Report into skin diseases in elderly people by the Associate Parliamentary Group on Skin (APGS) (2000) highlighted that older people suffer from a lack of sensitivity to their skin care needs and related problems, that training was lacking for healthcare professionals and service provision was not planned.

The aim of this article is to highlight the importance of skin care in the older person and increase the nurse’s knowledge in relation to the care of ageing skin. The skin changes associated with age will be discussed, and some practical advice and guidance when caring for an older person’s skin will be offered.

Major skin changes are one of the many features occurring with ageing and it is estimated that 70% of older people have skin problems which can have a significant impact on all aspects of daily living (APGS, 2000; Penzer and Finch, 2001). The APGS report, *Enquiry into the Training of Healthcare Professionals who Come into Contact with Skin Disease*, highlighted that:

- Older people were noted to suffer from a lack of sensitivity to their skin care needs and related problems
- Training was lacking for healthcare professionals to manage the skin care needs of older people
- Preventative interventions were inadequate
- Services were not planned with the needs of this group of people in mind.

A number of recommendations to improve the treatment and management of skin diseases in the older person were made by APGS. Measures need to be taken to improve both older peoples’ and nurses’ knowledge base and skills in caring for ageing skin. With sufficient training and expertise, many skin disorders could be managed effectively at primary care level (All Parliamentary Party Group on Skin (APPGS), 1998). The enquiry (APGS, 2000) highlighted a lack of basic skin care for people in nursing and residential homes, which often employ unqualified or under-qualified nursing staff. The importance of basic skin care, including the regular and correct use of emollients to prevent common skin problems such as dryness, itching and stasis eczema in older people is not recognized, according to the report. Carers may often be responsible for assisting the older person with skin hygiene and care and therefore need to be trained to perform these tasks correctly and safely (APGS, 2000).

**Skin ageing**

Skin ageing is a continuous process that affects skin function and appearance. As we age, our chances of developing skin-related disorders increases. Skin ageing can be classified into two types, these are intrinsic, and extrinsic ageing.

**Intrinsic ageing**

Intrinsic ageing includes alterations in structure and function of the ageing skin. It is a result of normal maturity and occurs in all individuals (Rook, 1992; Norman, 2003).

**Epidermis**

As a person ages, the epidermis becomes thinner on a structural level; there is flattening of the dermo-epidermal junction and the corneocytes become less adherent to one another, which reduces their water binding capacity. This reduces the skin’s ability to cope with environmental conditions such as humidity and temperature changes, resulting in dry skin.

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capacity and results in skin dryness. The number of melanocytes and Langerhans cells decrease, altering the immune response, increasing the risk of infection and skin cancer and decreasing the ability to heal (Rook, 1992; Hill, 1994).

**Dermis**

The dermis becomes atrophic and it is relatively acellular and avascular. There are changes in the collagen and elastin fibres which degenerate resulting in less bulk and structure to the dermis (laxity). The number of mast cells which have a protective function and fibroblasts which have a role in wound healing steadily decrease.

**Subcutaneous tissue**

The subcutaneous tissue is diminished in some areas, especially the face, shins, hands and feet, while in others, particularly the abdomen in men and the thighs in women, it is increased owing to reduced insulation and protection (Hill, 1994).

**Skin appendages**

The number of eccrine glands are reduced with age, and both the eccrine and apocrine (sweat) glands undergo shrinking which affects the thermoregulatory function, as sweating is reduced. Sebaceous glands tend to increase in size but ironically their secretory output (sebum) is lessened which reduces the water retaining/waterproofing effect of the skin.

The nail plate is generally thinned, the surface ridged and lustreless, and the lunula (half-moon shape at the very bottom of the nail) decreases in size (Rook, 1992).

There is a progressive reduction in the density of hair follicles; the capacity to grow long hair decreases, scalp hair is thinner, chest and pubic hair peaks in the fifth decade and then declines. However, in some areas, especially the ears, nose and eyebrows of men, the hair becomes bushy. Hirsutism may occur in women as a result of hormonal changes (Rook, 1992).

**Extrinsic ageing**

Extrinsic ageing results from the cumulative effects of exposure to a variety of environmental insults. Changes in the environment decrease occupational exposure and increase leisure exposure to potential irritants and sensitizers (central heating, weather, soaps...
and bubble baths). These lead to decreased sensory perception, increased dryness, and skin thinning, decreased vitamin D synthesis and a reduction in the skin’s immune response. The thermoregulatory function is also decreased (Hill, 1994). A number of extrinsic factors (smoking, environmental pollutants, ultra violet light (UVL), decreased mobility, drug induced disorders and chronic illness) often act together with the normal ageing process to prematurely age our skin. Most premature ageing is caused by sun exposure. ‘Photoageing’ is the term used to describe this type of ageing. The amount of photoageing that develops depends on:

- A person’s skin colour
- Their history of long-term or intense sun exposure
- Occupation
- Geographical location
- Religion and culture (Smoker, 1999).

Photoageing occurs over a period of years. With repeated exposure to the sun, the skin loses the ability to repair itself, and the damage accumulates. Repeated ultraviolet (UV) exposure breaks down collagen and impairs the synthesis of new collagen. The sun also attacks elastin, leaving the skin loose, wrinkled and leathery. Photoaged skin is coarse, wrinkled, pale–yellow in colour, telangiectatic, irregularly pigmented, prone to purpura and subject to benign and malignant neoplasms (Gawkrodger, 1992).

**Other influences on skin health**

Factors other than intrinsic and extrinsic ageing will also influence skin health:

- Age-related disease in other organ systems
- Social circumstances e.g. poor nutrition
- Home care and mobility often contributing to the expression, perpetuation and failure to resolve skin problems
- Not being able to reach areas to apply treatments
- Reduced mobility
- Poor dexterity
- Physiological problems, such as dementia
- Increasing rigidity of attitude and cognitive decline
- Refusal to accept advice
- Increasing physical frailty, resulting in a relative incapacity to carry out tasks correctly
- Poor hygiene

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**Common skin conditions affecting the older person**

Common conditions affecting the older person can be categorized into the groups listed in Table 1 (Norman, 2003).

**Pruritus (itch)**

Skin diseases in this age group cover a vast array of disease processes with xerosis (dryness) and pruritus (itch) being key players in many conditions. Pruritus induces scratching and is often linked to an underlying skin condition or systemic disease. It may also have a psychogenic cause and can provide healthcare teams with a real challenge (Norman, 2003). Persistent severe pruritus, like pain, is a dominating part of one’s existence; from day to day it takes over one’s life. It leads to sleepless nights, exhaustion and impacts on all activities and relationships and requires a comprehensive workup to establish a possible cause (Fitzpatrick et al, 2001). Figure 1 provides an example of a work up.

In some patients, however, no cause is found and it may be labelled as idiopathic (Gawkrodger, 1992). This can be frustrating both for the patient and their carers, there are, however, some practical measures which may help to relieve and minimize the symptoms: keeping the environment cool and dust free, wearing loose cotton clothing and ensuring emollients are used to wash and moisturize the skin. Avoiding products that may irritate the skin such as perfumes, bubble baths and talcum powder and soap-based products (Pringle and Penzer, 2002) will also help. Other treatment interventions include sedating antihistamines, emollients and the use of topical antipruritics such as menthol in aqueous cream (Gawkrodger, 1992).

**Hygiene and the use of emollients**

Emollients (Table 2) are important agents that play an integral part in the treatment of skin disorders and skin care for the older person. Some of the emollients available are detailed in Table 2. They act by producing an occlusive film on the skin and preventing water loss. Many emollients can be used both as a soap substitute and a moisturizer, there are many available and patient involvement in the choice of preparation will ensure effective use. Emollient bath additives or oils can be added to the water in a bath or bowl, soap substitutes can be massaged gently onto the skin and then rinsed off, or applied with a soft cloth or sponge and gently rubbed into the skin (Pringle and Penzer, 2002; Peters, 2008). Products such as cosmetic soaps and bubble

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**Table 1.**

<table>
<thead>
<tr>
<th><strong>ESTABLISHING A CAUSE FOR PRURITIS (ITCH) - A COMPREHENSIVE WORK-UP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed history of pruritus; skin lesions, severity</td>
</tr>
<tr>
<td>Constitutional symptoms: weight loss, fatigue, fever, malaise</td>
</tr>
<tr>
<td>Recent emotional stress</td>
</tr>
<tr>
<td>History of medication taken</td>
</tr>
<tr>
<td>Assess for primary skin condition</td>
</tr>
<tr>
<td>General physical examination</td>
</tr>
<tr>
<td>If duration &gt; 2 weeks and no other cause established, laboratory investigations and screens will be required: chest x-ray, full haematological screening and others dependent on assessment</td>
</tr>
<tr>
<td>Dry skin present – avoid soap based products and use emollients</td>
</tr>
<tr>
<td>Arrange follow-up to review</td>
</tr>
</tbody>
</table>

**Differential Diagnosis**

- Primary skin disease
- Dry skin (xerosis) exacerbated by environmental factors
- Infestations
- Metabolic and endocrine conditions
- Haematological disease
- Malignant Neoplasms
- Hepatic disease
- Drug induced
- Psychogenic cause

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bath strip the skin of its natural moisturizing factors, leaving a tight sensation after use (Peters 2008). Emollients (moisturizers) are best applied immediately after the cleansing routine when the skin has a high water content (Lawton, 2004). Ideally, emollients should be used at least twice daily, but may need to be applied more frequently depending on the severity of the skin condition, dryness of the skin and the type of product used. The type of product used will be based on skin dryness, disease severity, site and personal choice. 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. Lotions are easy to apply and have less friction if the skin is particularly hairy (Peters, 2008). Emollients should be applied lightly: aim for a glisten on the skin, not a thick heavy application that damages clothing, furniture, and often makes the patient too hot and itchy (Lawton, 2004). They should be applied in smooth downward strokes, in the direction of hair growth to reduce the risk of folliculitis (Pringle and Penzer, 2002). Rubbing vigorously is discouraged as it causes friction and increases localized heat which makes the skin itchy especially in eczematous conditions (Peters 2008).

Safety issues

It should be noted that the National Patient Safety Agency (NPSA) (2007) issued a fire hazard notice regarding paraffin-based products following a fatality. Paraffin-based products (50/50 liquid/white soft paraffin, emulsifying ointment and other similar trade products) when soaked in bandages are easily ignited with a naked flame or cigarette and all patients should be informed of the risks (this applies to products with greater than 50% paraffin in the formulation). Other safety issues include reducing the risk of slipping in the bath, shower and floor (Peters, 2008).

The use of non-slip mats and protecting the floor will help to prevent accidents. Protecting the environment from these products as mentioned previously is important. However, the risk of contaminating products with micro-organisms is also extremely important. Decanting products into smaller pots or containers, or using pump dispensers also reduces the risk of microbial contamination, and emollients should be prescribed for individual use and not shared (Davis, 2001; Peters, 2008).

Conclusion

Skin disease in older people can significantly affect quality of life. People are often embarrassed about their condition, and reluctant to seek help. Nurses are ideally placed to recognize skin problems when helping with personal hygiene needs or performing treatments.


Hill MJ (1994) Skin Disorders. Mosby, St Louis


Further information

Websites

British Dermatological Nursing Group (BDNG)
www.bdn.org.uk

British Association of Dermatologists (BAD)
www.bad.org.uk

DermNet NZ
www.dermnetnz.org/

Wounds UK
Care of the Older Person’s Skin
www.wounds-uk.com/cgi-bin/link.cgi?t=bestpractice&i=downloads/best_practice_older_skinca.pdf

KEY POINTS

- **Skin ageing is affected by internal and external factors which alter the structure and function of the skin.**

- The importance of basic skin care and using emollients to prevent common skin problems such as dryness, itching and asteatotic eczema in older people is not recognized.

- **Emollients are the mainstay of dermatological treatments for dry skin/conditions.**

- Effective use of emollients improves the skin barrier and reduces the potential for inflammation and drying skin.