

COMMON SKIN PROBLEMS: ASSESSING THE OLDER PERSON

The skin care needs of older people are often neglected or confined to major skin breakdowns, such as leg ulcers. However, clinicians should also pay attention to basic skin care, including the assessment of rashes and the correct use of emollients that can prevent common skin conditions such as dryness, itching and eczema. This article examines the nursing assessment of older people with common skin problems.

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Throughout life the skin plays an important part in our body image and self-concept. It also protects us from environmental stresses, regulates temperature, maintains the body's fluid and electrolyte balance, excretes metabolic waste and plays a key part in the sensations of touch, pain and pressure.

Skin changes are one of the most significant and visible features that occur with ageing and are often the informal evidence people use to determine someone's age. Wrinkles, sagging, paper-thin skin which is vulnerable to damage, grey hair and baldness are just some of the common features we use to assess the age of skin.

Ageing depends not only on the external factors that the body is subjected to, such as exposure to sunlight and the environment, but also on internal factors, such as genetic make-up and other bodily changes.



Figure 1. An arterial leg ulcer.

The skin care needs of older people are often neglected or confined to major skin breakdowns, such as ulcers (Figures 1 and 2) and problems caused by immobility (Matteson et al, 2006). Nurses, however,

Skin changes are one of the most significant features that occur with ageing.

should also pay attention to basic skin care, including rashes and the regular and correct use of emollients. These measures can delay skin breakdown and prevent common skin conditions such as dryness, itching and eczema (Cooper, 2007).

Normal changes in ageing skin

The epidermis generally becomes thinner with advancing age as cells reproduce more slowly and become larger and more irregular. Sunlight causes the activation and proliferation of melanocytes (the cells responsible for producing melanin) (Lawrence and Cox, 2002). This process gives the skin of older people a thinner, paler, and translucent appearance.

Simultaneously, the strength and elasticity of the skin are affected by collagen changes in the dermis. There is also a decrease in the number of fibroblasts, the cells responsible for the synthesis of protein and collagen. This condition is called elastosis and



Figure 2. A venous leg ulcer on a patient's ankle.

produces the weather-beaten or tanned appearance associated with farmers and white-skinned people living near the equator.

Ageing also results in a decrease in the numbers of epithelial cells and blood vessels, and frequent haemorrhages (senile purpura) begin to appear on the face, ears, lips and neck. These manifest themselves as cherry angiomas, venous stasis and venous lakes on the ears, face, lips and neck. The thinning cells do not repair as quickly and may result in higher and more severe incidence of skin breakdown and delayed healing.

These and other biological changes render the skin more vulnerable to damage, especially from external agents such as pressure and exposure to the sun. Soaps should also be avoided, as they can result in very dry and dehydrated skin.

In general, the hair of both men and women becomes lighter, thinner, and less numerous with ageing. Nails become dull,

brittle, hard and thick and most of these changes are due to a diminished vascular supply to the nail-bed. Nutritional disturbances, repeated trauma, inflammation, and local infection can also lead to thickening of the nails. Toenails especially may be prone to thickening (Figure 3) as a result of constant trauma and pressure from shoes. In addition, the toenails may become discoloured, grooved and may accumulate debris and fungal infections (Figure 4).

Skin lesions

The frequency of skin disorders is so common among older people that it is often difficult to distinguish normal from abnormal changes. It is believed that the major cause of pathological or abnormal skin changes is sunlight. The easiest way to categorise skin disorders is to group them into two types of lesions affecting the skin — primary and secondary.

Primary lesions

These arise from internal



Figure 3. Thickened toenail.



Figure 4. Fungal infection of the toenails.

disorders or external irritants and examples include:

- ▶▶ Macules: flat, non-palpable lesions differing in colour from the surrounding skin
- ▶▶ Papules: small, raised, solid, superficial lesions, usually less than 0.5cm in diameter
- ▶▶ Nodules: raised, solid, lesions, usually more than 0.5cm in diameter
- ▶▶ Vesicles: small (less than 0.5cm) fluid-filled lesions
- ▶▶ Bullae: large (greater than 0.5cm) fluid-filled lesions
- ▶▶ Pustules: fluid-filled sacks containing cloudy or purulent material
- ▶▶ Cysts: sacs or cavities containing fluid
- ▶▶ Tumours: abnormal swellings or solid masses, which may extend through the skin's subcutaneous layer.

Primary lesions may indicate an allergic reaction within the body or a problem with the immune system. They may also be related to problems with the biological and metabolic processes that are going on within the body to

maintain and repair cells and maintain circulation and nutrition. They may also indicate that an external factor or irritant is affecting the person, for example, an environmental hazard, trauma, infection, poor skin hygiene, or a lack of appropriate skin care.

Secondary lesions

These arise from primary lesions and include:

- ▶▶ Scales: flakes of skin or scab, especially epidermis
- ▶▶ Crusts: dried serum or purulent material overlying an erosion or ulcer
- ▶▶ Fissures: cracks in the skin that are usually narrow and deep
- ▶▶ Erosion: the loss of superficial surface epidermis
- ▶▶ Ulcers: the loss of epidermis extending into the dermis or subcutaneous tissue, usually as broad as they are deep.

Secondary lesions may indicate that the individual's primary lesion is breaking down and may be causing problems. This can be the result of over-exposure to environmental hazards, poor repair of skin damage and the underlying tissue continuing to be exposed to environmental hazards, infections, trauma, and an interruption of the biological process that maintain healthy skin tissue.

However, many of the lesions that are found on the skin of older people are considered to be the normal result of ageing and are only of concern to the individual who dislikes their 'spotty' and mottled appearance on the body's surface.

In darkly pigmented individuals, lesions can be difficult to identify by inspection and may need to be

identified by palpation, observation of patients' scratching or patients' verbal reports.

Common skin disorders in older people

Lesions are a feature of common skin disorders and the following are some of the most frequent types that nurses may come across during assessments of older people.

Keratosis is a common skin growth that mainly occurs in older people. Seborrhoeic keratoses are harmless growths that occur mainly on the trunk. They are usually flat, dark-brown patches or small, wart-like protrusions, which do not need treating unless they become unsightly.

Solar keratoses are smaller, wart-like, red or flesh-coloured growths, which appear on exposed parts of the body, such as the forehead, cheeks, hands, forearms and ears as a result of exposure to the sun over many years. These do not usually develop into skin cancer.

Squamous cell carcinoma (*Figure 5*) most often occurs in middle-aged and older people, and is twice as common in men. It arises from the epidermis and mucosa of sun-exposed, damaged skin. Treatment consists mainly of surgical removal.

Basal cell carcinoma, also known as 'rodent ulcer', is the most common form of skin cancer in white people (*Figure 6*) (Matteson et al, 2006). Found on the face, it usually starts as a small, smooth, hemispherical,



Figure 5. Squamous cell carcinoma presenting as extensive ulceration over the shin of an elderly woman.



Figure 6. A basal cell carcinoma lesion.

translucent papule covered by thinned epidermis, through which dilated blood or black pigment can be seen. The papule gradually enlarges into a mass of pearly nodules or a papular plaque that may be darkly pigmented, resembling a malignant melanoma. Surgical removal and possible radiotherapy may be needed as there is a danger of metastasis.

Malignant melanoma is the most common cause of death in skin conditions. The melanoma lesions usually take the form of pigmented macules, papules, nodules, patches, or tumours with any of the following warning signs which can be remembered as ABCD:

- ▶▶ **A**symmetry
- ▶▶ **B**order irregularity
- ▶▶ **C**olour variegation (two or more colours)
- ▶▶ **D**iameter greater than 6mm.

Diagnosis of malignant melanoma is through biopsy and treatment consists of surgical removal.

Other common skin conditions in the older person include fungal infections, dermatitis, pigmentary disturbances, psoriasis, and urticaria. Blackheads, scaling, cherry angiomas (small red benign tumours), nevi (moles), skin tags (pedunculated fleshy growths), and lentigos ('liver spots'). Some of these may need treating when they begin to cause problems, for example, fungal infections, psoriasis, and damaged skin tags.

Senile purpura (bruising) is related to the loss of the subcutaneous tissue that supports the skin's capillaries. Minor trauma can also cause small bruises or lesions that are largely found on the extensor surface of the forearm. In some cases, this can be an indication of elder abuse.

Pruritus

Pruritus, or generalised itching, is an extremely common disorder in older people. It may occur with or without a rash and can be caused by other medical conditions, such as biliary cirrhosis, chronic renal failure and pellagra.

In older people, itching is often caused by decreased sebaceous activity, cold and dry weather, and excessive washing with soaps and detergents. Therefore, treatment often consists of simply cutting down on the amount of bathing and the use of natural products and moisturisers that do not dry out the skin.

Dry, scaly, itchy skin (*Figure 7*) most often occurs on the lower legs, hands and forearms, however, itching may also occur in skin folds and in the genital and anal regions.

The excessive scratching associated with pruritus can also lead to skin inflammations, such as dermatitis or eczema.

Eczema/dermatitis

This is a term often used interchangeably with the term dermatitis and in the elderly dermatitis is not only more difficult to treat, but also causes more distress. Eczema is characterised by round patches of inflammation that are reddened, scaly, and extremely itchy (*Figure 8*). The patches are usually found on the fingers, the dorsa of the hands, the forearms and the anterior tibial area. Drying agents such as soap and water are the main causes of eczema.

Seborrheic dermatitis or seborrheic eczema is the technical name for dandruff and is common in older people. It mainly affects the scalp, but can also cause redness and scaling of the eyebrows, sides of the nose, hairline, sternum and axilla.

Intertrigo is a form of seborrheic eczema where inflammation and itching are found in skin folds under the breasts (*Figure 9*), the groin area and abdominal folds and axilla. It is most common in obese people and those with poor hygiene and cleanliness.

Pruritus ani and pruritus vulvae are types of itching associated with the perianal area and are due to irritation from heat, swelling,



Figure 7. Dry, scaly skin is often the site of pruritus.



Figure 8. Eczema on a patient's back.



Figure 9. Seborrheic dermatitis on a patient's chest.

haemorrhoids or fissures. The itching frequently occurs at night, causing the appearance of scratch marks in the morning. The condition is complicated by incontinence and is especially troublesome for older people who have a chronic condition, are confused, or have dementia. Regular attention to hygiene and avoidance of certain medications can help.

Allergic reactions

Medications are probably the most common causes of allergic reactions in older people. A maculopapular rash is the most common type of reaction, and it can be both generalised and itchy. Allergic urticaria or hives



Figure 10. It is important to examine a patient's skin thoroughly — for example, this photograph demonstrates extensive excoriation on a patient's buttocks.

may also result, with swelling and itching and it may be caused by some form of allergy or reaction to drugs. Hives may also be a factor, and can cause severe swelling and itching.

Herpes zoster

Herpes zoster, or shingles, is an acute viral infection that particularly affects older people and is believed to be increasing in severity and incidence, particularly in those over the age of 80 years. The virus also causes chickenpox in children and is thought to arise from a reactivation of the varicella virus that can lay dormant for many years.

The symptoms include severe burning pain followed by a papular rash lasting for 3–4 days. A papule is a discrete lesion that is usually visibly raised above the skin surface, originating in the dermis. The rash becomes

oedematous then vesicular and pustular, and finally exhibits erosions and crusting. The skin may be permanently scarred and the associated pain may linger at the site for many years. The location of the rash and pain is the thoracic area radiating from the lumbar area to the side or lower lumbosacral region of the body. The rash and associated pain are usually located in the thoracic area, radiating from the lumbar area to the side of the body.

Nursing assessment

This should start with an overview of patients' health history and must include a thorough head-to-toe assessment of their skin condition (Seidel et al, 2006).

Many skin disorders are so common among older people that it can be difficult to distinguish normal from pathological changes. There is also a danger that clinicians do not take the time



Figure 11. Cracked and fissured skin on a patient's feet — a site often overlooked in physical examinations.

to examine patients properly, particularly in the vulnerable areas of the body, such as the groin, buttocks (Figure 10), genital area and feet (Figure 11).

The skin can provide the practitioner with a very good idea of the health status of the older patient as well as providing an indication of any self-care problems.

No equipment is required except the clinician's hands, eyes and, in some cases, nose. Good lighting and full exposure of the area being evaluated are essential — a small flashlight may also help to illuminate difficult-to-access areas. However, practitioners should be careful not to overexpose patients and leave them feeling vulnerable or cold. It is also important to ask for a patient's permission to carry out an examination, explaining the reasons why it is being performed and the method being used. Throughout the procedure, the patient should be kept informed of what is happening.

The three methods of examination are inspection, palpation and observation. Inspection is the

careful exposure and examination of the skin, noting the distribution of any rash or skin complaint. Clinicians should be systematic and thorough in their approach, making sure the whole of the patient's body has been covered.

Palpation is the gentle touching and physical feel of the texture of the skin.

Observation involves looking at the different colours and types of rashes, the distribution of skin problems and any changes in skin condition or wound state. The outcome of the examination should be accurately recorded.

Clinicians should assess any skin colour changes, although this may be difficult in people with dark skin. Cyanosis (a blue coloration of the skin due to the presence of deoxygenated blood near the skin's surface) is best detected at the sites of least pigmentation, i.e. lips, nail beds, palms and soles of the feet. Among other conditions, cyanosis can be indicative of heart and lung disease. The characteristics of the skin, such as changes, breaks, colour and texture, should be noted as they are often an indication of possible problems and effects of the environment or the person's health.

Practitioners should also note any signs of lesions, strange markings, freckles, birthmarks and signs of general ageing, such as wrinkles, hair loss, skin tags, inelastic paper-thin skin and any discolouration. Many of these signs not only help the clinician to obtain a good overview of the older person's

skin condition and possible need for further nursing care, but are also an aid to medical diagnosis.

Conclusion

There are a wide variety of skin conditions affecting the older person and the most common have been discussed in this article (excepting the various issues associated with leg and pressure ulcers).

There are several key nursing procedures associated with these common skin conditions, such as observing the condition of the skin from the time of the first contact with the patient until he or she is transferred to another area.

It is also important to carefully examine and record the condition of the skin. Any significant changes should be noted in a care plan, which must be regularly updated and evaluated. The skin of the older person should also be carefully handled and kept clean, preserving it or improving its condition where possible.

There are a variety of methods for assessing the skin using evidence-based tools and some of these are outlined in Hampton and Stephen-Haynes (2005) and Lawrence and Cox (2002).

Patients' holistic state, particularly their nutritional needs, is also a vital part in their recovery and rehabilitation from illness. It is therefore important to take into consideration not only the physical qualities of the skin, but also the part it plays in helping patients to keep up their appearance, body image and self-concept. **WE**

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Key Points

- ▶ Skin disorders are very common among older people and it is often difficult to distinguish normal from pathological changes.
- ▶ The major cause of pathological skin changes is sunlight.
- ▶ Older people's skin condition should be examined systematically and carefully.
- ▶ The ageing process results in a significant reduction in the skin's thickness and the number of sweat glands, leading to dryness, splitting and cracking.
- ▶ Emollients/moisturisers should be applied to an older person's skin after washing.