## Wounds uk

# Everything you about but were afraid to ask

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#### Glossary

**EMOLLIENT:** A substance that hydrates and softens the skin by slowing evaporation of water

**HUMECTANT:** A substance that helps retain moisture by drawing water into the skin

NATURAL MOISTURISING FACTOR (NMF): A mixture of small compounds present in the the skin, derived from filaggrin, sweat constituents and triglyceride turnover. The NMF mixture consists of amino acids and amino acid derivatives, lactic acid, sugars, urea, glycerol and a variety of ions

**SKIN FRAGILITY:** Skin that is easily damaged bruised or torn, especially in older individuals or those who are very young or have comorbidities

SKIN INTEGRITY: Skin being whole, intact and undamaged SKIN TEAR: A wound that occurs when the layers of skin separate or peel back, which are most common on the arms or legs, and are often seen in those with fragile skin (particularly older people)

XEROSIS: Dry skin

Emollients help restore the barrier function of the skin, reduce itching, and increase hydration levels (Callagahan et al, 2018). Emollients should be used in all patients with fragile or at-risk skin, to reduce the risk of skin damage and further complications that may affect patient quality of life and add to clinician time and overall costs (Le Blanc et al, 2018).

In healthy individuals, the skin is strong and resilient. However, as skin ages and becomes thinner and more fragile, it becomes more susceptible to external and internal injury due to ageing and altered physiology. The loss of natural moisturising factor (NMF) with age also means that the skin becomes drier and less hydrated.

Once the skin becomes dry, it is more vulnerable to splitting and cracking, exposing it to increased water loss through trans-epidermal evaporation and to bacterial invasion, further adding to the risk of infection (Callagahan et al, 2018). By age 60, the integrity of the skin has typically become vulnerable and requires support (Moncrieff et al, 2015).

#### **How emollients work**

Simple emollients work by 'trapping' moisture into the skin and reducing water loss by evaporation (Wounds UK, 2015). They are available as moisturisers (creams, ointments and lotions), bath oils, gels and soap substitutes (NICE, 2015).

Some emollient products contain humectants, which either mimic or comprise the same molecule as NMF. These emollients have been shown to promote increased hydration, as the humectants have water-attracting properties and encourage the active movement of water from the dermis to the epidermis, as well as helping to hold water in the stratum corneum (Callaghan et al, 2018).

Using emollients has been found to preserve skin integrity and reduce the risk of damage: a care

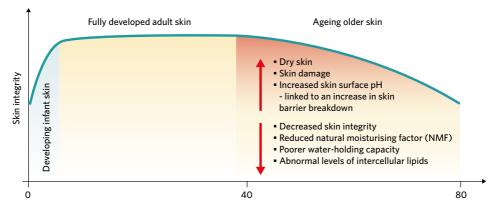


Figure 1. Changes in the epidermis as it ages (from Moncrieff et al, 2015)

## What is an emollient?

home-based study that introduced twice-daily use of emollients as part of the residents' daily routine was found to decrease incidence of skin tears by 50%. Guidance states that emollients should be used daily, particularly in those with fragile or aged skin, or those who have, or are at increased risk of, a wound (Carville et al, 2014).

#### **Injuries in fragile skin**

Patients with aged and fragile skin are at increased risk of wounds such as skin tears (LeBlanc et al,

2018), which are wounds that may result from blunt trauma, falls, poor handling, equipment injury or the removal of dressings.

They can occur anywhere but are often sustained on the arms, legs and hands (LeBlanc and Baronski, 2011). Skin tears can be painful and distressing, may increase the length of hospital stays, can lead to increased health costs and have an impact on quality of life (Wounds International, 2018).

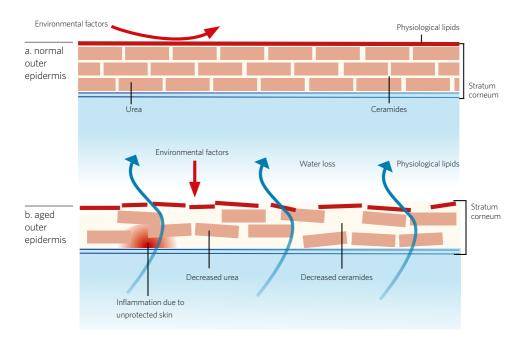


Figure 2. The physiology of the normal outer epidermis (a) and aged outer epidermis (b), adapted from Moncrieff et al, 2015

The ageing population means the incidence of skin tears is increasing. However, skin tears are often preventable wounds that create avoidable costs (LeBlanc et al, 2018). Prevention should be the main aim when assessing, planning and implementing care for skin damage, including skin tears.

#### **Emollient therapy and skin care**

When skin tears occur, it is vital that the wound care products chosen will optimise healing and not increase the risk of further skin damage. As well as

specialist dressings, this should include products to cleanse and moisturise the skin (LeBlanc et al, 2018). Complete emollient therapy (CET) is a way of keeping skin properly moisturised at all times by using a combination of emollient products liberally and frequently. It should be seen as a vital part of skin care in patients with aged or fragile skin. The use of emollients can be incorporated into a care bundle to aid with moisture management. Using emollients instead of soap for cleansing can help protect and hydrate vulnerable skin at risk from pressure damage (Callaghan et al, 2018).

Skin damage prevention checklist (adapted from LeBlanc et al, 2018)	
Risk factor	Action
Skin	<ul> <li>Inspect the skin and investigate previous history of skin tears</li> <li>Assess risk of accidental trauma if the patient has dry, fragile, vulnerable skin</li> <li>Manage dry skin and use an emollient to rehydrate</li> <li>Implement an individualised skin care plan using a skin-friendly cleanser and warm water</li> <li>Prevent skin trauma from adhesives, dressings and tapes; use a medical adhesive remover if necessary</li> <li>Consider medications that may directly affect the skin (e.g. topical and systemic steroids)</li> <li>Be aware of increased risk due to extremes of age</li> <li>Discuss use of protective clothing</li> <li>Avoid sharp fingernails or jewellery in patient contact</li> </ul>
Mobility	<ul> <li>Encourage active involvement/exercises if physical function is impaired</li> <li>Avoid friction and shearing and use good manual handling techniques as per local guidelines</li> <li>Conduct a falls risk assessment</li> <li>Ensure that sensible/comfortable shoes are worn</li> <li>Apply clothing and compression garments carefully</li> <li>Ensure a safe environment — adequate lighting, removing obstacles</li> <li>Use padding for equipment and furniture</li> <li>Assess potential skin damage from pets</li> </ul>
General heath	<ul> <li>Educate patient and carers on skin tear risk and prevention</li> <li>Actively involve the patient/carer in care decisions where appropriate</li> <li>Optimise nutrition and hydration, referring to dietician if necessary</li> <li>Refer to appropriate specialist if impaired sensory perception is problematic (i.e. diabetes)</li> <li>Consider possible effects of medications and polypharmacy on the patient's skin</li> </ul>

## Introducing Hydromol



Hydromol is a range of emollients, which includes different products for indications including dry skin, eczema and psoriasis. The Hydromol range includes:

- Hydromol Cream (containing sodium) pyrrolidone carboxylate [PCA])
- Hydromol Ointment
- Hydromol Bath & Shower Emollient
- Hydromol Intensive (containing urea).

#### Why choose Hydromol

The full Hydromol range can be used to provide CET to individuals with vulnerable or at-risk skin

Hydromol emollients can improve overall skin integrity and reduce the risk of damage in drv skin, and in skin conditions such as eczema (Wounds UK, 2022). Emollient use can reduce the risk of damage at dressing change if the individual has a wound requiring adhesive dressing products and can be used as part of a care plan to reduce the risk of occurrence in individuals at risk of recurring leg ulcers (Wounds UK, 2022). They also protect

the surrounding skin from further damage or breakdown

Emollient creams can be used as a good soap substitute, and bath emollient can be used instead of traditional bubble bath. Hydromol Ointment is the number-one prescribed ointment in the UK (NHSBSA, 2022) and provides an ideal option for use in wound care, to preserve the skin and reduce the risk of damage, particularly in patients with vulnerable skin who are at risk of developing a hard-toheal wound (Wounds UK, 2022).

Additionally, Hydromol Ointment is available in a tube, helping to reduce the risk of infection compared to tubs (NHS, 2020). Hydromol Cream contains the added benefit of a humectant for dual-action moisturisation in patients with very dry skin. The humectant sodium PCA hydrates the skin by attracting water form the dermis to the epidermis and trapping water in the stratum corneum, which helps to moisturise the skin from the inside (Callaghan et al, 2018).

Remember, using emollients can help protect and cleanse the skin, preserve skin integrity and reduce the risk of wounds such as skin tears.

## Practical tips for using emollients such as Hydromol:

- Apply Hydromol as often as possible, at least 3-4 times a day (or twice daily for Hydromol Intensive)
- Apply liberally to the affected area
- Always use bath emollient when bathing. Air or pat dry (do not rub) and liberally apply the cream/ointment
- Although Hydromol Bath & Shower Emollient leaves less residue on surfaces than other leading products (data on file), always take care when getting in and out of the shower or bath
- Even when skin starts to improve, do not stop using emollient therapy — skin problems can occur again quickly
- Take some of your emollient with you wherever you go, and don't wait until you run out to get some more
- If you prefer the cream/ointment warmer or cooler, you can either warm it in your hands or

## Self-care checklist (from LeBlanc et al, 2018)

- □ Have I been given an individualised skin care plan?
- □ Am I using an emollient every day?
- Am I eating sensibly and drinking enough water?
- Am I keeping as active and mobile as possible?
- Am I wearing clothing to protect my skin (e.g. long sleeves, shin guards or tubular bandages)?
- Has my environment been made as safe as possible (e.g. adequate lighting, no obstacles and using padding on furniture if required)?
- Am I wearing sensible/comfortable shoes to avoid falls?

store in a cool place before applying (however, it should not be heated or chilled)

- Apply the cream/ointment in the direction of hair growth to avid blocking hair follicles
- Take care with naked flames after applying any emollient product; it is important to be aware of the risk of fire and how to minimise this (CQC, 2022).

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