

Caring for Skin in the Older Person

The Importance of Emollients



This booklet on caring for the older person’s skin has been produced as an educational resource for healthcare practitioners. NICE guidance ‘Older people with social care needs and multiple long-term conditions’ has highlighted skin integrity as a common care need in older people. Skin integrity has been identified as a health problem that needs to be recognised by healthcare practitioners, monitored and responded to as part of tailored care plans.¹

Skin health is important in the older person and should not be overlooked. Being aware of the changes that occur in older skin, the risk factors associated with skin problems and recognising signs and symptoms of skin disease are vital in keeping older skin healthy. Maintaining skin integrity can help prevent common skin problems and conditions occurring and can improve the quality of life of the older person.

Introduction to older skin	3
Dry vulnerable skin	4
Restoring the skin barrier with emollients	5
Good skin care regimes	6
Applied emollients	6
Emollient soap substitutes	7
Common conditions affecting older skin	8
Asteatotic eczema	8
Varicose eczema	9
Incontinence-associated dermatitis	10
Skin tears	11
Pressure ulcers	11

Introduction to older skin

Skin is the largest organ of the body and it carries out vital functions such as: regulating temperature, providing a barrier between the environment and internal organs, mediating sensation and also vitamin D synthesis.

As the skin ages it becomes more fragile and easily damaged due to changes in the skin structure.

Change in function and structure	What effect does this have?
Decreased sebum production	The skin produces less natural oils and becomes dry
Thinner epidermis and slower rate of skin cell turnover	The skin becomes thinner, more prone to damage and delayed wound healing
Decreased thickness of the dermis	The skin loses its underlying strength and becomes more fragile and wrinkled. Its insulating function is reduced
Collagen is less elastic	
Decrease in number of sweat glands	Decreased sweating and the skin becomes drier
Change in dermal vasculature	Decrease in blood supply

When the above changes are combined with other risk factors such as poor general health, decreased mobility, poor nutritional status, incontinence and some medications, they make the skin more fragile, vulnerable to damage and increase the potential for certain skin conditions to develop. Examples include dry skin prone to skin tears, varicose eczema and eczema craquelé, pressure ulcers and incontinence-associated dermatitis.

“Adequate skin care is regarded as a major strategy for maintaining the skin barrier, skin integrity and health.”²

It is vitally important to maintain skin barrier function and skin integrity to help prevent damage and hopefully stop these skin problems from developing.

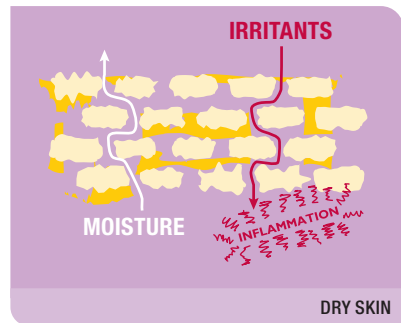
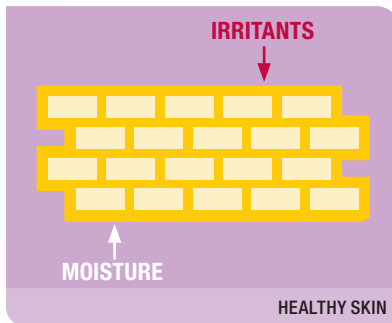


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Dry vulnerable skin

Healthy skin provides an effective physical barrier between the body and the external environment. In healthy skin, the skin cells are full of water and are surrounded by natural oils to form an effective barrier, keeping moisture in and bacteria, chemicals, irritants and allergens out. This is often shown as a 'brick wall' where the skin cells are the 'bricks' and the natural oils are the 'mortar'.

In older skin, less natural oils are produced, allowing moisture to escape and the skin cells shrink forming gaps allowing further water loss and the entry of irritants. The skin will become dry, which is the most common disorder in aged skin.²



Dry skin (also known as xerosis) has numerous possible causes:

- Skin changes that occur with increasing age (e.g. decreased sebum production)
- Environmental factors (e.g. dry air from central heating, heat from radiators and fires)
- Frequent washing/use of harsh soaps
- Other skin diseases (e.g. eczema, psoriasis, ichthyosis)
- Systemic illness (e.g. hypothyroidism, liver/kidney disease, malnutrition)

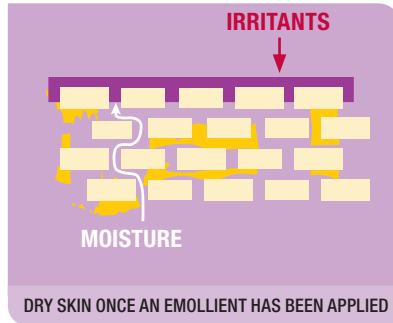
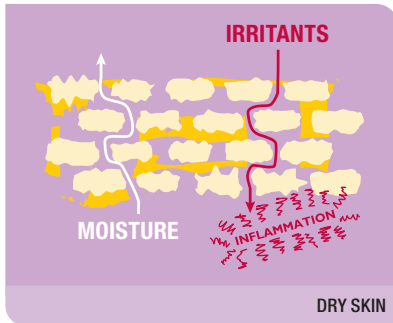
“Once patients with dry, itchy skin are identified they should have a frequent skin assessment to monitor skin integrity.”³

Once the skin becomes dry, the natural barrier function of the skin is impaired and it is more vulnerable to splitting, cracking and skin tears. Also, the skin is left open to irritants leading to inflammation and bacterial invasion and possible infection. Dry skin is often itchy and scratching can damage the skin barrier further.

Pruritus or itch is a very common dermatological problem in the older person. It is often associated with dry skin or may be due to medications, exposure to environmental agents or underlying systemic disease.

Restoring the skin barrier with emollients

An impaired skin barrier can lead to a number of skin problems and conditions. It is therefore really important to restore the skin barrier to prevent the skin from further drying and to stop irritants and bacteria entering the skin. Protecting the skin and avoiding situations and products that cause further damage to the skin barrier can help prevent dry, itchy and sore skin from developing.



Emollients can help restore the damaged skin barrier. A good emollient routine, with regular emollient application, can help to keep older skin in good condition, preventing damage and discomfort. A range of emollients may be required and consideration should be given to ease of application of the emollient by the older person or carer and avoidance of trigger factors that can cause dry skin.

- Avoid washing with harsh soaps, shower gels, bubble baths and detergents. An emollient based soap substitute will prevent the drying effects of washing
- Avoid a dry, hot environment and exposing the skin to direct heat from radiators or a fire
- As older skin is more fragile, it is more prone to damage from friction
- Cold weather can dry the skin

“Emollients are important in promoting skin health in the elderly and are seen as the first-line treatment for all dry scaling disorders, regardless of age group.”³



*Stock photo
(Posed by models)*

Good skin care regimes

For those with dry skin conditions, it is important to ensure that all products applied to the skin have an emollient action to contribute to Complete Emollient Therapy. This includes the use of applied or 'leave on' emollients that are designed to be left on the skin and emollient soap substitutes that are used for washing or cleansing the skin.



Applied emollients

Leave on emollients should be applied regularly to provide optimal rehydration of dry skin. They should be used even when the skin appears in good condition, as this can help to prevent disease flares and repeat breakdown of the skin surface.

Applied emollients may be in the form of ointments, gels, creams or lotions. They can vary in their ingredients, oil content, cosmetic acceptability and frequency of application. Emollients may be packaged in pump packs or tubes which are easy to use and hygienic whilst tubs of creams and ointments are more prone to contamination. Some emollients have a high oil content and are more occlusive e.g. ointments, while others are more cosmetically acceptable e.g. creams and gels.

Emollients may include a humectant, such as glycerol or urea, which draws and holds water in the skin. Other ingredients may also be included such as antipruritics, to help alleviate itch, or antimicrobials to help reduce the impact of bacterial irritants on delicate dry skin.

Consideration should be given to the whole emollient formulation and it is best to avoid potential irritants and sensitisers such as fragrances, lanolin and harsh detergents.

Good practice points for applying emollients:

- Use emollients generously and regularly
- Smooth the emollient gently onto the skin
- Use gentle downward strokes in the same direction as hair growth to prevent folliculitis
- Do not vigorously rub the emollient into the skin, and allow time for it to soak into the skin
- Application immediately after a bath or shower helps to trap moisture in the skin

“The benefits of emollient therapy to treat specific skin conditions are well recognised, but in patients at risk of skin breakdown, emollient therapy should also be used as part of an everyday skin care routine.”¹⁴

Emollient soap substitutes

It is important to ensure skin is clean and dry before applying emollients. However, most ordinary soaps, foaming shower gels and bubble baths contain harsh cleansing agents that can have a detrimental effect on the integrity of the skin. They remove the natural oils in the skin, are very drying and can be irritant, particularly when used on dry or inflamed skin. Most soaps change the pH of the skin, which can lead to skin irritancy, and is due to the inclusion of detergents such as sodium lauryl sulfate (SLS).

Emollient soap substitutes are products which contain gentle cleansing agents and emollient oils and are able to clean the skin without stripping the natural oils. Emollient soap substitutes should be free from SLS, lanolin and fragrances to avoid skin irritation.

Good Practice Points when cleansing older skin:

- Wash regularly and carefully to keep the skin clean and dry, especially where skin touches skin
- Ensure the room is a comfortable temperature, older people particularly feel the cold
- Wash with water that is comfortably warm – don't use hot water as this removes more natural oils from the skin
- If using emollients in the bath or shower, be aware of the danger of slipping. Make sure to place a non-slip mat in the bath or shower
- Gently pat the skin dry with a soft towel after washing. Don't vigorously rub the skin dry because this makes dry skin conditions worse



“All individuals with dry, vulnerable skin should avoid skin irritants (e.g. soaps).”³

When using emollients, instruct patients not to smoke or go near naked flames. Fabric (clothing, bedding, dressings etc) that has been in contact with emollients burns more easily and is a potential fire hazard. Washing clothing and bedding may reduce product build-up but not totally remove it.

Common conditions affecting older skin

Loss of skin integrity, environmental factors and underlying health problems are the main causes of skin conditions developing in the older person. Some of the more common skin problems and conditions affecting older skin are described here with guidance on treating and managing these problems.

Asteatotic eczema

Asteatotic eczema is a common form of eczema which occurs when the skin is very dry, particularly in the older person. Asteatotic eczema (meaning 'without fat') is also known as eczema craquelé, derived from the French word for 'cracked'.

This type of eczema has a characteristic 'crazy-paving' appearance and usually affects the lower legs but it can affect other parts of the body. The skin is very dry and can be itchy, sore, cracked and red. It develops due to loss of natural oils in the skin and is usually caused by the skin drying effects of over washing with harsh soaps and detergents and over heating. It can also be caused by other diseases, for example an underactive thyroid or malnutrition, or some medications, such as diuretics.

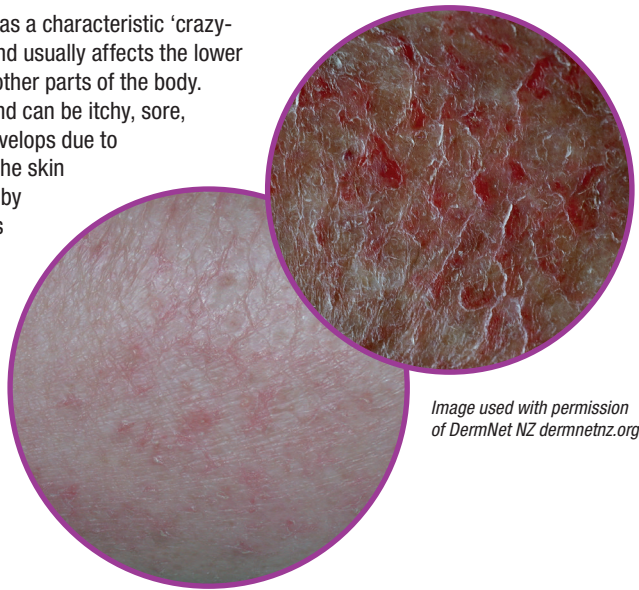


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Treatment involves using generous amounts of emollients applied regularly to rehydrate the dry skin. It is important to avoid provoking factors, such as excess washing, and to use an emollient soap substitute instead of soap. Exposing the skin to direct heat by sitting in front of a radiator or fire should be avoided. If the skin is very red or inflamed a topical steroid may be required.

Varicose eczema

Varicose eczema is associated with chronic venous insufficiency and usually affects the lower legs in the older person. It is also known as venous, stasis or gravitational eczema.

This inflammatory eczema develops as a result of pooling of fluid in the tissues of the lower leg due to poor venous return. Dark red/brown pigmented areas develop due to red blood cells leaking into the skin from the veins. In addition, the skin can be dry, scaly and fissured or red, itchy, blistered and weepy.

There are a few measures that can help reduce swelling in the legs such as elevating the feet when sitting down, not standing for long periods and the use of compression hosiery. Regular exercise or movement can help prevent the fluid from pooling in the legs.

It is important to protect the skin as it is very fragile and easily breaks down if knocked or damaged, which can lead to infection or venous ulcers developing. Applying generous amounts of emollients regularly to the legs can help and topical steroids may be needed. Antibiotics (usually systemic) should only be prescribed if the skin is infected. Compression advice should be sought from a specialist.

If varicose eczema does progress to a leg ulcer, the regular use of emollients to the surrounding area will assist in keeping the skin moist and prevent the problems associated with dry skin.



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“A regular moisturising regimen should be viewed as a vital part of skincare in all patients with fragile or at-risk skin to reduce the risk of skin damage.”⁵

Incontinence-associated dermatitis

Moisture-related skin damage occurs when the skin is in contact with excessive fluid for sustained periods of time. The skin may become soft and wrinkled which may lead to superficial breaks in the epidermis and cause a moisture lesion.

Maceration describes the process whereby the moisture has infiltrated the superficial layers of the skin, water-logging and softening the cells so that the skin develops a white and mushy appearance.

Skin breakdown is increased by the presence of enzymes within urine and faeces, which in turn irritate and burn the skin (excoriation) causing it to become red, inflamed, broken and painful (dermatitis). Loss of the skin barrier function occurs as a consequence of chronic or repeated exposure of the skin to urine or faecal matter.

General skin care advice may include:

- Washing the area with a soap-free cleanser
- Pat the skin dry/don't rub
- Moisturisation (applying skin protectant/barrier creams)
- Ensure a well fitted incontinence pad is used

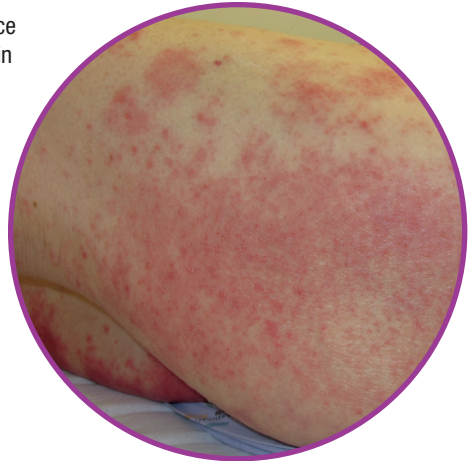


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Skin should be assessed and monitored. There are likely to be local policies in place. It is generally good practice to deliver skin care immediately after each episode of incontinence. Use a structured skin care regime combining cleansing, moisturisation and skin protectants.

Skin tears

Skin tears as a result of injury such as rubbing or pulling on the skin. These cause separation of skin layers and need referring for management as soon as possible.

Ageing skin is more fragile and more prone to skin tears. Complications such as pain, infection and delayed wound healing can occur. Skin tears can occur anywhere on the body although in the elderly they are more common on the extremities such as the upper and lower limbs and on the dorsal aspect of the hands.

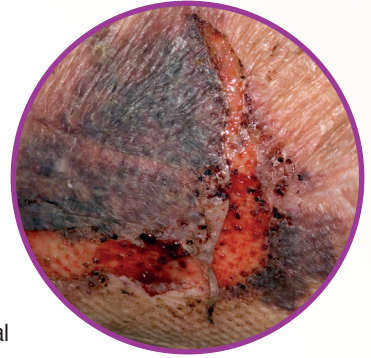


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Preventing skin injuries

- Care needs to be taken when removing adhesive tapes and dressings from those with existing wounds in order to prevent further damage³
- Dry skin is one of the modifiable risk factors for skin tears⁶ and a good skin care regime is important to maintain skin integrity
- The use of moisturisers can reduce the incidence of skin tears⁷

Pressure ulcers

Older people's skin is more fragile making pressure ulcers, also known as pressure sores, more likely to develop. Skin changes combined with reduced mobility, poor nutrition and illness can cause pressure ulcers to develop. Pressure ulcers are then notoriously difficult to heal as ageing skin repairs itself more slowly than younger skin, leaving the skin at risk of infection during this time.

One of the NICE Quality Standards for pressure ulcers states that prevention is key and adults who have been assessed as being at high risk of developing a pressure ulcer should be offered a skin assessment by a trained healthcare professional.⁸

A skin assessment should take into account any pain or discomfort reported by the patient and the skin should be checked for:⁸

- Skin integrity in areas of pressure
- Colour changes or discoloration
- Variations in heat, firmness and moisture (for example, because of incontinence, oedema, dry or inflamed skin)



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A skin assessment needs to be repeated whenever a person is identified as at high risk as a result of a pressure ulcer risk assessment, to take account of any changes to the skin.⁸

A skin care prevention plan should be implemented.⁴



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