Age-related changes in the skin mean older people are at increased risk of skin breakdown, and should be supported to maintain good skin health.

Maintaining skin health in older people

**In this article...**

- Skin care for older people
- Approaches to skin assessment
- Methods of promoting skin health in older people

**Structure and function of the skin**

The skin is the largest organ of the body, covering approximately 2m² (Penzer and Ersser, 2010). It performs a number of functions including:

- Maintaining an effective barrier between the environment and internal organs;
- Regulating temperature;
- Storage;
- Sensation;
- Vitamin D synthesis.

This article focuses on the barrier function and how it is affected by age.

The skin has two main layers: the epidermis (outer layer) and the dermis. These provide supportive structures allowing the epidermis to function (Fig 1). The stratum corneum provides the skin barrier. In normal skin it is resilient, protecting the underlying skin from the penetration of irritants and allergens and preventing the loss of water from the body.

The corneocytes are full of water; this results in a smooth barrier with no cracking between the corneocytes, which also contain high levels of natural moisturising factor (NMF) – a humectant. Normal skin is smooth and elastic and does not itch (Cork and Danby, 2009). The natural pH of the skin is slightly acidic – between 4 and 5.5 – providing protection from microbes (Cowdell, 2010). Damage to the skin barrier allows for water to be lost and irritants and allergens to be introduced, leading to inflammation (Cork et al, 2006).

**Skin ageing**

As we age the skin is affected both by intrinsic and extrinsic factors. Intrinsic ageing is the “programmed” true biological changes (Lawton, 2007), summarised...
Skin assessment

There is evidence of under-reporting of skin problems in older people (Kirkup, 2006) possibly because they see skin deterioration as an inevitable part of ageing and believe no help is available. Fanos and Laird (2001) also note that clinicians may see concerns as trivial. It is therefore important that nurses routinely enquire about skin concerns, using an ongoing process, involving monitoring and change and response to treatment. It should include:

- Listening to the patient;
- A detailed visual inspection of the skin;
- Touching the skin to assess texture;
- Smelling to check for distinctive odours (Cowdell, 2010).

Finch (2003) gave a detailed explanation of skin assessment. If any skin problems are identified on general assessment, further assessment, investigation and completion of risk assessment tools should be undertaken as required.

Skin care

Skin care is one of the cornerstones of nursing practice but the importance of general skin care is an area of practice that is often overlooked (Castledine, 2003). However, maintaining or improving skin health is generally neither costly nor difficult. Simple, low-cost interventions can have a positive impact on quality of life and help to prevent skin breakdown.

Skin hygiene is essential for skin health and important in promoting personal wellbeing. For older people with dry skin it is particularly important to achieve a balance between cleanliness and over-washing, which may damage the barrier function (Voegeli, 2008a). Use of appropriate washing products and emollients can contribute to maintaining skin health.

Washing products

The lack of evidence base for bathing practices means they are frequently guided by ritual (Voegeli, 2008b). Both nurses and older people may be reluctant to relinquish tried and tested practices.

Washing with soap and water remains the standard method of skin cleansing (Ersser et al, 2005) and is recommended in many nursing texts (for example, Downey and Lloyd, 2008; Dougherty and Lister, 2008). However, this can cause an increase in skin pH (Korting et al, 1987), which can alter the skin’s normal bacterial flora, increasing the likelihood of colonisation with more pathogenic organisms (Cooper and Gray, 2001). The increase in pH can also damage the skin barrier and cause irritation (Kirsner and Froelich, 1998). Soap also removes lipids from the surface of the skin and overwashing removes NMF (Peters, 2001), resulting in further skin dryness. If acceptable to the individual, using emollient and soap-substitute products rather than soap will help to maintain skin health.

Emollients

Emollients increase the amount of water held in the stratum corneum, either by occlusion (trapping the water in and preventing evaporation), or by actively drawing water into the stratum corneum from the dermis (Ersser et al, 2009). They play a crucial but often undervalued role in skin health and are the mainstay of therapeutic treatment for older patients with dry and itchy skin. Although their benefits are widely acknowledged in the field of dermatology, they have tended to be undervalued and underused in general care (Lawton, 2010). Adverse effects from emollients are rare, although occasionally sensitisation to an ingredient may occur.

There are many formulations of topical emollients including ointments, creams, lotions, gels and sprays. Ointments are the greasiest preparations and often contain paraffin; creams are an emulsion of oil and water; lotions are the least greasy, making them less effective as an emollient. Cosmetic acceptability is, however, an important consideration. Some products contain humectants such as urea or lipids (NMF), which provide excellent moisturisation (Lawton, 2010). Emollients alone may be sufficient to alleviate skin dryness but can be considered as adjuvant therapy alongside other topical or systemic treatments in chronic skin conditions such as eczema or psoriasis (Ersser et al, 2009).

There is little scientific evidence on how to apply emollients, although it is generally agreed they should be applied using a gentle stroking motion following the lie of the hair on the body (Penzer and Ersser, 2010). This rationale is based on the principle that rubbing with a greasy emollient may lead to an irritated or blocked hair follicle and subsequent folliculitis. Ersser et al (2009) recommend application of emollients during the day at times convenient to the individual – this may be as frequently as every 2-3 hours, and at bedtime. A more greasy emollient may be acceptable for use overnight, so it is important that an adequate supply and several preparations are available.
Self-care

Self-care and self-management are central to UK health policy (Department of Health, 2005) and undoubtedly the majority of older people would prefer to meet their own skin-care needs as far as they are able. Nurses should facilitate self-care wherever possible to ensure effective skin care and minimise deterioration in condition (Burr, 2007).

Many older people can care for their own skin provided they have sufficient knowledge, skills and confidence to do this (Bandura, 1997). They may face difficulties such as reduced mobility and dexterity, cognitive impairment, increased frailty and difficulties in social circumstances but these can often be minimised or overcome if the multidisciplinary team is involved and they are advised on different techniques or enabled to use appropriate aids. Concordance with skin care regimens can be enhanced using a range of strategies summarised in Box 1.

Conclusion

Skin health is essential to the wellbeing of older people and a fundamental aspect of nursing care. Nurses should regularly assess the skin health of older patients, promote self-care and encourage the use of appropriate products.

References
