

END-OF-LIFE SKIN CARE CHALLENGES, PREVENTION AND MANAGEMENT

**THURSDAY
18 MARCH
7.30-8.30**

FACEBOOK LIVE



STEFANIE MAHAN RGN
PALLIATIVE CARE CLINICAL
LEAD, INDEPENDENT TISSUE
VIABILITY SPECIALIST NURSE



SPONSORED BY:



Medicareplus
INTERNATIONAL

END-OF-LIFE SKIN CARE: CHALLENGES, PREVENTION AND MANAGEMENT

END-OF-LIFE CARE

- Caring for a dying patient presents many challenges, not least the maintenance of skin integrity. Occasionally, despite receiving all of the necessary interventions, palliative patients may still develop skin damage¹.
- **End of life** is defined as '*a phase of life when a person is living with an illness that will often worsen and eventually cause death².*'

This is not restricted to the short period just before death, but may begin some weeks or even months beforehand³.

NORMAL FUNCTIONS OF THE SKIN⁴



Protection

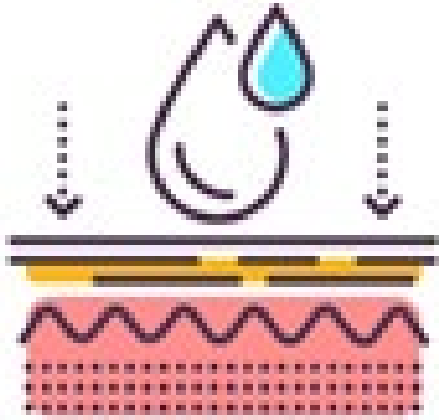
- Mechanical damage
- Infection
- Chemical irritants
- UV radiation



Metabolism

- Synthesis of vitamin D
- Production of melanin

NORMAL FUNCTIONS OF THE SKIN⁴



Fluid balance

- Prevents water loss
- Promotes hydration



Absorption

- Emollients for rehydration
- Medicinal patches
- Medicinal ointments/creams
- Harmful chemical substances

NORMAL FUNCTIONS OF THE SKIN⁴



Communication

- Facial expression
- Touch
- Physical appearance
- Secretion of pheromones



Excretion

- Sweat
- Salts, water, urea, toxins, pheromones

NORMAL FUNCTIONS OF THE SKIN⁴



Temperature control

- Hot (vasodilation)
- Cold (vasoconstriction)
- Sweating



Sensation

- Nerve endings detect pain, pressure, touch

AGE-RELATED CHANGES IN THE EPIDERMIS AND DERMIS⁵

Dry epidermis:

- Reduction in sebaceous and sweat gland activity

Thin epidermis:

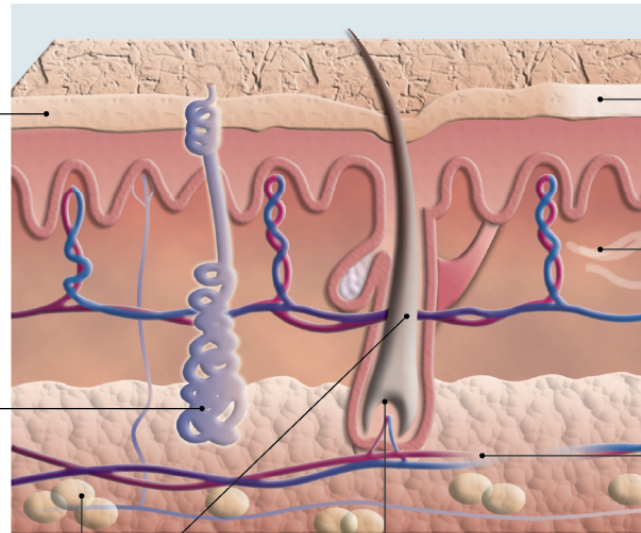
- Slower repair function
- Decreased vitamin D production
- Reduced number of Langerhans cells

Reduced sweat gland activity:

- Tendency to overheat

Changes in distribution of fat and hair:

- Due to reductions in sex hormone levels



Fewer melanocytes:

- Paler skin
- Reduced tolerance to sun exposure

Thin dermis:

- Sagging and wrinkling due to collagen fibre loss

Reduced blood supply:

- Slower healing
- Reduced ability to lose heat

Fewer active follicles:

- Thinner, sparser hair

SKIN CHANGES AT LIFE'S END

It is well accepted that during the end stages of life, any of a number of vital body systems (e.g. the renal, hepatic, cardiac, pulmonary, or nervous systems) can be compromised to varying degrees².

As the body enters this stage, vital organs will begin to fail — the skin is yet another organ whose functions may begin to deteriorate at the end of life (skin failure).

ACUTE SKIN FAILURE



Skin failure is often overlooked and not included in patient/family education... the skin is the largest organ of the body and it **can** and **does** fail, along with the other organs at life's end.

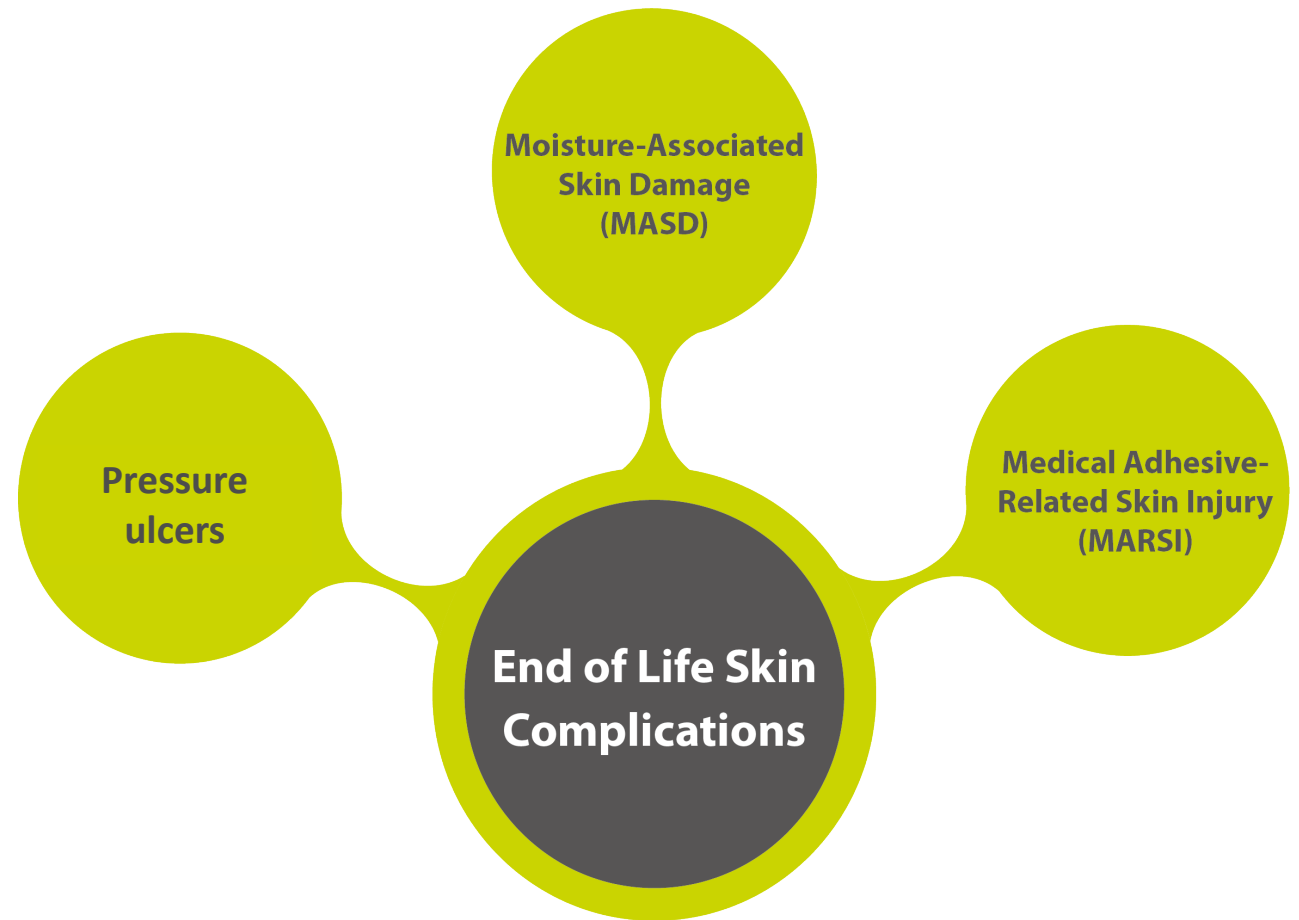
<https://quizlet.com/515097438/pressure-ulcers-flash-cards/>

ACUTE SKIN FAILURE CONTINUED

- The skin and subcutaneous tissues die, or become necrotic, due to hypo-perfusion that occurs alongside severe dysfunction or failure of other organ systems
- Damage may occur despite the application of appropriate interventions that meet or exceed standards of care.

POTENTIAL SKIN COMPLICATIONS

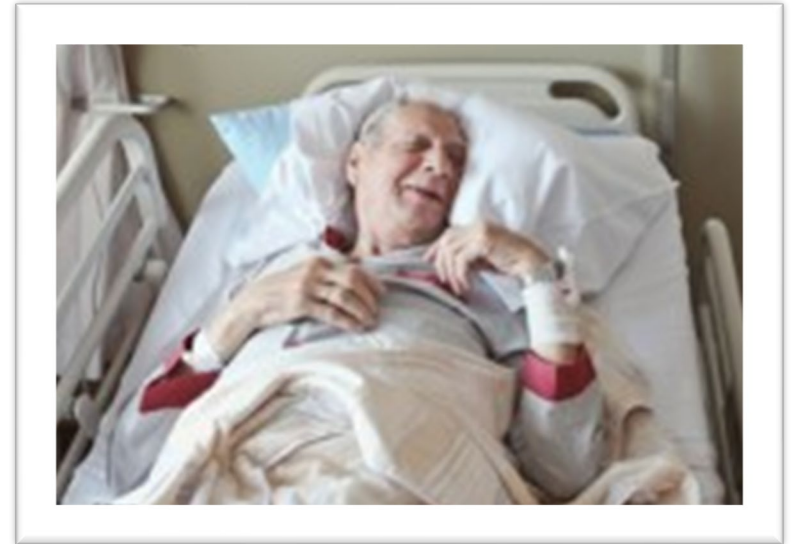
Maintaining skin integrity for end-of-life patients can be extremely challenging, as they are at risk of further skin complications.



PRESSURE ULCERS

End-of-life patients with limited mobility and physical activity are at highest risk¹:

- Reflection of compromised skin at end of life
- Pear or butterfly-shaped, and are located predominantly on the coccyx or sacrum
- Red, yellow, purple and black in colour



www.bedsorefaq.com

PRESSURE ULCERS CONTINUED

- Have a sudden onset, and appear when death is imminent (within seven days)
- The term 'Kennedy terminal ulcer' should no longer be used to describe this type of skin damage⁶.



Image courtesy of D. Copson, TVN

***ALL** pressure ulcers should be reported in line with local guidance and investigated accordingly.*

COMMON SITES OF MOISTURE ASSOCIATED SKIN DAMAGE (MASD)

Common MASD sites:

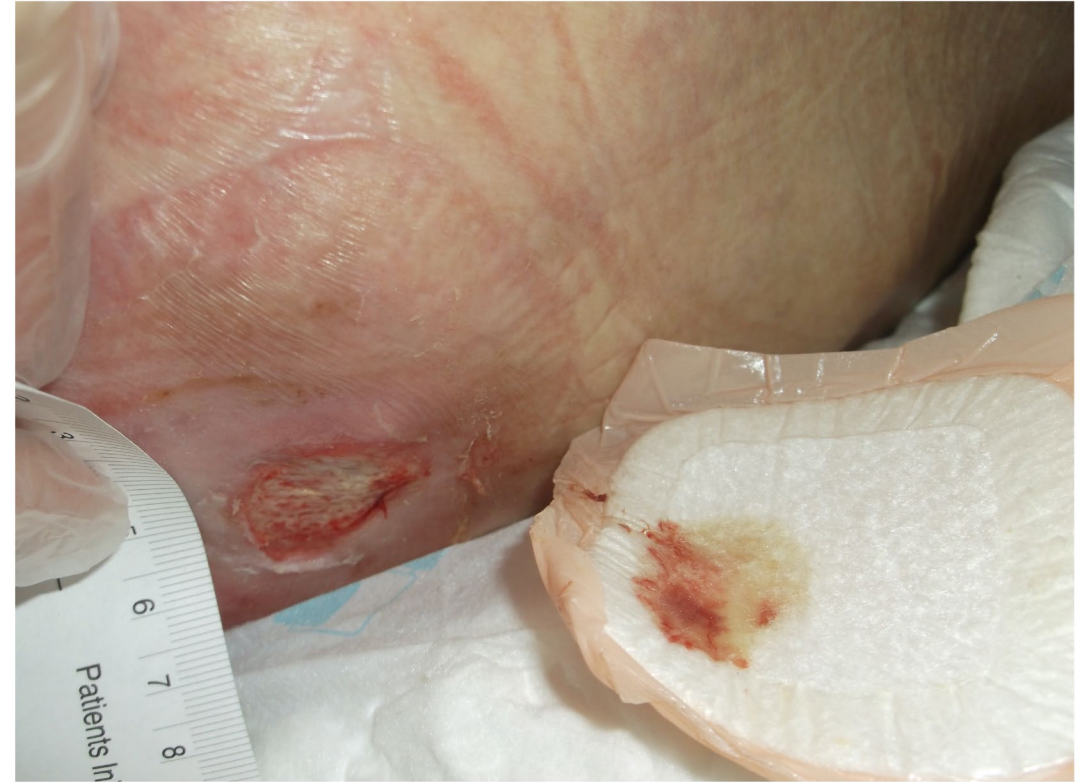
- Neck
- Armpits
- Under breasts
- Abdominal folds
- Between fingers
- Perineum
- Groin/Genitalia
- Thighs
- Heels
- Between toes



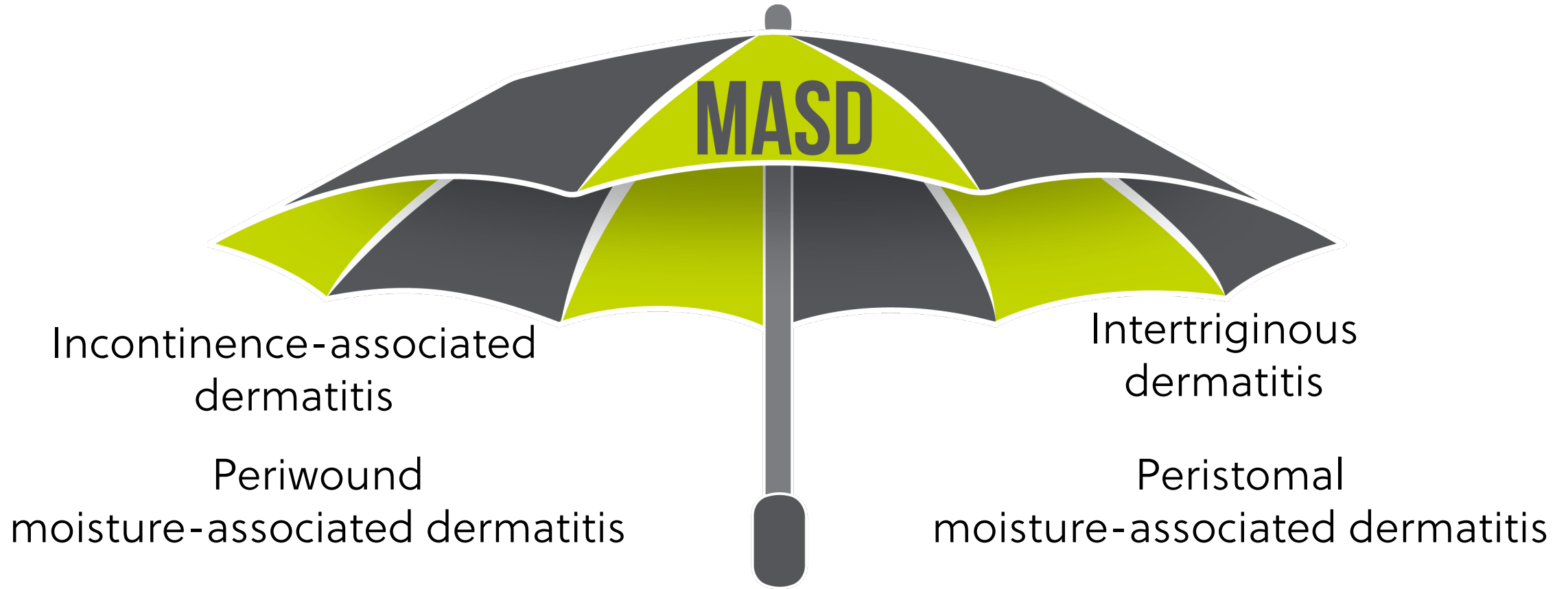
COMMON SITES OF PRESSURE ULCERS

Common PU sites:

- Occiput
- Elbows
- Hips
- Sacrum
- Buttocks
- Natal cleft
- Ankles
- Heels
- Between toes



MOISTURE-ASSOCIATED SKIN DAMAGE



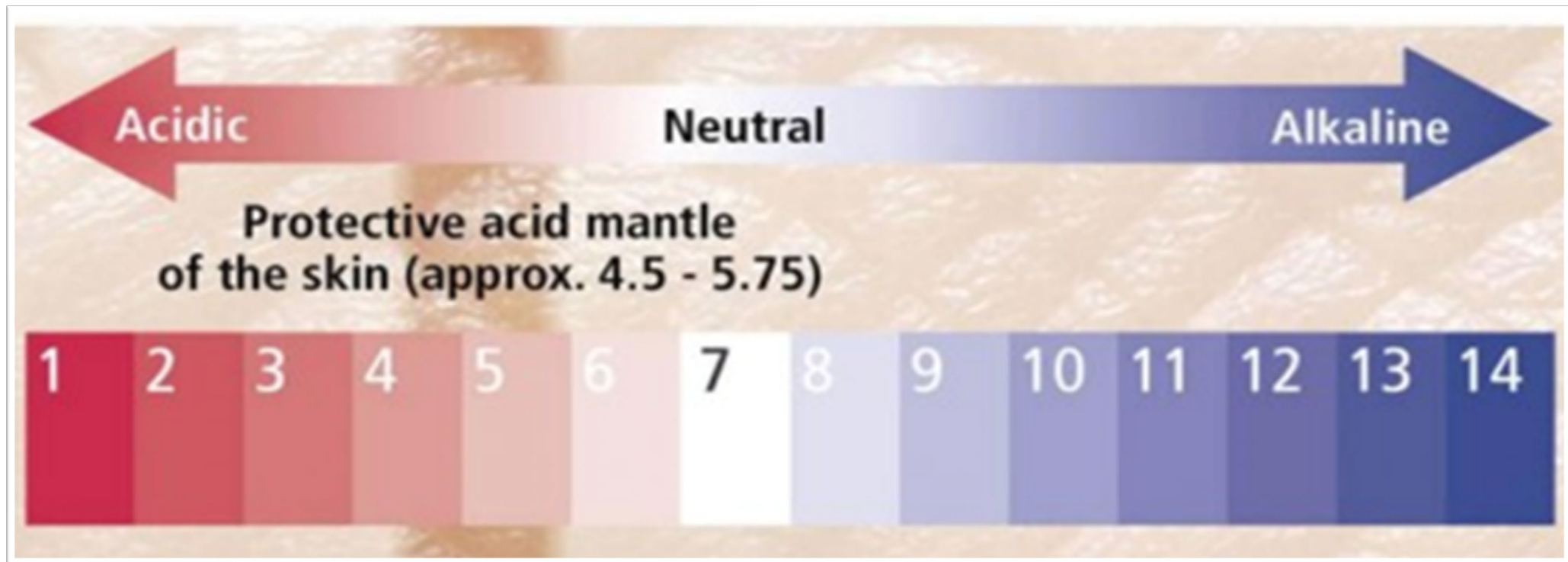
Mucus and saliva can also contribute to MASD
in some patient groups

PROLONGED/CONTINUOUS EXPOSURE OF THE SKIN TO MOISTURE

Changes in the 'acid-mantle'

- The pH of healthy skin is between 4 and 6, providing an acidic environment that supports the resident, commensal bacteria on the surface of the skin⁷
- In cases of overhydration, the pH of the skin increases, resulting in an alkaline environment that is conducive to bacterial proliferation and infection⁸

PROLONGED/CONTINUOUS EXPOSURE OF THE SKIN TO MOISTURE



PROLONGED/CONTINUOUS EXPOSURE OF THE SKIN TO MOISTURE

Loss of barrier/protective function

- Overhydration of the skin, regardless of the underlying cause disrupts the barrier properties of the stratum corneum and allows irritants to penetrate the epidermis⁹
- Once the skin is overhydrated, it is more prone to physical damage including friction and shear⁹.



Image courtesy of M. Hughes, TVN

CASE STUDY ONE

- Mr Smith is 60 years old with a diagnosis of carcinoma of the lung and COVID positive
- His preferred place of care/death is home
- He had a tracheostomy site formation while in acute care
- He was discharged home for end-of-life care and has a syringe driver in place
- Initial assessment identified that Mr Smith had extensive MASD to his neck from copious respiratory secretions.

CASE STUDY TWO

- Mr Jones is a 79-year-old gentleman with carcinoma of the bowel
- He has been having copious loose bowel movements due to his cancer and has bleeding MASD
- On initial assessment, Mr Jones was in increased pain requiring opioid analgesia to manage pain levels.
- Mr Jones was also low in mood.



CASE STUDY THREE

- Mrs Peters is a 56-year-old lady with carcinoma of the rectum with liver and pulmonary metastasis
- She has rapidly deteriorated and is now only able to mobilise short distances, and has episodes of incontinence and general fatigue
- Mrs Peters is also low in mood following bereavement of her husband three months ago.

MEDICAL ADHESIVE-RELATED SKIN INJURY

- **Medical adhesive-related skin injuries** (also known as **MARSI**) are often not recognised and so are underreported
- They are defined as '*skin damage related to the use of medical adhesive products or devices such as tapes, wound dressings, stoma products, electrodes, medication patches and wound-closure strips*¹⁰'
- These injuries can occur when the epidermal layers separate, or if the epidermis completely detaches from the dermis.

MEDICAL ADHESIVE-RELATED SKIN INJURY

Any patient who comes in contact with medical adhesives can potentially experience MARSI, this group of patients are particularly vulnerable.

- Skin temperature
- Skin colour
- Moisture level
- Turgor (fullness and elasticity: lack of turgor is a sign of dehydration)
- Fragility
- Integrity

Observe for local signs of irritation or damage at the site where the adhesive will be/has been applied

CASE STUDY FOUR

- Mrs Wise is a 70-year-old lady who has end-stage heart failure
- She has gross pitting oedema to her bilateral lower limbs and lower torso from fluid retention due to her heart failure
- Due to uncontrolled symptoms, Mrs Wise requires a continuous sub cut infusion (syringe driver) to manage her symptoms.

MAINTAINING SKIN INTEGRITY

Caring for individuals approaching end of their life is based on regular assessment and provision of optimal care, to ensure patient comfort and prevent/manage further skin complications.

SKIN BARRIER PRODUCTS

- The main function of barrier products is to protect/prevent skin damage from shear, and/or friction and irritants¹²
- Modern barrier products are available as creams, films and ointments, contain silicone (an effective water repellent), and are designed to be applied thinly across the skin¹³

SKIN BARRIER PRODUCTS CONTINUED

- They provide a transparent, waterproof barrier, and are indicated for all degrees of MASD (mild-to-severe), or for those at high risk¹⁴. In addition, they can be an effective option for the prevention of MARSI¹⁵.

TOTAL BARRIER PROTECTION (TBP)

TOTAL BARRIER PROTECTION (TBP)



*Barrier products should not be on repeat prescription

MEDI DERMA-S TOTAL BARRIER CREAM



MEDI DERMA-S Total Barrier Cream



MEDI DERMA-S Total Barrier Film



MEDI DERMA-*PRO* Foam and Spray Incontinence Cleanser and Skin Protectant Ointment

MEDICAL ADHESIVE REMOVERS

Effectively breaks adhesive bonds to minimise the potential for skin stripping, pain and/or discomfort during the removal of adhesive dressings/devices.

- Gently lift the edge of the dressing/device
- Apply **LIFTEEZ** Medical Adhesive Remover underneath the dressing/device while gradually removing it from the skin.



SUMMARY

When managing skin changes at the end of life, we should consider:

- Educating the patient/carers on what these changes may be
- Regular skin assessment, especially over bony prominences
- Implementing the most appropriate intervention/s to ensure patient comfort, while respecting the wishes of the patient/family.

SIGN UP FOR YOUR FREE LIFTEEZ SAMPLE

Sign up to receive a free sample of Lifteez Medical Adhesive Remover wipe here:

www.medicareplus.co.uk/lifteezsampl/



REFERENCES

1. Beldon P (2011) Managing skin changes at life's end. *Wound Essentials* **6**: 76–9
2. Sibbald RG, Krasner DL, Lutz JB, et al (2009) *The SCALE Expert Panel: Skin Changes At Life's End. Final Consensus Document*. Available online: www.nursingcenter.com/prodev/ce_article.asp?tid=1005418 (accessed Dec, 2020)
3. Qaseem A, Snow V, Shekelle P (2008) Evidence-based interventions to improve the palliative care of pain, dyspnoea and depression at life's end; a clinical practice guideline from the American College of physicians. *Ann Intern Med* **148**(2): 74–9
4. Wounds UK (2018) *Best Practice Statement Maintaining Skin Integrity*. London: Wounds UK
5. Nigam Y, Knight J (2017) Anatomy and physiology of ageing 11: the skin. *Nurs Times* **113**(12): 51–5
6. NHS Improvement (2018) *Pressure ulcers: revised definition and measurement framework*. Available online: <https://improvement.nhs.uk/resources/pressure-ulcers-revised-definition-and-measurement-framework/> (accessed Dec 2020)

REFERENCES

7. Flanagan M (2013) *Wound healing and skin integrity: principles and practice*. London: John Wiley and Sons
8. Voegeli D (2016) Incontinence-associated dermatitis: new insights into an old problem. *Br J Nurs* **25(5)**: 256–62
9. Beeckman D, Campbell J, Campbell K, et al. (2015) *Incontinence associated dermatitis: moving prevention forward. Proceedings of the Global IAD Expert Panel*. Available online: <http://tinyurl.com/hr28grk> (accessed April 2020)
10. Fumarola S, Allaway R, Callaghan R, et al (2020) Overlooked and underestimated: medical adhesive-related skin injuries. *J Wound Care* **29(Suppl 3c)**: S1–S24
11. Collier M (2020) Guide to the prevention of medical adhesive related skin injuries. *J Wound Care: International Consensus Document*. Available online: <https://live.wounds-uk.com/wp-content/uploads/2020/08/Guide-to-the-prevention-of-medical-adhesive-related-skin-injuries.pdf>

REFERENCES

12. Fletcher J (2015) Appropriate selection and use of barrier creams and films. *Wounds Essentials* **10(2)**: 61–8
13. Voegeli D (2016) Incontinence-associated dermatitis: new insights into an old problem. *Br J Nurs* **25(5)**: 256–62
14. Southgate G, Bradbury S (2016) Management of incontinence-associated dermatitis with a skin barrier protectant. *Br J Nurs* **25(9)**: S20–S29
15. Fumarola S, Allaway R, Callaghan R et al (2020) Overlooked and underestimated: medical adhesive-related skin injuries. *J Wound Care* **29(Suppl 3c)**: S1–S24
16. Scottish-Excoriation-and-moisture-related-Skin-Damage-Tool.pdf (pressureulcer.scot)



DOWNLOAD CERTIFICATE
WWW.JCN-LIVE.CO.UK/CERTIFICATE