subcutaneous fat along with its protective and insulating function. Collagen decreases 1% annually and the skin loses its elasticity, resulting in the appearance of wrinkles and skin folds (Norman, 2003).
- Changes in dermal vasculature include thicker arteries and thinner capillaries, causing a general reduction in the blood supply to the skin.

Skin changes seen with arterial disease

Arterial occlusion in the leg, due to any cause, can result in ischaemia of the skin and subcutaneous tissues, leading to ulceration. Small vessel disease, associated with patients with diabetes, interferes with peripheral circulation and leads to tissue hypoxia. As a result, the lower limb skin tends to dry out, become pale, shiny and hairless. The skin on the feet will also become dry, possibly with fissures (deep cracks) over the heels and thickened toe nails.

Skin changes seen with venous disease

The concept of the stasis of venous...
blood in the legs, due to the high pressure in the veins and incompetence of the valves, is what is responsible for the skin changes associated with venous ulceration. These include the following:

- **Dry skin** (Figure 1) (oil and water loss from the skin)
- **Atrophie blanche** (dilatation of the skin capillaries)
- **Haemosiderin** (red/brown staining in gaiter area)
- **Varicose eczema**
- **Hyperkeratosis** (thickened, scaling skin)
- **Ankle flare** (dilated capillaries around the base of the foot)
- **Lipodermatosclerosis** (hardening of the skin and subcutaneous tissues)
- **Folliculitis** (surrounding skin becomes inflamed along with the presence of pustules)
- **Maceration** (white and soggy skin due to wound exudate).

**Skin assessment**

Assessing the skin is a process which requires great sensitivity and the use of four of our five senses. Before undertaking a skin assessment it is helpful to give careful consideration to the environment: is the room warm enough? Are unwanted interruptions guarded against? It is also worth considering whether the individual needs to be asked to undress completely, or just to show a specific area. In relation to being able to reach down and wash feet well or change footwear frequently. If someone is neglecting themselves and not washing this is something that you might pick up by smell.

Finally, listening will help to find out more about the patient, listening to the story that they have to tell about their history and more subtly for involuntary winces of pain or discomfort as you touch their legs.

**Prevention of dry skin and varicose eczema**

Measures to prevent varicosities in the first place will reduce the likelihood of dry skin and varicose/stasis/gravitational eczema. These include avoidance of sitting/standing still, encouraging exercise of the legs, including the calf muscle pump, elevation of the legs at rest, use of compression hosiery or bandages, and appropriate topical treatments for any signs of dry skin/eczema.

**Contact dermatitis**

The low skin growth rate in the elderly, combined with a reduced protective ability makes older skin prone to retaining allergens and irritants. Only when a sufficient quantity of allergen has been deposited on an older skin, such as rubber accelerators and topical antimicrobials, does the body react, often with dramatic and extensive dermatitis: hence the need for a full body skin assessment rather than just the area being treated.

Looking at the skin will provide many visual clues. Is the skin cracked, are there any obvious breaks in the skin, varicose eczema/dermatitis or are there any suspicious lesions that may indicate skin cancer? It is a good idea to keep an eye open for secondary lesions. These are breaks in the skin that have been caused by the individual, e.g. by picking or scratching. Make a note of the extent of any specific dermatological condition present. Does it fit with contact dermatitis, i.e. where the dressing/topical treatments are applied?

Smell is an important sense to use as it may give clues about an individual’s well being that they feel reluctant to talk about, for example, whether they are able to reach down and wash feet well or change footwear frequently. If someone is neglecting themselves and not washing this is something that you might pick up by smell.

Allergic contact dermatitis (Figure 2) occurs following systemic sensitisation, after which only the smallest quantity of irritant is required to trigger symptoms. Dermatitis is recognised by redness, scaling, crusting, weeping and the formation of small, surface vesicles. The distribution of the rash would normally suggest contact with an external factor such as those mentioned above. It has been shown that up to 68% of patients presenting at a leg ulcer clinic can have contact sensitivity to substances used on their legs (Tavadia et al, 2003).

Removal of the suspected irritant/allergic substance, where possible, is the first form of treating such contact dermatitis. Referral for patch testing within a dermatology department may help identify specific allergens when unsure. Management of the dry skin, as outlined below, along with the application of medium strength topical corticosteroids can reduce the inflammatory responses.

**Management of dry skin**

As dry skin and eczema are both the result of water and oils being lost from the skin, the basic method of management is two-fold: prevention
of further water and oil loss and replacement of water and oils.

**Prevention of water loss**
Several factors increase water evaporation from the skin, such as central heating, open fires and dry rooms, which are common among the elderly in the winter. An increase in dietary fluid intake can help to rehydrate the skin, especially for patients on diuretics.

The use of soap on the skin should be avoided, as its alkalinity is known to irritate and dry the skin out further. Similarly, the use of bubble baths and shower gels, which are often highly fragranced, should be avoided and replaced with soap substitutes. This is especially important once the patient’s leg ulcer has healed and they have less contact with healthcare professionals.

**Replacement of water and oils to the skin**
Soap substitutes can replace soap and are used in a similar way when washing. They can be applied to the entire body or just the legs if the rest of the skin is in good condition, either prior to washing and rinsed off with water, or when in the bath or shower. Aqueous cream is a good soap substitute for most adults but is best not used as a leave-on moisturiser as there have been reports that it can cause sensitivity (Cork et al, 2003).

If the skin is extremely dry, bathing is preferable to showering, as the skin can absorb moisture from the water as well as the soap substitute. Bathing in water alone can be quite drying to the skin, especially in areas of harder water. In combination with soap substitutes, it is possible to use bath oils added to the water. These either leave a film of oil on the skin when getting out of the water or mix in with the water, enhancing the moisture levels that the skin can absorb. Some leg ulcer clinics use bath oils and soap substitutes when washing patients’ legs.

**Emollients**
Both soap substitutes and bath oils are designed to be rinsed off the skin. Emollients are designed to stay on the skin and be absorbed, removing the dry, scaling skin and allowing it to become more moist, supple and comfortable. They soften and protect the skin and are also able to reduce inflammation and irritation. Appropriate use has been shown to reduce the need for using topical corticosteroids, which could be vital in managing varicose eczema (Lucky et al, 1997).

A list of the most common emollients includes Diprobene® (Schering-Plough), Doublebase® (Dermal), Dermol 500 lotion® (Dermal), Hydromol® (Ferndale), Epaderm® (Medlock), white soft paraffin/liquid paraffin, to name but a few. They all vary in consistency with lotions being higher in water content than creams and ointments being the greasiest.

When using any topical treatment to manage varicose eczema or dry skin, it is preferable to use ointments rather than creams as the preservatives in creams have been shown to increase the likelihood of sensitivities and allergies (Tavadia et al, 2003). However, it must also be remembered that folliculitis is more common on hairy parts of the body when treatments block the hair follicles. In these instances, a lighter cream or lotion is preferable.

**Topical corticosteroids**
When varicose eczema or other forms of dermatitis, e.g. contact dermatitis, do not resolve with emollients alone, topical corticosteroids have an important role to play. As anti-inflammatory agents they are best applied once or twice daily, however, depending on the dressings used to manage the leg ulcer itself this may not always be possible, especially if dressings are to be used cost-effectively. Such treatments will have their potency increased if they are applied under any occlusion, including bandaging, so a lower potency may be required or the length of time reduced to avoid hyperabsorption and the risk of side-effects.

Generally, the amount to be applied is deduced by using a finger tip unit (between finger tip and distal crease) as a guide. This quantity is sufficient to cover an area of eczema the same size as that covered by two palms.

One controversial issue remains, however, as it is still not known whether emollients or topical steroids should be applied first when treating active skin disease (Smoker; 2007). It is recommended that the practitioner considers the severity of the skin disease and the hydration level of the skin. A definitive stance is difficult to reach, as further evidence is needed in this area.

**Other skin problems associated with leg ulceration**

**Maceration**
Excessively exuding wounds may cause more damage to the surrounding skin, as it is bathed in potential irritants from the exudate (Figure 3). The skin can become white, hard and swollen or erythematous, or both, and eventually the epithelial layer is damaged further and breaks down, enlarging the wound. Effective management of the wound with good dressings is vital, along with appropriate use of elevation and compression to encourage venous and lymph return. Sometimes the surrounding skin needs a barrier from such exudate. Zinc pastes or second skin sprays (Cavilon™ [3M Healthcare]) can be helpful under the dressings.
Skin cancers
Any persistent, unusual or non-responsive leg lesion should be dealt with according to local protocol. This usually means referral to a dermatologist and a biopsy to establish aetiology. The most common lower leg lesions that can ulcerate include basal cell carcinomas and squamous cell carcinomas. Removal of the lesion is usually indicated and the prognosis dependent on the lesion. Bowen’s disease and malignant melanomas can also present on the lower leg, but if caught early ulceration can be prevented.

Pyoderma gangrenosum (Figure 4) and bullous diseases (blistering) can also present on the lower leg. Again, management of these is best left to the dermatology team.

Conclusions
Skin breakdown places a huge financial burden on the NHS, annually costing around £3.1 billion, which will only rise with an increasingly elderly population. One recent report (Smith and Nephew Foundation, 2007) states that chronic wounds, like leg ulcers, form a large part of this cost. They suggest that skin breakdown has the potential to reach epidemic proportions and that this has huge implications for us as nurses. They are encouraging more research into preventative and remedial measures to address this issue. The issue of skin care around leg ulcers can be seen to be even more important in light of this recent report, with the following points as key messages:

- Accurate assessment of the cause of leg ulceration is paramount to the success of healing. Assessment of surrounding skin dryness and the use of appropriate skin care strategies is crucial.
- Maintaining skin integrity using soap substitutes and emollients, whether replacing moisture or removing excess, is vital in providing an optimum environment for wound healing.
- Prevention is better than cure. Health promotion around good skin care for the elderly and ulceration prevention are essential messages as today’s population gets older.

Key points

References


Dermatology is the study of the skin. We often sound erudite with our abundance of technical terms, but we are simply describing what we see (often in Latin or Greek). Skin disease is written on the skin, not in words but in pictures, and it is our job to describe the various lesions. This article hopes to assist the reader to understand the terminology that is used in dermatology.

Why is the skin important?
The skin is the largest organ of the body comprising 16% of the body weight and a surface area of 1.8m². It is often misunderstood and trivialised, not being considered to be an organ in its own right, particularly when things go wrong. Our skin is essential to our existence. It defines who we are and is a good indicator of our general health and well being.

Structure of the skin
The skin is composed of two layers, the epidermis and the dermis (Figure 1). The epidermis is a stratified squamous epithelium about 0.1–0.8mm thick, with several well-defined layers. Its main function is to act as a protective barrier. The principle cell is a keratinocyte. These are produced in the deepest layer of the epidermis and move progressively to the skin surface. The four layers of the epidermis represent the stages of maturation of keratinocytes.

The dermis is a layer of connective tissue lying beneath the epidermis and forms the bulk of the skin. It varies in thickness from 0.6–3mm. The dermis and epidermis interdigitate with downward epidermal projections (rete ridges) and upward dermal projections (dermal papillae). Collagen fibres make up the majority of the dermis and give the skin strength, while elastin fibres provide elasticity to the skin.

The subcutaneous fat consists of loose connective tissue and fat and can be up to 3cm thick. The skin also supports hair, sweat glands, sebaceous glands and nails.

Skin disease is written on the skin, not in words, but in pictures, and it is our job to describe the various lesions.

Functions of the skin
It is sometimes described as the icing on the anatomical cake or the decorative wrapping paper. It keeps the outside out and the inside in. But, it is obvious from its complex structure that it is not there simply to keep all other parts of the body together.

Some of the important functions of the skin are:

- Controlling body temperature — the skin plays an important role in thermoregulation
- Keeping out infections — the structural integrity of the stratum corneum (the top layer of the epidermis) protects against invasion of micro-organisms
- Providing a waterproof barrier — in the absence of a stratum corneum, the skin would lose significant amounts of water to the environment. There is the prevention of internal fluids escaping and unwanted fluids from the external environment gaining access to the body
- Synthesising vitamin D — this is produced in the skin by the action of ultraviolet (UV) light. Vitamin D is essential for the development of the skeletal system
- Protection of tissues and organs — the subcutaneous fat layer protects the underlying tissues from trauma by providing a deep cushioning effect
- Providing a sense of touch and...
helping us to express emotions, such as smiling and blushing.

We all have skin and most of us, despite our best efforts, do burn and generally abuse our skin, yet still go through life with a perfectly functioning outer layer. However, like any other organ of the body, things can and do go wrong.

It is estimated that skin disease that could benefit from clinical intervention affects 25% of the population at any given time. Of the 4,500 various dermatology diagnoses, eight of these make up the majority of GP consultations in relation to skin disease, making the fourth commonest reasons for visiting our GP. The incidence of some skin diseases, particularly atopic eczema and skin cancer is rising (Williams, 1997). Dermatology affects us all, whether we are the patient, the carer of the patient or working within the healthcare system.

Assessing the patient
This involves obtaining a detailed history to assist with making a diagnosis, as well as considering a management plan and the related nursing care. Assessing the patient can be broken down into two sections, history-taking and physical examination.

History-taking
To understand why the patient sought help, it is important to find out the patient’s view of their condition, how it started and how the patient describes it in their own terms.

Ask the patient about:

- Social history — the patient’s occupation or hobbies may have induced contact eczema. Foreign travel may have exposed the patient to a raft of tropical skin diseases. Asking about and understanding the patient’s living conditions and their home background will help to build up a picture of the patient’s skin condition, as well as to decide upon the course of treatment.

<table>
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<tr>
<th>Site</th>
<th>Number of lesions</th>
<th>Consistency</th>
<th>Type of lesion</th>
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It is estimated that skin disease that could benefit from clinical intervention affects 25% of the population at any given time.

The following questions could help you in history-taking:

1. What is the main problem?
2. How long has it been there?
3. How did it start?
4. Has it changed?
5. Has it got worse or better?
6. Has it occurred before?
7. Does it come and go?
8. Are you taking any new medications?
9. Have you had any history of similar symptoms?
10. Have you travelled abroad?
11. Do any family members have the same symptoms?
12. Have you done or used anything to make it better?

Physical examination
Due to the intimate nature of skin examination, it is vital that we gain informed consent from our patients before undertaking any kind of examination or procedure. The patient should feel safe and relaxed, and understand what we are doing and why.

We have to consider culture and religion and be aware of age and gender issues. A high level of privacy should be maintained at all times throughout the physical examination.

The physical examination should start with a general survey of the skin, followed by a closer examination of skin lesions.

A systematic approach using an assessment aide memoire will assist with the physical examination and make it easier on the patient. Such an approach should cover:

- Site
- Number of lesions
- Distribution
- Consistency
- Type of lesion
- Colour
- Arrangement

The following questions could help you in the examination:

1. What is the main problem?
2. How long has it been there?
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Type of lesion
Various terminology, as follows, is used within dermatology to describe the type of lesions. These terms are often called primary lesions, as they are visible at the onset of the disease process.

A macule is a circumscribed, flat discoloration of the skin. It cannot be felt on the skin. The size is generally less than 1.5cm, and macules can be a variety of colours. Examples of a macule would be a freckle or vitiligo. Larger macules are called patches.

A papule is a discrete, small, palpable lesion less than 0.5cm in size. Papules can vary in colour. Examples of a papule would be a compound naevus or insect bite.

A nodule is an enlargement of a papule in three dimensions: height, width and length. Nodules can involve all layers of the skin and they are generally larger than 0.5cm in size. Examples of nodules would be dermatofibroma, lipoma, and squamous cell carcinoma.

A plaque is defined as a circumscribed, elevated lesion. Plaques differ from nodules in that they have a flat top. Plaques can have well- or ill-defined borders. An example of a plaque would be psoriasis.

A vesicle is a fluid-filled blister less than 0.5cm in size. An example would be herpes zoster.

A bulla is a large vesicle, i.e. over 0.5cm. An example of a bulla is pemphigoid.

A pustule is a pus-filled vesicle. Pustules are either white or yellow in colour. Pustules can be infected, as in the case of folliculitis, or they can be sterile, as in the case of pustular psoriasis.

A wheal is an oedematous round or irregular area on the skin. Wheals are caused by swelling in the superficial dermis and they can vary in size from 0.2 to 10 or more centimetres. Wheals are generally transient. An example of a wheal is urticaria.

Erosions are the superficial loss of the epidermis. They do not extend into the dermis and heal without scarring.

Ulcers are areas of skin loss extending into the dermis and are associated with surface exudeate, crust and slough. Ulcers heal with a scar.

A fissure is a linear split in the skin.

Texture
The following terms to describe the texture of the skin are often referred to as secondary changes, as they occur due to the natural progression of the skin disease or are caused by some physical occurrence such as scratching.

Scale is excess dead epidermal cells caused by abnormal keratinisation and shedding. Scales can present in various forms.

Dermatology is an art not a science. It is not learnt by reading a textbook or attending a course. It takes many years of practice to build up the skills and knowledge required to make a diagnosis.

Crusting is the collection of dried serum and cellular debris and can be yellow or brown in colour.

Atrophy results from loss or thinning of the epidermis or dermis. The skin appears white, papery and translucent.

Excoriation is caused by scratching. Excoriations can be linear or round in shape, and can result in erosions and ulcers.

Lichenification is the chronic thickening of the skin and is generally caused by persistent scratching.

Colour
Skin lesions can present in a variety of colours.

Conclusion
The aim of this article was to enable the reader to understand the common terminology in dermatology and to give the reader the confidence to use it to describe skin lesions.

Key points

The skin is the largest organ in the body but it is often misunderstood.

It is a complex structure, vital to everyday living.

Skin disease affects a quarter of the population at any given time.

Assessing the skin involves detailed history-taking and physical examination.

Understanding dermatological terminology will give nurses confidence to use this terminology to describe skin lesions.

Dermatology is an art not a science. It is not learnt by reading a textbook or attending a course. It takes many years of practice to build up the skills and knowledge required to make a diagnosis. Even the most common skin diseases, such as eczema and psoriasis, can present in many different forms. Use this article as a guide to help you in undertaking an assessment of the skin. It is important that nurses have an understanding of the common skin conditions and their correct terminology. But, be aware of your limitations and always seek further advice when necessary.

Reference and further reading