assessment of skin in older people

As the largest organ in the body, the skin can offer valuable information about the general health of an older person. Mary Finch explains how

The importance of the skin as an organ of the human body for people of all ages is often underestimated. It is the largest organ of the body and has several vital functions. Nurses have an important role in carrying out a thorough and systematic assessment of an older person’s skin in both hospital and community settings. This article aims to inform the reader of the basic tools needed in order to carry out a comprehensive assessment of an older person’s skin. The functions of the skin and the ways in which the ageing process and specific medical problems can affect the skin will be discussed. A holistic approach to assessing skin will then be outlined.

The article will focus on assessment of skin for general health, rather than on the diagnosis and treatment of specific dermatological conditions. For further information on common skin disorders in older people, see Smoker (1999), Penzer and Finch (2001) and Hill (2002).

functions of the skin

The skin has several vital functions. These are:

- a barrier to the external environment, protecting the body from pathogens, irritants, trauma, ultraviolet light and preventing dehydration
- holds internal organs together, keeping the body in the correct shape
- immunological protection
- sensory – the skin has an important role in the body’s perception of external physical stimuli
- temperature regulation
- synthesis of vitamin D
- enhancement of body image and comfort – healthy skin contributes to a greater self-esteem and can make a great difference to a person’s comfort.

Each of these functions is important in maintaining good general health and illustrates the importance of the skin as an organ of the body. Care of the skin is therefore essential in prevention of illness and promotion of good health for older people.

changes to the skin in ageing

The ageing process can adversely affect skin functioning. Physiological changes, along with medical problems, can have a significant impact on the health of the skin of an older person:

- dermal cells are replaced more slowly, slowing the healing process
- blood vessels become more fragile, reducing the supply of blood to skin
- elastin and collagen fibres become linked more loosely; skin is less elastic, and therefore more vulnerable to trauma and shearing forces
- sensory receptors transmit sensation less rapidly resulting in a slower response to pain and other stimuli, which can in turn result in damage to skin
- reduced activity of skin cells that produce natural oils means that the skin dries more quickly
- the subcutaneous fat layer becomes thinner (Christiansen and Grzybowski 1993).

In addition, other common problems that older people may experience can also threaten a person’s skin integrity. These include:

- decreased peripheral sensation: reduced response to pain; increased risk of trauma and pressure ulcers
- decreased mobility: increased risk of pressure ulcers; slowing of circulation, especially venous return; increased risk of limb oedema and leg ulceration
- incontinence: increased risk of skin maceration and breakdown (Lyder et al 1992)
- depression/dementia: increased risk of self-neglect/self-harm, which could potentially lead to poor skin integrity
- polypharmacy: increased risk of drug reactions such as rash es of varying severity; long-term use of some drugs – steroids, for example – can affect skin integrity
- diabetes: can affect wound healing, sensation, circulation
- vascular changes – for example, in peripheral vascular disease – can cause poor circulation to skin and extremities and this will result in slower healing, ulcers, and so on
- poor nutritional status: can lead to poor healing and to greater vulnerability to pressure sores and skin breakdown
- heart failure: can lead to oedema, causing the skin to be more vulnerable to damage
- pruritis (itching): this affects at least 50 per cent of those aged 60 and over (Hill 2002) The main cause is dry skin. If itching is persistent and does not respond to emollients, underlying causes should be looked for. Common causes include renal failure (uraemia), liver disease, iron deficiency anaemia, diabetes and hypothyroidism.

Many of these problems are treatable; if treated the condition of the skin can be greatly improved and the risk of skin breakdown reduced significantly. There are therefore many factors to take into account when assessing the skin of an older person and an informed assessment can be extremely important in assisting an older person’s recovery from illness.

the process of assessing skin

The assessment of a person’s skin should not be a single event when a nurse first meets a patient; it should be an ongoing process. In assessing an older person’s skin, the nurse’s goals will be to treat any existing problems, in partnership with other members of the multidisciplinary team, and to prevent potential problems through education and nursing intervention.
Both acute and chronic skin problems may be identified. Acute problems will require an immediate response, whereas chronic problems will require more long-term planning. Patient empowerment, encouraging involvement of the older person in planning care for his or her condition, is also important to consider.

A holistic/systematic approach to the assessment of the skin of an older person makes use of the four senses.

listening
Ask the patient and/or carers sensitively about any previous skin problems. Have there been any recent changes to the skin? Refer also to the patient’s medical notes and nursing history for any details relating to skin. Ask about:

- past medical history. Any skin problems past or present noted? Any other medical problems that might affect skin quality or healing – for example, diabetes or peripheral vascular disease?
- drug history and current medications. Any treatment for skin conditions in the past? Any current drugs or treatments for the skin? Is the patient taking any other drugs that might affect skin condition – steroids, for example? Any history of drug allergies? Is the patient on any drugs that might cause allergic reactions – for example, antibiotics?
- skin care routine. What is the patient’s current skin care routine? What products, such as soap and creams, are currently used? Have any products been changed recently?
- psychological wellbeing. Is the older person under any particular stresses at present?
- body image. How does the person feel about his or her body image?

looking
When observing the patient for skin problems photos, drawings, accurate measurements and detailed descriptions can be used in order to make ongoing assessment as simple and as accurate as possible. They can be particularly useful when the specific cause of a change in the skin is not easily identified. They can be used in conjunction with assessment and planning tools such as wound charts.

Assess general skin quality of the whole body. Look for specific problems such as dry skin, oedema, variations in skin colour, bruising, inflammation, jaundice (eyes and skin), swelling (shiny skin), breaks, sores, lesions, warts, and so on.

Look for and describe any specific problems such as rashes, infestations such as head lice or scabies, broken areas (damaged barrier function), ulcers, and infections such as ringworm or athlete’s foot.

Assess pressure areas for signs of potential or actual breakdown. If there are any breaks, take a photo if possible or draw a picture, giving accurate measurements and showing exact shapes. Again, try to describe what you see as clearly as possible. A useful and widely used tool to assess for the risk of developing pressure sores is the one developed by Waterlow (1988). It is reasonably quick and simple to use. Such a tool enables the nursing team to plan interventions needed to prevent breakdown of the skin and to assist the healing of existing sores.

Assess for any continence problems that may affect the condition of the skin, and consider how management of the incontinence might be improved.

Examine the flexures (skin folds) – parts of the body where two layers of skin rub together, such as breasts, groins, axillae and between the toes. These are vulnerable to problems such as infection and breakdown. Warm, relatively damp conditions in these areas are ideal conditions for developing fungal infections so they need to be washed and dried carefully, and the use of unperfumed talc is recommended.

touching
Use your hands to assess the following:

- texture and moisture. Is the skin smooth or course? Is it dry?
- turgor. Is the skin layer firm and resistant to being pinched – on the forearm or chest, for example? Or does the skin ‘tent’ or stay in condition when pinched? Tenting can be a result of normal changes in ageing skin but can also be an indicator of dehydration or malnutrition
- temperature. Is the skin hot or cold? Are there variations around the body? A hot area could indicate inflammation (for example, cellulitis); a cold area could indicate decreased arterial blood supply and vascular changes.

smell
Although we might not use this sense consciously, our sense of smell can tell us a lot about a patient’s skin condition. Has the older person been able to wash adequately? Is there a related odour? What is the condition of the flexures – between the toes, for example, or under the breasts? Are there indications of incontinence? Are there any areas of the body that seem to smell more, or differently, than others? This might not necessarily be related only to hygiene; for example, in some malignant diseases the skin can emit specific odours (McGovern and Kuhn 1992, Pedley 1999).

collection
A thorough assessment of the condition of an older person’s skin is extremely important. Effective partnership and communication between nursing staff, the patient, the patient’s carers, the multidisciplinary team and dermatology specialists is vital in order to ensure that both acute problems and chronic problems are attended to effectively and that ongoing solutions to these problems are planned appropriately. Such interventions can help improve significantly the quality of life for older people.

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References

Further reading