SESLHD PROCEDURE COVER SHEET



NAME OF DOCUMENT	Wound – Skin Assessment and Care/Management		
TYPE OF DOCUMENT	Procedure		
DOCUMENT NUMBER	SESLHDPR/547		
DATE OF PUBLICATION	September 2024		
RISK RATING	Medium		
LEVEL OF EVIDENCE	National Safety and Quality Health Service Standards:		
	Standard 1 - Clinical Governance		
	Standard 2 - Partnering with Consumers		
	Standard 3 - Preventing Healthcare Associated Infection		
	Standard 5 - Comprehensive Care		
	Standard 6 - Communicating for Safety		
REVIEW DATE	September 2027		
FORMER REFERENCE(S)	N/A		
EXECUTIVE SPONSOR or	Director, Nursing and Midwifery Services		
EXECUTIVE CLINICAL SPONSOR			
AUTHOR	SESLHD Wound Management Committee		
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FUNCTIONAL GROUP(S)	Nursing and Midwifery		
KEY TERMS	Skin assessment		
	Skin care		
SUMMARY	The purpose of this procedure is to inform all clinical staff involved in the care of skin to promote healthy skin, provide comfort and minimise skin complications.		

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Wound – Skin Assessment and Care/Management

SESLHDPR/547

1. PROCEDURE STATEMENT

This procedure is to inform all clinical staff of appropriate measures to promote healthy skin. Patients under the care of SESLHD facilities must have a holistic skin assessment. This assessment will assist clinical decision-making regarding:

- Intervention needed
- Education required to minimise complications
- Optimal treatment needed
- How to promote patient comfort.

Skin re-evaluation is ongoing throughout patient's episode of care.

This plan will be kept within the patient's health care record and documented in eMR.

2. BACKGROUND

It is essential to improve, maintain and protect the patient's skin whist they are in our care. The skin is the largest organ of the body and has many properties that are essential to the patient health. Failing to care for, maintain and protect the skin will leave the patient at risk of skin failure. This will disable the normal tasks and functions of the skin. These tasks include but are not limited to:

These tasks include but are not limited to:

- acting as the first immune response
- regulation of body temperature
- absorption of vitamin D and medications e.g. creams
- protection from UV radiation
- protecting from loss of body fluid containing essential vitamins /minerals e.g. albumin.

Skin Assessment is attended to in order to provide the evidence required for individualised skin management.

- 1) There is no tool that grades a person's skin fragility
- 2) Skin is different throughout a person's life span e.g., neonate to older person

Management of the skin should be prompt and appropriate. Management should promote an environment that enables person centered skin care.

Limitations of this procedure

This procedure does not provide advice on dermatological conditions. Concerns with patient dermatological conditions will need a referral to a dermatologist.

Examples of known dermatological conditions include:

- Acne
- Eczema
- Psoriasis
- Shingles
- Allergic reactions
- Fungal infections (not responding to first line treatments)

Wound – Skin Assessment and Care/Management

Scabies (not responding to first line treatments) •

Urticarial (acute) (not responding to first line treatments)

Refer patient to a dermatologist for other skin concerns that do not respond to care.

Known medical conditions with associated skin breakdown should be referred to appropriate medical specialists related to the cause of the condition, some examples include:

- Skin cancers (SCC / BCC) referred to a Plastic Surgeon •
- Melanoma referred to a Melanoma Clinic •
- Pvoderma gangrenosum or Vasculitis referred to an Immunologist •
- Cellulitis or bites (e.g., spider bite) referred to the Infectious Disease team
- Calciphylaxis referred to the Renal/Vascular Team •
- Gout referred to a Rheumatologist
- Raynaud's Disease referred to a Rheumatologist
- Hydradenitis suppurativa referred to the Infectious Disease team •
- Scleroderma referred to a Rheumatologist •

Skin conditions in children Examples include:

- Chickenpox (Varicella) •
- Eczema (atopic) •
- Henoch-Schönlein, •
- Impetigo purpura •
- Impetiginised eczema,
- Miliaria (sweat rash), Measles N
- Napkin dermatitis (nappy rash) •
- Rubella (German measles)

Refer to the Paediatric Medical Team/Paediatric Unit or GP for advice. Also review local Paediatric policies and procedures related to these conditions.

If the patient's primary illness/surgery is not dermatological; but they have a dermatological comorbidity:

- Discuss the care for this skin condition with the treating medical team/GP. •
- If appropriate continue usual skin care or refer patient to dermatologist.

Not covered in this procedure are specific skin situations that have a procedure assigned to their care. Refer to:

SESLHDPR/297 - Wound Assessment and Management SESLHDPR/205 - Wound - Incontinence Associated Dermatitis (IAD) SESLHDPD/326 - Pressure Injuries - screening, prevention and managing POW/SSEH BR - Care of the patient with Cellulitis (POWH CLIN151) POW/SSEH BR - Skin Tears - Prevention and Management (POWH/SSEH CLN022)

SESLHDPR/547

South Eastern Sydney

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Wound – Skin Assessment and Care/Management

SESLHDPR/547

South Eastern Sydnev

Local Health District

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DEFINITIONS

Education –	Education should be timely and continuous throughout the healing process and
patient/	should include a maintenance plan. The information should be both verbal and
carer	written where necessary.
	Contact details for appropriate Health Care Professionals are to be made available
	for the patient/client.
Health Care	Documented account of a patient's/client's health, illness and treatment during
Record	 each visit or stay at a hospital, nursing home, community health centre or other health care facility/service². The health care record may be in hard copy or electronic format, on approved Area forms or systems. Also known as patient medical records, it includes all documentation related to the individual patient/client, in any of the Area's health care settings. E.g. Patient Care Plan, Clinical Pathways, Progress Notes, eMR and CHOC-eMR; or various charts, e.g. Neurological, wound maps.
Patient	Any person to whom a health service provider owes a duty of care in respect of
	the provision of health services ²
Terminology	See appendix <u>SESLHDPR/287 – Wound – Assessment and Management</u>

3. **RESPONSIBILITIES**

3.1 All clinical staff who attend wound management are responsible:

- at all times for the assessment of the skin
- for the development and documentation of an appropriate wound management plan
- for on-going re-evaluation of the skin management plan (in collaboration with the medical team)

When nursing staff are involved a Registered Nurse (RN) is primarily responsible to ensure this happens. An Enrolled Nurse (EN) or Trainee Enrolled Nurse (TEN) may be delegated specific wound management activities under the direct and indirect supervision of the RN.

3.2 Line Managers will ensure all clinical staff:

- have the opportunity to attend District wound management education
- work within the scope of this procedure
- have appropriate resources to implement the recommendations within this procedure

4. PROCEDURE

4.1. Assessment

4.1.1. Assess the skin

- Colour
 - Is the skin the normal colour for this patient?

Wound – Skin Assessment and Care/Management

- - Is there bruising present?
 - Is there erythema (redness) indicating infection or inflammation?
 - Temperature \cap
 - Does the skin feel the same as surrounding skin?
 - Does the skin feel warm to touch?
 - Does the patient have known infection to area?
 - Does the skin feel cold to touch indicating poor vascularisation?
 - Texture 0
 - Is the skin papery or thin?
 - Does the skin feel dry or moist?
 - Is the moisture due to sweat or urine or wound exudate?
 - Is the skin macerated due to oedema?
 - Integrity \cap
 - Is the skin broken?
 - Is there a wound/skin tear/Incontinence associated dermatitis/pressure injury?
 - Please refer to the appropriate LHD/facility policy/procedure (links above)
 - Is there epidermal stripping?
 - Is there a rash?
 - Sensation 0
 - Pain is the skin painful to touch?
 - . Pruritus - does the patient complain of an itch?
 - Infection \cap
 - Does the patient have a known skin infection? e.g., Cellulitis, Tinea, Fungal

4.1.2. Skin breakdown caused from

- Incontinence of bladder and bowel
- Medical conditions of the skin
- Treatment of medical conditions which cause side effects to skin
- Failure to moisturise skin (skin becomes dry brittle or clubs on skin causing mounds) of dead skin cells)
- Failure to clean skin around wounds
- Failure to clean skin after compression bandaging removed
- Obesity which causes skin to sweat (skin fold breakdowns)
- Failure to manage wound exudate.

4.1.3. Skin Photography

Should skin photography be necessary to facilitate patient care, refer to the taking and storage of skin photos in procedure SESLHDPR/285 - Wound - Clinical Digital Photography.

4.1.4. **Medications**

Should prescribed topical medication be needed to for skin care, NSW Health, SESLHD medication policies and procedures should be followed.

South Eastern Sydnev Local Health District SESLHDPR/547

Health

Wound – Skin Assessment and Care/Management

SESLHDPR/547

Should ward or unit impress stock of lotions / creams / oil based products be needed for skin health, the <u>Nurse Initiated Medication Administration policy</u> for their applications should be followed.

4.2 Management and evaluation

- Once the skin assessment is complete refer to Appendices for detailed information on cause and care:
 - Age Related Skin changes see Appendix A
 - Bariatric skin folds see Appendix B
 - Cleaning unwashed skin see Appendix C
 - Contact dermatitis see Appendix D
 - Desiccation see <u>Appendix E</u>
 - Fungal see <u>Appendix F</u>
 - Tinea see <u>Appendix G</u>
 - Hyperkeratosis see Appendix H
 - Ichthyosis see Appendix I
 - Lotions, Oils, Creams and Emollients see Appendix J
 - Maceration see Appendix K
 - Neonatal skin see Appendix L
 - Pruritus (Itching skin) see <u>Appendix M</u>
 - Radiotherapy Damaged Skin see Appendix N
 - Skin Care and Oedema/Lymphoedema see Appendix O
 - Skin stripping see Appendix P
 - Venous Eczema see Appendix Q
 - Xeroderma (Dry Skin) see Appendix R
 - Skin affected by Moisture see Appendix T
 - The clinician must discuss the plan needed for skin care with the patient and if appropriate the carer. This is to assist their understanding of the treatment involved. To reduce and eliminate the risk of non-concordance with treatment.
 - Patients/carers should be provided with appropriate handouts to reinforce teaching/learning. Where possible, translations should be provided for non-English speaking patients/carers.
 - Should the patient choose not to follow the recommended treatment plan, document in eMR the reason for their decision. Discuss any concerns with medical team.
 - Advise patient of:
 - the signs and symptoms of reactions/discomfort to treatment
 - when to ask for extra help

4.3 Training and Education

Staff involved in skin care should attend SESLHD Wound Care Management education annually. This is to ensure evidence-based knowledge and consistency of skin care practice.

Wound – Skin Assessment and Care/Management

SESLHDPR/547

To assist with the understanding and implementation of this procedure see: <u>Shared</u> <u>ISLHD/SESLHD Skin Assessment and Lotion and Potions Education Resource.</u>

To understand terminology used for skin assessment and management see Appendix S.

5. DOCUMENTATION

Document any skin changes in eMR, discharge letters, transfer documentation. This will include:

- diagnosis of skin problem
- treatment plan
- evaluation of the plan commenced
- any follow-up appointments related to skin problem

If the patient has open wounds these are documented on Wound Assessment & Management Plan Form (hard copy form number S0056) or the electronic equivalent e.g. community use Wound Assessment Treatment Evaluation Plan (WATEP). Transfer documentation e.g., from community to hospital or vice versa

Discharge letters should include wound assessment and management plan information

6. AUDIT

Wound Care Nurse's, or nurse's responsible for the skin if a wound care nurse is not located at a site, are to monitor the procedures use and effectiveness. Data gathered from pressure injury and incontinence associated dermatitis audits and reviews of related clinical incidents should also be monitored as they will reflect the effectiveness of this procedure.

7. REFERENCES

7.1 External References

British Journal of Nursing. Downloaded from magonlinelibrary.com by 113.011.234.010 on February 21, 2016.

7.2 Internal References

Staff should also refer to site infection control manuals.

8. VERSION AND APPROVAL HISTORY

Date	Version No.	Author and approval notes
November/December 2016	Draft	Draft for Comment period
21.2.17	Final draft	SESLHD and ISLHD Wound Committee
March 2017	Final draft	Approved by Clinical and Quality Council
March 2018	1	Minor addition of Appendix T approved by Executive Sponsor.
July 2021	2	Scheduled review – nil change, reformatted to read clearer
23 September 2024	2.1	Minor review includes minor grammatic improvements.



Health South Eastern Sydney Local Health District

SESLHDPR/547

Appendix A: Age Related Skin Changes

Definition

The cause of skin aging is due to as 'intrinsic' and 'extrinsic' ageing. Intrinsic changes occur due to internal changes within the patient's body. Extrinsic ageing occurs due to repeated exposure to environmental factors. Examples of extrinsic aging include ultraviolet radiation, air pollution and smoking¹.

Signs of intrinsically aged skin rarely manifest before the age of 70 years. Intrinsically aged skin features pale, dry skin with fine wrinkles alone. Extrinsically aged skin features coarse wrinkles with increased laxity². In addition to changes in the skin, tissue ageing leads to a loss of functional capacity.

Factors that may cause dry skin and pruritus include:

- altered lipid content
- reduced water intake
- changed sebum production
- altered natural moisturising factors

Impaired pH of the skin surface leads to:

- decreased stratum corneum cohesion
- disturbed skin barrier recovery
- increased susceptibility to pathologic colonisation and infection

The flattening of the dermal-epidermal junction increases the risk for shearing injuries such as bullae and skin tears^{1,2,3}. Therefore, skin is less able to cope with external stresses. Skin is more susceptible to a wide range of age-related conditions, diseases, injuries and wounds.

Management

There is a need to preserve skin integrity by sustaining moisture content as a potential barrier against infection.

Emollients or moisturisers are interchangeable terms for topical applications that help to stop hardening and irregularities in the outer layer of the skin through the addition of moisture⁴.

The structural integrity of the skin can be improved with daily skin cleansing and twice-per-day moisturising. Essential for good skin health always use a pH neutral and perfume free:

- skin cleanser daily to clean the skin
- moisturer⁴ twice-per-day to moisturise the skin ^{3,5,6}

References:

- 1. Kottner J Of youth and age: what are the differences regarding skin structure and function. *EWMA Journal*, 2015, Vol. 15, No. 2, 11-13
- 2. Blume-Peytavi, U; Kottner, J; Sterry, W; Hodin, MW; Griffiths, TW; Watson, RE; Hay, RJ & Griffiths CEM Ageassociated skin conditions and diseases: current perspectives and future options. *The Gerontologist*, 2016, Vol. 56, No. S2, S230-S242
- 3. Watkins P The use of emollient therapy for ageing skin. Nursing Older People, Vol. 23, No. 5, 31-37
- 4. New Zealand Dermatological Society 2010 *Emollients and Moisturisers*. <u>www.dermnetnz.org/treatments/emollients.html</u> (accessed July 10 2016)
- 5. Ryan, T Matt's hypothesis: How simple strategies can lead to better outcomes. *Journal of Lymphoedema*, 2016, Vol. 11, No. 1, 46-48
- 6. Stephen-Haynes, J & Carville, K Skin tears: made easy. Wounds International, 2011, Vol. 2, No. 4, 1-6

Wound – Skin Assessment and Care/Management

Version: 2.1 Ref: T17/47873 Date: 23 September 2024 Page 9 of 30 COMPLIANCE WITH THIS DOCUMENT IS MANDATORY This Procedure is intellectual property of South Eastern Sydney Local Health District. Procedure content cannot be duplicated.

Appendix B: Bariatric skin folds

Definition:

All skin folds in bariatric patients are at risk of breakdown. This is due to the heat generated by the skin folds and lack of air flow to skin area causing the skin to sweat. Sweating is the body's normal response to overheating. If sweating is not controlled then the skin will become moist and breakdown.

Identifying and minimising potential risks:

Obesity is also associated with low-grade chronic inflammation within the fat tissue. Excessive fat storage leads to stress reactions within fat cells. This in turn leads to the release of pro-inflammatory factors from the fat cells themselves and immune cells within the adipose (fat) tissue. This leads to increased risk of infection.

Prevention:

- Apply a layer of antiperspirant to towel-dried skin before bed and after showering. Antiperspirant
 must come into contact with skin fold edge. Select a good quality roll on antiperspirant e.g. 24hour
 sports antiperspirant*
- Combines/pads can be used to absorb sweat and protect clothing but need to be changed as when necessary. Ensure all clothing is thoroughly dry before wearing.
- *Note: Deodorants reduce odour, but do not prevent wetness /sweating. Obesity, smoking, and drinking alcohol can cause or intensify heavy sweating. "To prevent sweating and skin-fold breakdown: maintain a healthy weight, quit or reduce smoking and limit excessive alcohol consumption.
 - To remove products: wash off in shower or use bath bags daily. Always dry in between the folds of skin.

References:

https://www.betterhealth.vic.gov.au/health/healthyliving/obesity-and-hormones



SESLHDPR/547

Wound – Skin Assessment and Care/Management

Appendix C: Cleaning unwashed skin

Definition:

The top layer of human skin (stratum corneum) consists of four to five layers with the top layer (epidermis) consisting of dead cells (Keratinocyte). The natural process for skin revitalisation is that the top layer breaks away from the live cells every hour of every day.

Cleaning of the skin removes the oldest dead skin cells to allow for new layer of cells to be exposed to protect the body. If you leave the Keratinocytes undisturbed, they will mix with the sweat and dirt on the skin surface to form an area for bacteria to multiply. This would put the person at risk of infection.

Identifying and minimising potential risks:

Using high pH cleansers, such as soap, can lead to:

- A loss of skin integrity
- Loss of cohesion between skin layer
- Increased epidermal permeability
- Dry, flaky, irritated skin

The dry skin loses its natural protection against bacteria, which can then slip in through cracks and fissures in your skin.

Prevention:

Use PH friendly skin cleaning products

Management:

- Skin should be washed daily and as required, depending on exposure / problems / assaults, e.g. Incontinence wash skin each time the person's skin is soiled.
- Compression stockings / bandages: wash the person's skin each time the bandages / stockings are removed
- General all over body cleaning is normally daily according to person's condition

References:

https://www.reference.com/science/much-skin-shed-day-4e93a661a80b649a



SESLHDPR/547

Wound – Skin Assessment and



SESLHDPR/547

Appendix D: Contact dermatitis

Care/Management

Skin reactions to dressings and other products applied may not be immediate. These reactions can occur after repeated use of the same product. Skin reaction:

- are often under reported
- can lead to increased cost of healthcare •
- can affect the patients quality of life
- can undermine the patients confidence in the prescriber¹ •

Definition:

Contact dermatitis results from skin contact with an allergic or irritant substance. For example: dressings, stoma bag, adhesive tape, stoma effluent, soaps, wound exudate². Skin changes that may occur include irritation and itching, inflammation, blisters and eczema occur.

Management:

Identifying potential risks

Take a thorough patient history of when and why previous skin reaction occurred. Document this information as per the ISLHD policy. Once alerted to this problem use of the allergen is to be avoided¹. Before using a new product on the patient skin assess product suitability by patch testing.

Minimising risks •

Be aware and avoid exposure to products that cause skin reaction. Selection products that are less likely to cause irritation. If unsure contact your wound care expert for advice. Keep wound care products to a minimum and avoid multiple brands where possible. Use products as per manufacturer's recommendations^{1,3}.

How to identify contact dermatitis •

The reaction occurs at and is confined to the point of contact. There will be a defined area of erythema which corresponds to the outline of the dressing/product used.

What to do if allergy occurs (reporting and alerts)

Stop use of the offending product. The literature recommends topical steroids to treat allergic contact dermatitis⁴. However, this may prohibit adhesion of wound dressings or stoma/wound drainage bags. Often by changing to a different product the dermatitis will resolve. If not contact your wound care expert for advice.

Report the adverse reaction via the IMS+ notification system.

References:

- 1. Conway, J. & Whettan, J. 2002 Adverse reactions to wound dressings, Nursing Standard, Vol 16, No. 4, Pp. 52-60
- 2. Lyon, C.C. & Smith, A. 2010 Abdominal stomas and their skin disorders 2nd Ed Informa healthcare, London
- 3. Jarvis, S. 2004 Contact dermatitis: causes and prevention, Practice Nurse 27; 4. Pp.44-47
- 4. Jones, R. & Horn, H.M. 2014 Identify the causes of contact dermatitis, The Practitioner, 1772, Pp. 27-31

Please also refer to the following policy/procedures

- SESLHDPR/205 Wound Incontinence Associated Dermatitis (IAD)
- PD2021 033 Patient Identification, Allergy and Alert Bands

Wound – Skin Assessment and Care/Management

SESLHDPR/547

South Eastern Sydney

Local Health District

Health

Appendix E: Desiccation

Definition:

Dryness cause cell death and forms a physical barrier to the migration of epithelial cells from the wound edges^{1,4}. Desiccation can result in delayed healing and damage to underlying structure (e.g., bone and tendons)¹.

Dry wounds restrict the movement of cells needed for wound healing to occur. White Blood Cells cannot fight infection. Enzymes such as collagenase cannot breakdown dead material, and macrophages cannot carry debris. The wound edges curl up to preserve the moisture. The moisture at the wound edge and the epithelial cells (new skin cells) fail to grow over and cover the wound. Healing grinds to a halt and necrotic tissue builds up².

Causes:

Topical mismanagement (wrong dressing choice) A poorly vascularised wound bed Necrotic tissue Wound being left exposed for too long (usually at dressing changes)

Management:

Dry surrounding skin may indicate eczema which will require a dermatology review. If the problem is a little dryness, the skin can be moisturised².

Recommendation for Wound Care:

Dressings that promote moist environments and prevent additional drying out of the wound Silicone Hydrogels

Hydrocolloids Film dressings

References:

- 1. Templeton, S. 2005. Wound Care Nursing: A Guide to Practice, Ausmed Publications, Melbourne, Australia.
- 2. Vuolo, J. 2009. Wound Care made incredibly easy, Lippincott Williams & Wilkins, London, England.
- 3. Collins, F., Hampton, S. & White, R. 2002. A-Z Dictionary of Wound Care, Quay Books, Wiltshire, England.
- Chamanga, E. 2015. Effectively managing wound exudate, British Journal of Nursing, Vol. 20, Issue Sup. 9 Section 8

Wound – Skin Assessment and Care/Management Health South Eastern Sydney Local Health District

SESLHDPR/547

Appendix F: Fungal infections

Definition:

Fungal infections are divided into groups depending on what type of organism is involved and where it is on the body. These include:

Athlete's foot - tinea pedis – located on the feet and toes, and tinea manuum located on the palm of hands and sides of fingers. Can contain fungus and bacteria which causes skin to become itchy, dry, scaly and red. Refer to <u>Appendix G</u> for specific information relating to Tinea.

Nail infections – onychomycosis

Tinea unguium – ringworm of the nails. Nails become malformed, thickened and crumbly.

Ringworm of the groin – tinea cruris – causes an itchy, red rash in the groin area, caused by sweating.

Ringworm on the body – tinea corporis – can be anywhere on the body. Red, raised or flat patches and rings that can merge, grow and spread from the centre. Rings are scaly at the edge, surrounding clear skin in the middle.

Pityriasis or tinea versicolour – This infection causes dark patches to form on pale skin and light patches on darker skin.

Causes of fungal skin infections

Taking antibiotics, short or long term steroid use, high blood sugar levels i.e. uncontrolled diabetes, obesity, history of fungal skin infections, being immunosuppressed.

Treatment:

- Topical creams, lotions and medicated powders applied to the infected areas.
- Use of medicated shampoos for infected scalps, sprays for infected feet.
- These products may need to be used for two weeks after the symptoms have disappeared to make sure the infection is completely gone.
- Strong oral medications may be prescribed for systemic management for up to 18 months.

Management:

- Clean skin daily and as required
- Dry skin carefully
- Wearing loose fitting clothes, socks and underwear made of natural fibres to allow skin to breathe
- Not sharing towels, hair brushes or combs
- Washing bed linen and clothes often to get rid of fungal spores
- Wearing thongs in communal showers
- Treating shoes and socks for fungal spores while simultaneously treating the skin infection. Powders, sprays and laundry products are available for this purpose
- Keep blood sugar levels well controlled if diabetes is present

References:

Fungal skin infection - body and groin. London: national institutes for Health and Clinical Excellence 2009

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District

SESLHDPR/547

Appendix G: Tinea

Definition:

Tinea is a contagious fungal skin infection. The most commonly affected areas include the feet, groin, scalp and beneath the breasts.

Tinea of the stratum corneum of the feet is called tinea pedis or dermatophyte.

Tinea can be on nails is called Tinea unguium

Tinea symptoms can include:

- Itching and stinging
- Red scaly rash that is shaped like a ring (annular)
- Cracking, splitting and peeling in the toe web spaces
- Blisters (blistering eruption is quite itchy)
- Brittle or thick nails
- Yellow or white discoloration of the nails
- Bald spots on the scalp
- Small pustules
- Small patches of peeling skin on the soles of the feet

Identifying and minimising potential risks:

Most pathogenic fungi need warm, moist environments to multiply. Hot, sweat-prone areas of the body are the most likely areas for a tinea infection to occur.

People at risk of fungal infection include

- People with diabetes;
- People with disease of the small blood vessels (peripheral vascular disease)
- Older women (perhaps because estrogen deficiency increases the risk of infection)
- People of any age who wear artificial nails (acrylic or "wraps").

Tinea can be spread by skin-to-skin contact or indirectly through towels, clothes or floors (communal showers).

Prevention:

- After washing, dry the skin thoroughly, particularly between the toes and within skin folds
- Expose the skin to the air as much as possible
- Wear natural instead of synthetic fibers (e.g. cotton or bamboo)
- Use antiperspirants to control excessive perspiration (sweating)
- Wear thongs to communal shower areas

Management:

Treatment includes antifungal medication, antifungal creams, antiperspirants and good hygiene

References:

http://www.medicinenet.com/skin_problems_pictures_slideshow/article.htm https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/tinea

Wound – Skin Assessment and Care/Management

Appendix H: Hyperkeratosis

Definition:

Hyperkeratosis is thickening of the stratum corneum, often associated with the presence of an abnormal quantity of keratin, usually accompanied by an increase in the granular layer.

Identifying and minimising potential risks:

Hyperkeratosis can also be caused by B-Raf inhibitor drugs such as Vemurafenib and Dabrafenib or may be caused by friction or pressure.

Management:

It can be treated with urea-containing creams, which dissolve the intercellular matrix of the cells of the stratum corneum, promoting desquamation of scaly skin, eventually resulting in softening of hyperkeratotic areas. Debridement of hyperkeratosis (callus) may be indicated to prevent ulceration of weight-bearing surfaces such as the feet, especially of the person has loss of protective sensation commonly associated to diabetes. Refer to SESLHDPR/348 - Wound Debridement.

References: http://www.dermnetnz.org/

Health South Eastern Sydney Local Health District

SESLHDPR/547



Wound – Skin Assessment and Care/Management

Version: 2.1 Ref: T17/47873 Date: 23 September 2024 Page 16 of 30 COMPLIANCE WITH THIS DOCUMENT IS MANDATORY This Procedure is intellectual property of South Eastern Sydney Local Health District. Procedure content cannot be duplicated.

Appendix I: Ichthyosis

Definition:

There are many types of ichthyosis. Ichthyosis vulgaris is the most common type and it is a severe scaly skin condition, often of the front of the lower legs. This is not dry skin, but rather scaly skin caused by the failure of old skin to slough properly. Ichthyosis vulgaris causes dry, fishlike scales.

Different Types of Ichthyosis

- Ichthyosis vulgaris: Characterised by mild skin scaling and dryness. Ichthyosis vulgaris and another form, recessive X-linked ichthyosis, are relatively common and appear similar.
- **Epidermolytic ichthyosis** (previously called epidermolytic hyperkeratisis): Characterised by thick, often spiny dark scales and skin that may blister easily following trauma.
- Lamellar ichthyosis: Characterised by large, plate like scales and thickening of the skin.
- Congenital ichthyosiform erythroderma: Characterised by red skin and fine scales.
- **Localized ichthyosis:** Characterised by thick or scaly skin that is localized to particular regions such as the palms of the hands and soles of the feet.

Prevention:

Treatment is targeted at managing the signs and symptoms of the skin changes. This includes use of creams, lotions, or ointments to relieve dryness. Products containing salicylic acid (aspirin) or urea may also ease scaling

Treatment:

Ichthyosis is treated by dermatologists

References:

http://www.niams.nih.gov/Health_Info/Ichthyosis/



SESLHDPR/547

Wound – Skin Assessment and Care/Management



SESLHDPR/547

Appendix J: Lotions, Oils, Creams and Emollients

Definition:

Washing, cleansing and moisturising a person's skin to maintain skin integrity has always been integral to the nurse/patient role.

Management:

- For basic skin washing use cleansers with a pH between 4-5 that contain surfactants not soap¹
- Once daily washing for people with dry skin¹
- Twice daily application of moisturisers improves skin barrier function and helps protect against irritants¹ An example of a common moisturiser used extensively is Sorbolene cream.
- Emollients close fissures by filling spaces and sealing moisture into the skin by the production of an occlusive barrier. They also help to soften the skin². Emollients are often an ingredient of a moisturiser e.g. liquid paraffin².
- Lotions e.g. calamine are less occlusive than creams or ointment. They evaporate and cool the skin. The skin absorbs moisture therefore lotion are drying³
- Creams include Sorbolene and aqueous cream and are more occlusive than lotions³ but less occlusive than oils or ointments. A cream based product should be used if the skin is weeping⁴
- Ointments including white soft paraffin are very good for intensive moisturising when required³
- Pastes e.g. Conveen critical barrier cream, or Zinc Oxide are occlusive and protective against moisture³

Recommendations for wound care

• Product selection is difficult because of terminology and labelling.

References

- 1. Lichterfield, A., Hauss, A., Surber, C., Peters. T., Blume-Peytavi & Kottner, J (2015) Evidence- Based skin care: A Systematic Literature Review and the Development of a Basic Skin Care Algorithm. *Journal of Wound Ostomy and continence Nursing. Sept/Oct pp501-524*
- 2. Andriessen, A. (2013) Prevention, recognition and treatment of dry skin conditions. *British journal of nursing vol22, No 1*
- 3. Classification of potencies of topical corticosteroids, Dermatology Expert Group (2009), Therapeutic Guidelines, Version3, therapeutic Guidelines limited, Melbourne & the Australian Medicines Handbook, 2010, updated.
- 4. Topical issues emollients and corticosteroids, (2012), <u>https://www.veteransmates.net.au/topic-33-</u> <u>therapeutic-brief</u> accessed June 2020



SESLHDPR/547

Wound – Skin Assessment and Care/Management

Vehicle		Medication Absorption	Practice Points			
Lotion e.g.: Calamine lotion	More occlusive than oils, less than creams and ointments	Acute inflammation Used for scalp, hairy areas, mild dryness on face, trunk Used for large areas	Evaporates and cools the skin Absorbs moisture, promotes drying	Effective water- soluble medication Delivers medication as uniform residual film	Liquid vehicle Often aqueous or alcohol based May contain salt in solution	May cause stinging and drying in wet skin folds (intertriginous skin). Shake well before use
Cream e.g.: Sorbolene aqueous	More occlusive than oils and lotions	Sub-acute inflammation Used for hair- bearing areas, moist lesions, intertriginous folds and large areas	Used when more emollience is required	No increase in medication percutaneous absorption	Aqueous (oil in water) Oily (water in oil) High water content, mostly evaporates Contains an emulsifier for stability contains a preservative to prevent overgrowth of micro-organisms	Non-greasy Easy to apply and remove. Preservatives can cause irritant or allergic contact dermatitis, can cause confusion on skin assessments
Gel e.g.: Daibobet gel	Used for beneficial drying effect in hairy areas as an alternative to lotions	Exudative inflammation Sub-Acute inflammation Chronic inflammation Used for scalp	Drying and cooling May aid pruritic eruptions	Effective vehicle for water- soluble medication Leaves a film that stays on skin surface longer than aqueous cream	Transparent Semisolid May contains alcohol	Non-greasy Can sting, burn and aggravate dry cracked skin May be dehydrating Should be stored in airtight container



SESLHDPR/547

Wound – Skin Assessment and Care/Management

Vehicle		Medication Absorption	Practice Points			
Ointment e.g.: white soft and liquid paraffin or petroleum jelly	and protective	Chronic inflammation	Used for drier, thicker, scalier areas	Increased absorption enhancing potency of medication Effective vehicle for lipid- soluble medications Penetration is improved if skin is hydrated prior to application	Includes pure oil preparations High content of oils and fats Generally preservative free	Greasy and difficult to wash off Not prone to mould or bacteria growth Not recommend for extremely eczematous inflammation or intertriginous skin Folliculitis can develop Use of thick quantities on large areas can hinder normal perspiration Increased potential for irritation and maceration Paraffin-based emollients pose a fire risk as they are easily ignited by a naked flame, especially when soaked into dressings or clothing
Pastes: Lassar's paste - zinc oxide and salicylic acid, Upton's paste- salicylic acid & trichloracetic acid	prolonged contact with skin	Chronic inflammation	Used for well- defined areas	Effective vehicle for lipid- soluble medications Effective base for irritant medication application to a limited area	Ointment base Stiff consistency High proportion of power i.e. starch or zinc oxide	Difficult to wash off

References: Riley, J. & Rothenbuhler, H. (2015) Skin Revealed, course text book, p27

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District

SESLHDPR/547

Appendix K: Maceration

Definition:

Maceration is a softening of tissues by soaking until connective fibres part¹. Excessive or unmanaged exudate floods the wound and spills out onto the skin. This constant moisture causes maceration. Maceration is difficult to reverse and can result in increased wound size and cell death³. The migration of cells across the wound surface stops or is non-existent¹.

Maceration around the wound may appear as reversible white, spongy, wrinkly and soft skin^{1,2,3}.

Maceration in the peri wound is usually described as irritation and damage caused by saturation of the skin adjacent to the wound¹. It can be intrinsically caused by excessive or unmanaged wound exudate or extrinsically from perspiration or urine or faeces. Maceration weakens the wound edges and predisposes the wound to infection² (ideal environment for bacteria spread). Maceration can lead to excoriation and further wound breakdown⁴.

Causes:

- Topical mismanagement (wrong dressing choice)
- Lack of compression (in venous ulcer cases)
- Chronic inflammation
- A foreign body in the wound (e.g., suture material)
- An underlying medical condition (e.g., Lymphoedema, Low albumin, Infection (untreated/ unresponsive), medications)

Management:

Once the cause of the maceration is identified this needs to be addressed and skin moisture management commenced.

Excessive wound discharge must be contained using highly absorbent dressings³ or bagging. For patients who perspire freely, frequent changes of clothes and drying of skin might be necessary. Leakage from stomas must be attended to immediately. Stoma appliances should be changed if required².

Recommendation for Wound Care:

- Moisture balance can be maintained by applying the correct dressing for the level of exudate and condition of the wound. This requires accurate identification of wound aetiology and assessment of the wound characteristics.
- Application of a protective barrier around the wound (no sting film barrier, zinc based skin protectant)¹
- Review of the current dressing selection to a more absorbent dressing³
- Hydrofibre dressings
- Foam dressings
- Absorbent secondary dressings
- Bags (e.g., those used for drains or stomas)

References:

- 1. Gray, M. & Weir, D. 2007, Prevention and treatment of moisture-associated skin damage (maceration) in the periwound skin, Journal of Ostomy Continence Nursing, vol. 34, Issue. 2, pp 153-157
- 2. Templeton, S. 2005, Wound Care Nursing: A Guide to Practice, Ausmed Publications, Melbourne, Australia.
- 3. Vuolo, J. 2009, Wound Care made incredibly easy, Lippincott Williams & Wilkins, London, England.
- 4. Collins, F., Hampton, S. & White, R. 2002, A-Z Dictionary of Wound Care, Quay Books, Wiltshire, England

Wound – Skin Assessment and Care/Management



SESLHDPR/547

Appendix L: Neonatal skin

Definition:

A neonate is a baby in the first month of life whether it be full-term or premature. Specific issues that neonates especially premature infants encounter are:

- Thinner stratum corneum (protective barrier) usually 20-30 layers in an adult in full-term neonates 20% thinner, and in neonates born under 30 weeks only three layers
- Trans-epidermal water loss (TEWL) increased in neonates so more prone to dehydration
- Decreased adhesion between the epidermis and dermis high risk of skin injury
- Skin PH in FT infants skin PH becomes acidic within four days thus forming a protective barrier but with premature infants this takes much longer^{1,2}

Management:

- PH neutral or slightly acidic cleanser²
- Non-alcohol baby wipes with PH buffering capacity²
- Barrier creams containing zinc or Vaseline²
- Regular and when necessary change of tape and re-position of any tubes/drains¹

Recommendations for wound care:

- Hydrocolloids stoma bags, tapes, wound management
- Hydrogels
- Silicone
- Film dressings
- Any adhesives should be gently removed whilst holding the skin firmly use a silicone remover wipe without alcohol if required³

References:

- Expert Forum Neonatal skin health and skin care symposium 12th Sept 2015 from Australian College of Neonatal Nurses (ACNN)
- 2. Hugill, K (2014) Neonatal skin cleansing revisited: Whether or not to use skin cleansing products *British journal of midwifery vol. 22 no 10*
- 3. Royal Hospital for Women (2011) Skincare Guidelines (unpublished)



Wound – Skin Assessment and Care/Management

SESLHDPR/547

Appendix M: Pruritus (Itching skin)

The reason pruritus has developed needs to be investigated. If possible the reason needs to be eliminated or reduced to overcome the itch.

Definition:

Pruritus (itching) can be acute or chronic. It may occur without a rash or skin lesions. Pruritus can feel like pain because the signals for itching and pain travel along the same nerve pathways. Scratching may lead to breaks in the skin, bleeding, and infection

It can be associated with a number of disorders, including:

- Drying out of skin: Common in older people.
- Alcohol abuse
- Anaemia: Check serum iron and ferritin levels.
- Body lice: look for lice and nits in the seams of underwear.
- Diabetes Mellitus
- HIV/AIDS: Check HIV ELISA test.
- Lymphoma especially in young adults, check for enlarged lymph nodes clinically and on chest x-ray.
- Medication reactions
- Obstructive jaundice (may occur in patients with primary biliary cirrhosis before jaundice occurs): Check liver function tests and autoimmune profile.
- Polycythemia Rubra Vera (itching especially after a hot bath): Check full blood count (FBC).
- Pregnant women e.g. pemphigoid gestationis, pruritic urticarial papules plaques, intrahepatic cholestasis and atopic eruption
- Psychological: Look for evidence of stress, depression, anxiety or emotional upset.
- <u>Seasonal allergies</u>, <u>hay fever</u>, <u>asthma</u>, and <u>eczema</u>
- Thyroid disease both hypo- and hyperthyroidism: Check T4 and thyroid stimulating hormone levels.
- Uraemia (also seen in 80% of patients on maintenance haemodialysis): Check creatinine and urea.

Identifying and minimising potential risks:

- 1) Avoid use of high pH cleaners e.g. soap
- 2) Use appropriate moisturiser or emollient
- 3) Warm shower -- not hot -- water
- 4) Avoid wool or synthetics fabric. Natural fibers, such as cotton or bamboo are best

Management/ treatment: Is based on the cause:

- a. to relieve itching, place a cool washcloth over the area that itches, to prevent scratching
- b. antihistamines and/or topical steroids may be needed.

References:

http://www.webmd.com/skin-problems-and-treatments/guide/skin-conditions-pruritus

Wound – Skin Assessment and Care/Management

Health South Eastern Sydnev Local Health District

SESLHDPR/547

Appendix N: Radiotherapy Damaged Skin

Definition

Skin damage from radiation (Radiation dermatitis) is a side effect of external beam ionizing radiation.

Challenges

Can result in acute (occurs within 90 days) and chronic changes to the skin. Acute injuries manifest as erythema similar to an epidermal burn. When radiation is delivered in higher doses it may cause desquamation (an injury similar to a superficial dermal burn) or a deeper injury e.g. full thickness ulceration or necrosis^{1,2}. Acute injuries repair in a few weeks. Chronic injuries may manifest months to years later, they are progressive and permanent¹

Recommendations for skin care

- Skin reactions are more common in those areas of the body with skin folds e.g. the groin. These areas are likely to receive an increased dose of radiation (bolus affect) and are more prone to bacterial contamination².
- Aqueous cream, Aloe Vera and other lanolin- free hydrophilic products can be used to moisturise skin and are recommended².
- Topical corticosteroids were found to significantly reduce the severity of skin reactions².
- Cavilon "no sting" barrier film has been found to be useful in preventing moist desquamation in breast cancer patients³
- Used prophylactically⁴ Mepitel Film may reduce the severity of moist desquamation in people having radiation treatment for breast cancer.

General advice for people having radiotherapy is to avoid metallic-based products. This includes zinc oxide, deodorants with an aluminium base. Loose fitting clothes are recommended².

Recommendations for wound care

- Assessment of pain is extremely important. Give appropriate pain relief as prescribed.
- Hydrocolloid dressings can be used for dry and moist desguamation. These provide comfort to • the patient and prevent wound infection².
- Wound gels can be used for acute dry desquamation injuries as they provide comfort for patients. But this leads to delayed healing time².
- More severe injuries may need antimicrobial dressings e.g. silver dressings¹. •
- Hyperbaric Oxygen therapy can be useful in healing chronic radiation necrosis injuries. Because it can stimulate angiogenesis and neovascularisation⁵.

References

- 1. Hamm, R. (2015) Text and Atlas of Wound Diagnosis and Treatment, McGraw-Hill, USA pages 287,290, 311
- 2. Salvo, N. Barnes, E. Van Draanen, J. Stacey, E. Mitera, G. Breen, D. Giotis, A. Czarnota. G. Pang, J. and De Angelis, C. (2010) Prophylaxis and management of acute radiation-induced skin reactions: a systematic review of the literature
- 3. Graham, P. Browne, & L. Capp, A et al (2004) Randomized, paired comparison of No-Sting barrier film versus Sorbolene cream (10% glycerine) skin care during post-mastectomy irradiation. Int. J Radiation Oncology Biol Phys, 58:241-6
- 4. Herst, P. Bennett, N. Sutherland, A. Peszynski, R. Paterson, D. & Jasperse, M.(2014) Prophylactic use of Mepitel Film prevents radiation-induced moist desguamation in an intra-patient randomised controlled trial of 78 breast cancer patients. Radiotherapy Oncol. Jan; 110(1):137-40.
- 5. Meyers, L. (2013) Hyperbaric Oxygen Therapy for Radiation Necrosis Acelity.com.
- 6. DermNet New Zealand, Radiation dermatitis, dermnetnz.org [accessed 2017]

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District

SESLHDPR/547

Appendix O: Skin Care and Oedema/Lymphoedema

Definition

Oedema is an excess of fluid in the tissues (peripheral oedema). It may or may not be reversible.

Lymphoedema is a chronic condition caused by a dysfunction in the lymphatic system. This results in an accumulation of protein rich interstitial fluid in the affected area. This can occur in the extremities, face, abdomen, and genital areas. Oedema that is widespread may be caused by sodium retention or low plasma proteins. Other causes are

- venous congestion
- right side heart failure
- venous hypertension
- liver failure (ascites)
- nephrotic syndrome
- local obstruction

Causes of Lymphoedema include: DVT, tumour, infection, injury or surgery.

Skin thickening occurs over time, primarily in the epidermal layer of the skin. Thickened skin is prone to dryness, cracking and undernourishment as nutrients and water do not flow into the area efficiently. This leads to the skin losing its ability to keep out bacteria and allergens making it prone to infection.

Management

- 1. Careful observation of the skin
- 2. Cleansing of the skin using a non-soap pH neutral soap or wash
- 3. Perfume free bath oils
- 4. Moisturise the skin using creams, lotions or ointments once or twice a day depending on skin dryness
- 5. Patting skin dry rather than rubbing
- 6. Barrier creams around wounds where fluid is leaking
- 7. Treatment of the oedema/lymphoedema where possible

Recommendations for wound care

Use of highly absorbent wound care products that take fluid way from the skin include:

- Foams
- Gelling fibre
- Alginates
- Highly absorbent pads containing soft cellulose and polymers.

Compression bandaging and/or garments are used to manage chronic oedema and lymphoedema as prescribed and applied by trained health professionals.

References

- 1. Best practice skin care management in lymphoedema Jake Nowicki & Alex Siviour (2013)
- 2. The Lymphoedema Support Network, Skin Care for people with Lymphoedema (2012)
- 3. Oedema: causes, physiology and nursing management Casey G (2004) Nursing Standard vol. 18, no 51

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District

Health

SESLHDPR/547

Appendix P: Skin stripping

Definition:

Skin stripping is a skin injury related to medical adhesive usage. Medical adhesives include tapes, dressings, electrodes, stoma supplies and patches. It presents with erythema and/or other manifestations or cutaneous abnormality. The skin stripping persists 30 minutes or more after removal of the adhesive.

A medical adhesive is a product used to approximate wound edges or to affix an external device to the skin. Examples include tape, dressing, catheter, electrode, pouch or patch.

Identifying and minimising potential risks:

Daily skin assessment or at time of device changes. Obtain a history of patients known or suspected allergies and sensitivities to minimise risk of skin stripping.

Prevention:

- Identification of patients at high risk by daily skin assessment and at time of device changes
- Skin care
- Good nutrition and hydration
 - Suitable product selection based on assessment of patient and product factors
 - o Intended purpose
 - o Anatomic location
 - o Conditions at application site
 - Adhesive properties such as adhesive gentleness, breathability, stretch, conformability, flexibility.
- Consider potential adverse consequences of adhesion failure when securing a critical device
- Consider and anticipate skin movement with oedema when selecting medical adhesive products
- Adhesive products should be stored in a manner that prevents contamination and single use based products be used as much as possible
- Use proper application and removal techniques for adhesive-containing products to minimise skin damage.

Recommendations for applying and removing products:

- Application of a skin barrier prior to application of an adhesive product
- Limit or avoid use of substances such as tincture of benzoin which increase stickiness of adhesives
- Use proper application and removal techniques for adhesive-containing products
- Utilise adhesive removers to minimise discomfort and skin damage associated with removal of adhesive products.

Management:

- Assessment as per <u>SESLHDPR/297 Wound Assessment and Management</u> as a general wound
- Exclude dermatitis either contact or allergic
- Monitor sites exposed to adhesive materials for manifestations of infection
- Consult wound care expert if skin stripping injury does not respond to conservative management within seven days or the wound deteriorates despite conservative care.

References:

1. McNichol L, Lund C, Rosen T, Gray M. Medical adhesives and patients safety: state of the science JWOCN 2013; 40(4): 356-380.

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District

SESLHDPR/547

Appendix Q: Venous Eczema

Definition:

Venous eczema is also known as gravitational eczema, varicose eczema, dermatitis hypostatica, stasis eczema, stasis dermatitis and congestive eczema. It is caused by sustained venous hypertension¹ and is a manifestation of established venous disease. Venous eczema can be present with or without venous leg ulcers. The affected skin is frequently itchy, red and scaly and may ooze, crust and crack².

Treatment

- Presenting symptoms should be treated concurrently with the underlying disease²
- The use of potassium permanganate soaks can be useful in drying up weeping eczema. A 400 mg tablet in four litres of water will provide 1 in 1000 solution. The leg can be placed in a bucket containing the solution for 15-20 minutes. Inform the patient this treatment can discolour the toe nails. If soaking the leg is not possible apply gauze soaked in the solution on the affected area
- Antibiotics may be required as *Staphylococcus aureus* frequently colonizes eczema. Topical steroid creams and ointments can be used to treat severe episodes of venous eczema¹.

Prevention

- Once the symptoms have subsided emollient therapy should be commenced to maintain hydration³
- Zinc paste may be useful in the prevention of another outbreak
- Weight loss should be encouraged if obese and length of time standing reduced
- Wearing of compression garments and leg elevation above the heart will reduce venous hypertension
- The use of soaps and cleansers that will strip the skin of oils should be discouraged^{1,2,3}.

References

- 1. Patel, G.K., Llewellyn, M., & Harding, K. G. (2001) Managing Gravitational Eczema and Allergic Contact Dermatitis. *British Journal of Community Nursing.* Vol. 6 No. 8
- Nazarko, L. (2009). Diagnosis and Treatment of Venous Eczema. *British Journal of Community Nursing*. Vol. 14, No. 5
- 3. Barron, G. S., Jacob, S.E. & Kirsner, R.S. (2007).Dermatologic Complications of Chronic Venous disease: Medical Management and Beyond. *Annals of Vascular Surgery*. Vol. Issue 5 pp 652-662

Wound – Skin Assessment and Care/Management

South Eastern Sydney Local Health District SESLHDPR/547

Health

Appendix R: Xeroderma (Dry Skin)

The reason dry skin has developed needs to be investigated so that it can be reduced or eliminated.

Definition:

Dry skin (Xerosis) is a common dermatosis affecting people of various skin types, ages and areas of the body. It is associated with both skin thickening and skin thinning.

It is triggered by exogenous and or endogenous factors. Examples of exogenous include climate, environment and lifestyle. Examples of endogenous include medication, hormone fluctuations, organ diseases and auto immune diseases. Some hereditary conditions such as Ichthyosis, psoriasis and atopic dermatitis are causes of dry skin. Other causes of dry skin include:

- malignant disease such as Hodgkin's lymphoma,
- infectious disease (human immunodeficiency virus)
- psychiatric disorders (anorexia nervosa)
- endocrine disease (thyroiditis) renal dialysis
- deficiency in vitamin A, B C or E
- autonomic neuropathy

Skin requires a water content of 10-15% to remain supple and intact. Differences between dry skin and healthy skin are evident on examination. Visually dry skin may appear dull, often with a flaky surface and patchy dry white areas. Cracks and fissures may be visible and surrounding skin may appear red indicating the presence of inflammation and possible secondary infection. Skin may feel tight, rough and uneven. The person may have sensory changes such as tingling, itching, stinging or pain.

Dry skin is characterised by a lack of the appropriate amount of water in the most superficial layer of the epidermis. Older people are more prone to dry skin as they have diminished amounts of natural skin oils and lubricants. The area most at risk of dry skin is the lower legs. Severe dry skin can cause skin to flake off become irritated or cracks and breaks in the skin.

Table 1	Classification of dry skin		
Mild dry skin	Rough and /or scaling (+)		
	No or mild itching (- or +)		
	No pain (-)		
	No or minimal erythema (- or +)		
	No fissures (-)		
Moderate dry skin	Rough and /or scaling (++)		
	Mild or moderate itching (- or ++)		
	Mild or moderate pain (- or ++)		
	Mild erythema (++)		
	May have fissures (- or +)		
Severe dry skin	Rough and /or scaling (+++)		
	Severe itching (+++)		
	Severe pain (+++)		
	At least mild erythema (++)		
May have fissures (- or + to +++)			
Notes; + = mild, ++= moderate, +++= severe			
Itching is defined as moderate if it's present 10% of the time and interferes with			
ADL.	ADL.		
Itching is defined as	Itching is defined as severe if it's there most of the time and wakes the		
individual up at night	individual up at night		

There are different levels of dry skin and this needs to be assessed. Refer to Table 1

Wound – Skin Assessment and Care/Management

SESLHDPR/547

Recommendations for wound care

Identifying and minimising potential risks:

- Dry skin may result as a consequence of over washing of the skin or using skin cleaners with high pH disrupting the acid mantle (protection) of the skin
- Dry skin may occur in individuals who are dehydrated or as a side effect to certain medications, e.g. Diuretics
- Dry skin is more common in individuals with a history of eczema or hypothyroidism
- Secondary infections may result from any skin breakdown

Note: Dry skin may be mimicked by a genetic condition called ichthyosis. Refer to Appendix H

Prevention:

- Ensure individuals hydration level
- Avoid use of high pH cleaners e.g. soap
- Use appropriate moisturiser or emollient

Management

- A visual inspection of the skin including all creases
- Look for signs of inflammation/infection and treat as appropriate
- Bathe with warm (not hot) water using pH neutral products
- Emollients should be the first line therapy for all dry skin conditions
 - Patients should be given the opportunity to consider a variety of emollients from the whole spectrum of products available to identify the most suitable product for their skin. An adequate quantity of emollient should be prescribed for optimal effect (250-500g/week). They may require more than one emollient product depending on lifestyle, time of day, seasonal factors or disease severity. Emollients have a steroid sparing effect, and should be supplied in a 10:1 ratio of emollient to steroid in order to achieve the full benefit. Patients prescribed a leave-on emollient should also use an emollient washing product. Patients offered emollient therapy need to be advised about safety issues such as cross-infection, risk of slipping and flammability where appropriate.
- Consider using a humidifier during the winter to ensure a relative humidity setting of 45-60%
- Consider 0.05% to 0.1% betamethasone valerate 1-2 times daily if dry skin or pruritus are severe for a limited time. If no improvement occurs after several days consider underlying medical causes.

References:

- 1. Pons-Guiraud, A. (2007)Dry skin in dermatology: a complex physiopathology
- Voegeli, D. (2007) The role of emollients in the care of patients with dry skin, Nursing Standard 22,7,62-68
 Moncrieff, G. Cork, M. Lawton, S. Kokiet, S. Daly, C. and Clark, C. (2012) Use of emollients in dry skin
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Wound – Skin Assessment and Care/Management

Version: 2.1

Appendix	S: Glossary	

Pus-filled lesion (>1cm).			
Hair loss.			
Round or ring shaped.			
A diminution of tissue.			
Fluid-filled lesion (any size).			
Fluid-filled lesion, circumscribed elevation (>1cm).			
Linear lesion caused by parasites.			
Hyperplasia of the stratum corneum due to physical pressure.			
An inflammation of cellular tissue.			
Papule plugging sebaceous follicle containing sebum and cellular debris.			
Accumulation of dried exudate.			
A closed cavity or sac lined with epithelium containing fluid, pus or keratin.			
Loss of epidermis which heals without scarring.			
Redness of the skin caused by vascular congestion or perfusion.			
Loss of skin substance produced by scratching.			
Extensor surfaces (e.g. elbows and knees).			
A linear gap or slit in the skin's surface.			
Skin fold (e.g. back of knees).			
Inflammation of the hair follicles.			
Elevated progressive scar without regression.			
A single area of altered skin: it may be solitary or multiple.			
A flat-topped thickening of the skin often secondary to scratching.			
Straight line, often caused by scratching.			
Flat circumscribed area of discolouration (<1cm).			
A tiny white cyst containing lamellated keratin.			
Round elevated solid lesion (>1cm).			
Disc shaped.			
Tissue swelling.			
Any raised lesion or scaly, crusted, keratinised or macerated surface (<1cm).			
A large macule, change in colour only, surface is always normal (>1cm).			
A punctated haemorrhagic spot 1-2mm in diameter.			
Raised, flat-topped lesion (>1cm).			
Lesions have varied shapes.			
Discolouration of the skin or mucosa due to extravasation.			
Pus-filled lesion (<1cm).			
A widespread eruption of lesions.			
A hard crust of dried blood and serum which forms over a wound during healing.			
Visible and palpable flakes due to aggregation and/or abnormalities of shed epidermal cells.			
Fibrous tissue replacing normal tissue destroyed by injury or disease.			
A linear, atrophic, pink, purple or white streak or band on the skin due to changes in the connective tissue.			
A visible vascular lesion formed by dilatation of small cutaneous blood vessels.			
Loss of epidermis (often loss of underlying dermis and subcutis).			
Papules or vesicles with a central dell or hollow.			
Fluid-filled lesion (<1cm).			
Central itchy white plaque surrounded by an erythematous flare.			

Reference: Bianchi, J., Page, B. & Robertson, S. (2013) Your Dermatology Pocket Guide: Common skin conditions explained

Date: 23 September 2024

Ref: T17/47873



SESLHDPR/547



Wound – Skin Assessment and Care/Management

SESLHDPR/547

Appendix T: Skin Affected by Moisture

Comfort Shield Wipes by SAGE are used for treatment and prevention of Incontinence Associated Dermatitis (IAD) and Moisture Associated Skin Damage (MASD).

Critic barrier cream and spray are used

Recommended Skin Care Management; Incontinence Associated Dermatitis (IAD)

Urinary Incontinence:

Apply Comfort Shield wipe only after each episode of incontinence (Use of soap and water is NOT necessary)

Or

Apply Critic barrier cream and spray

Or

Use Molicare cleansing foam, spray and wipe (using a rediwipe) after each episode of incontinence (Use of soap and water is NOT necessary). Apply Molicare barrier cream to affected area once skin is dry.

Faecal Incontinence:

- 1. Clean excessive faecal matter from area with water and rediwipe.
- 2. Continue clean-up with 1-2 Comfort Shield Wipes
- 3. Use Molicare cleansing foam, spray and wipe (using a rediwipe) after each episode of incontinence (Use of soap and water is NOT necessary). Apply Molicare barrier cream to affected area once skin is dry.

Note: Continue to use wipes: Clean, Treat and Protect as long as incontinence continues.

Moisture Associated Skin Damage (MASD)

Use 1-2 Comfort Shield Wipes in affected area (may be groin, apron, breast folds) twice daily. Or

Use Molicare cleansing foam, spray and wipe (using a rediwipe) after each episode of incontinence (Use of soap and water is NOT necessary). Apply Molicare barrier cream to affected area once skin is dry.

Consider use of Zetuvit or Combine between skin folds to manage moisture.

Note: Continue to use Comfort Shield wipe on affected areas until healed.