FACEBOOK LIVE

30 NOV

MAINTAINING SKIN INTEGRITY – FROM PREVENTION TO COMPLEX SKIN DISORDERS

PRESENTED BY:

JACKIE DARK &
JACQUI FLETCHER

WOUND CARE TODAY

Smith+Nephew

HAVE A QUESTION?

COMMENT ON THE VIDEO

WOUND CARE TODAY

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MAINTAINING SKIN INTEGRITY: FROM PREVENTION TO COMPLEX SKIN DISORDERS

Jacqui Fletcher

Independent Nurse Consultant

WOUND CARE TODAY

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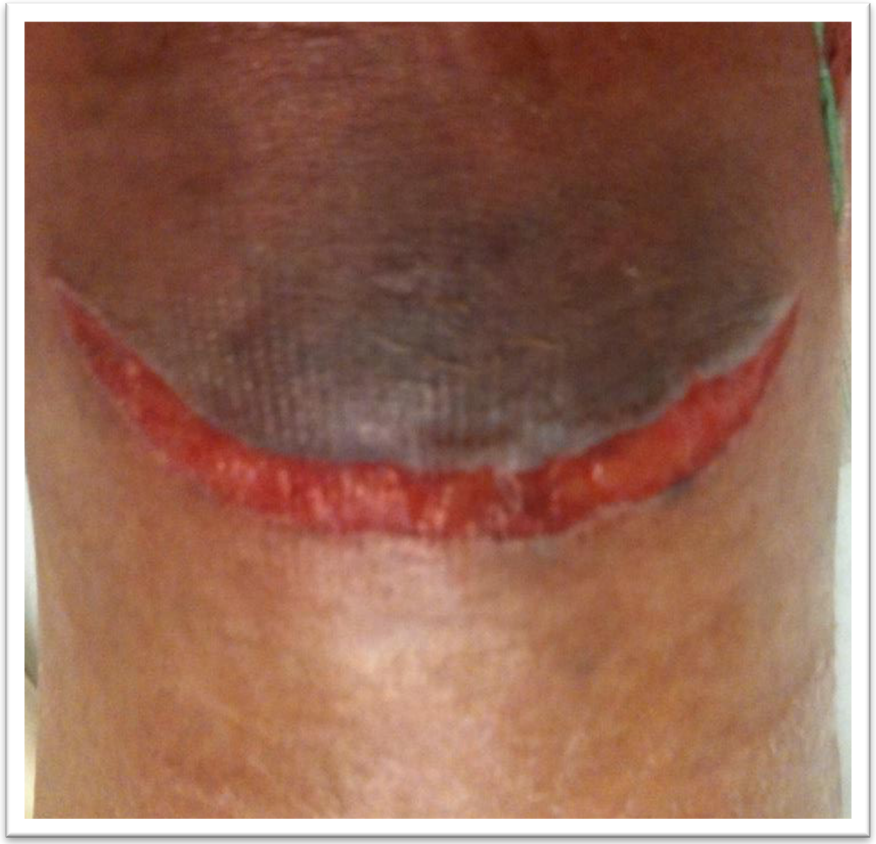
MAINTAINING INTACT SKIN

- What are we hoping to achieve?
- Prevention!
  - Pressure ulcers
  - Moisture-associated skin damage (MASD)
  - Medical adhesive-related skin injury (MARSI)
  - Skin tears
  - Leg ulcers
  - Diabetic foot ulcers (DFUs)

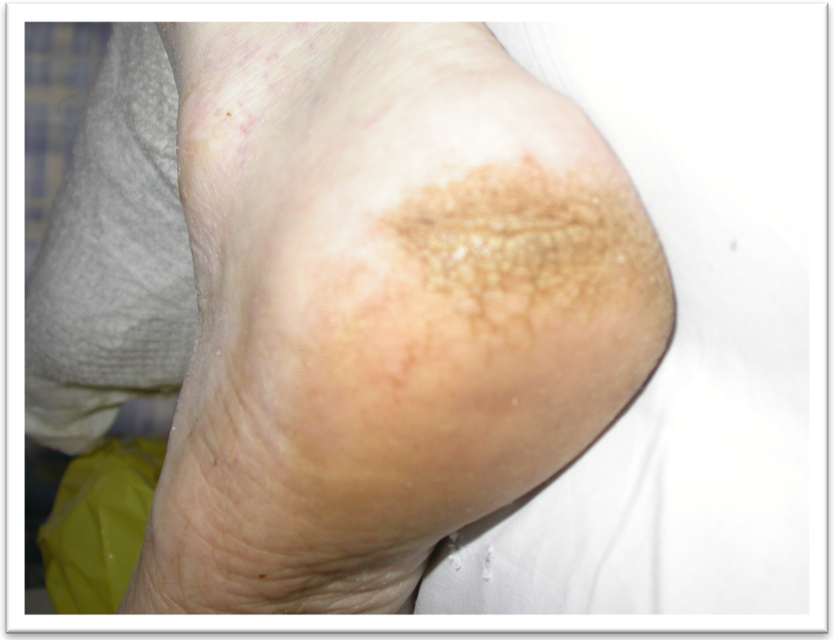


(All clinical images used in the first presentation are the property of Jacqui Fletcher)

DOES PREVENTION DIFFER?

Principles of maintaining good skin integrity are all the same:

- Keep it clean
- Keep it dry
- Keep it well hydrated
- Protect it from external forces:
  - Pressure, shear, friction
  - Moisture
  - Trauma



(Fletcher, 2019)

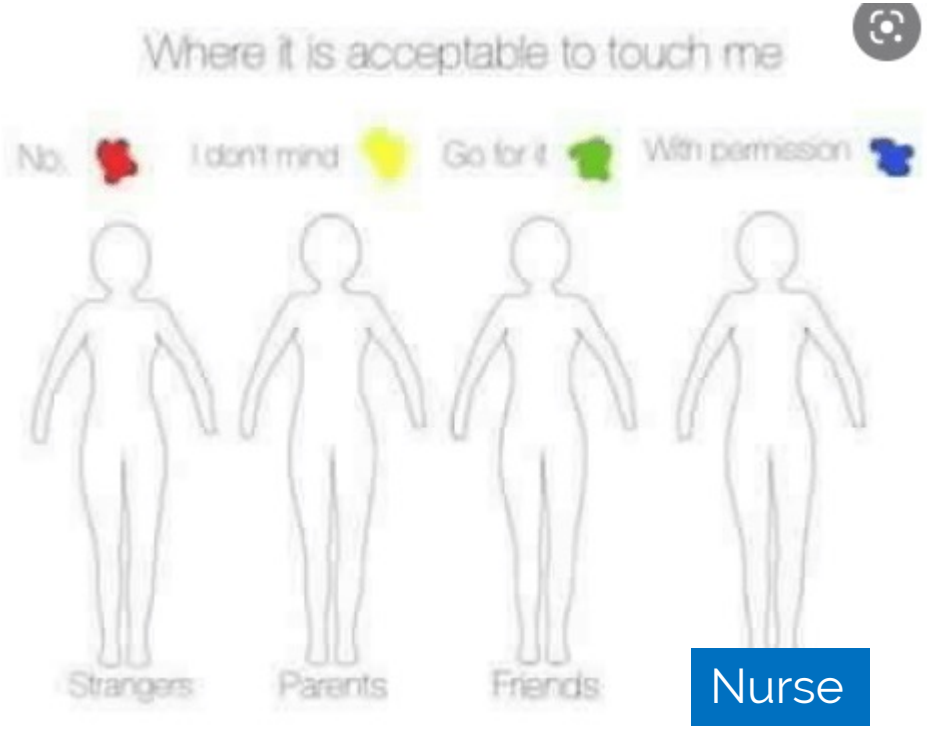
SKIN ASSESSMENT

- A crucial element of maintaining skin integrity
- Not just about what you see
- Skin inspection should include:
  - Visible skin changes
  - Textural skin changes
  - Temperature changes
  - Sensation change
  - Odour

(Fletcher, 2019)

THE IMPORTANCE OF TOUCH

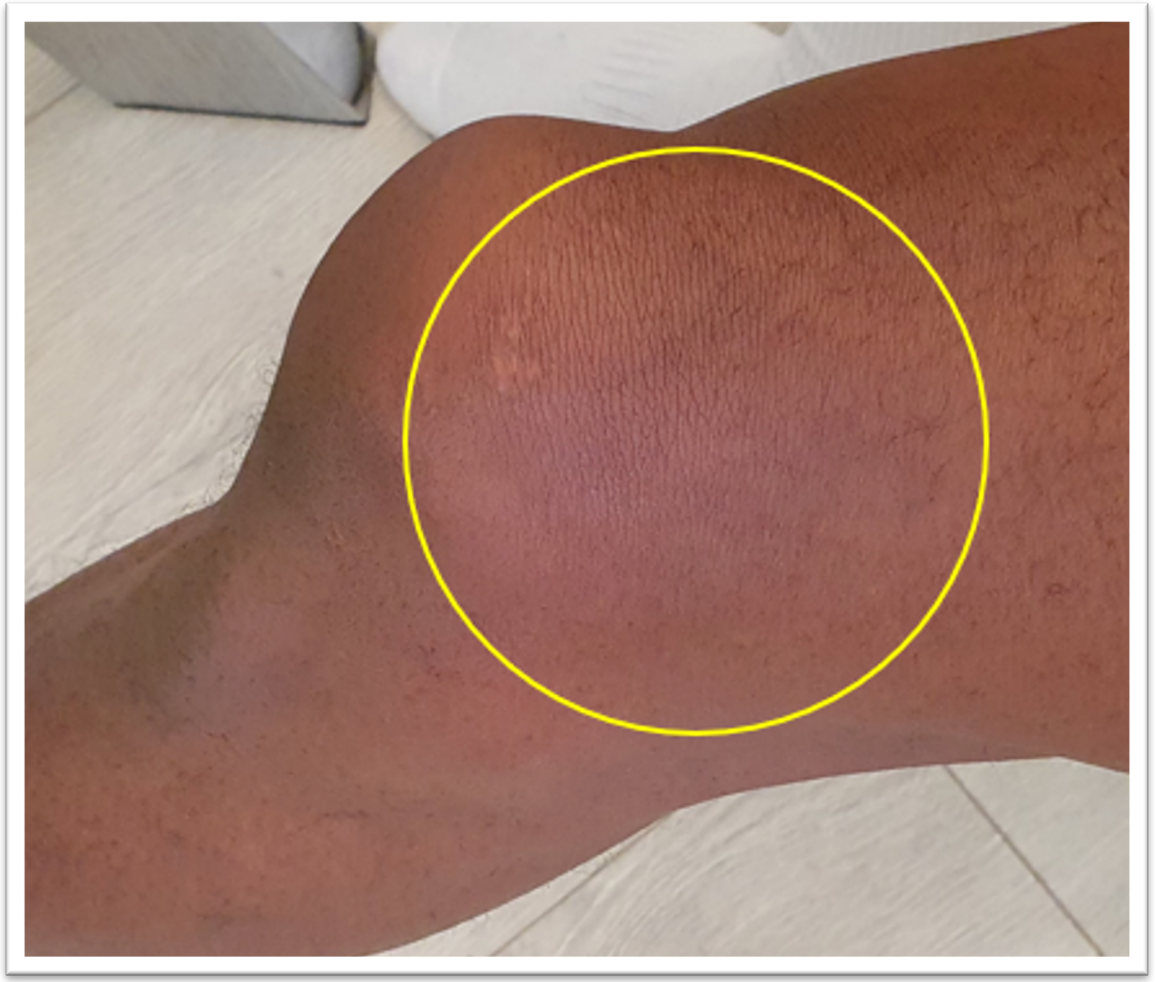
- A two-way communication
- Not just about what you feel
- About what it means

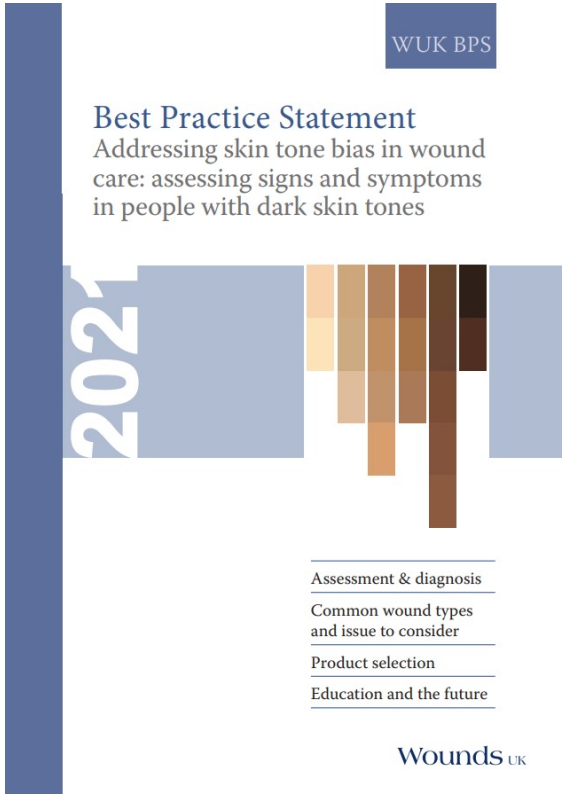


VISUALS – MAY NOT BE ENOUGH

Skin tone
is not
'just a pressure
ulcer thing'

Look for
colour change
Compare like
with like

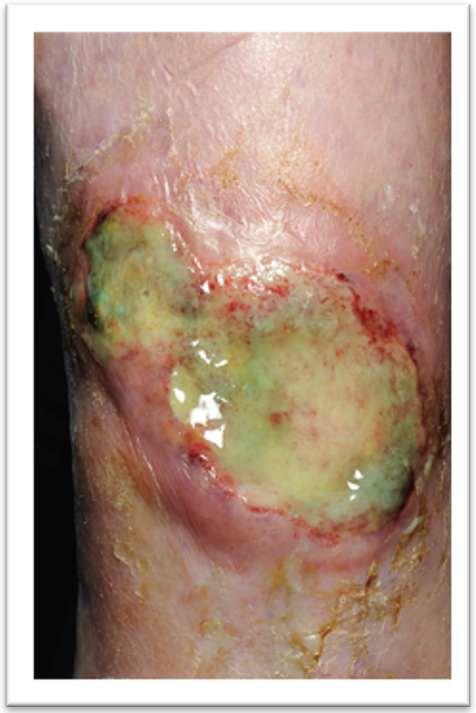


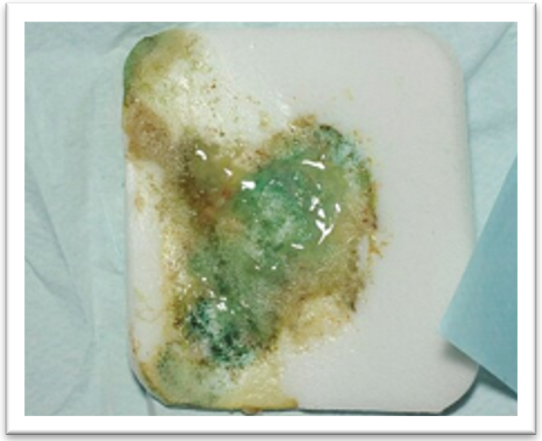


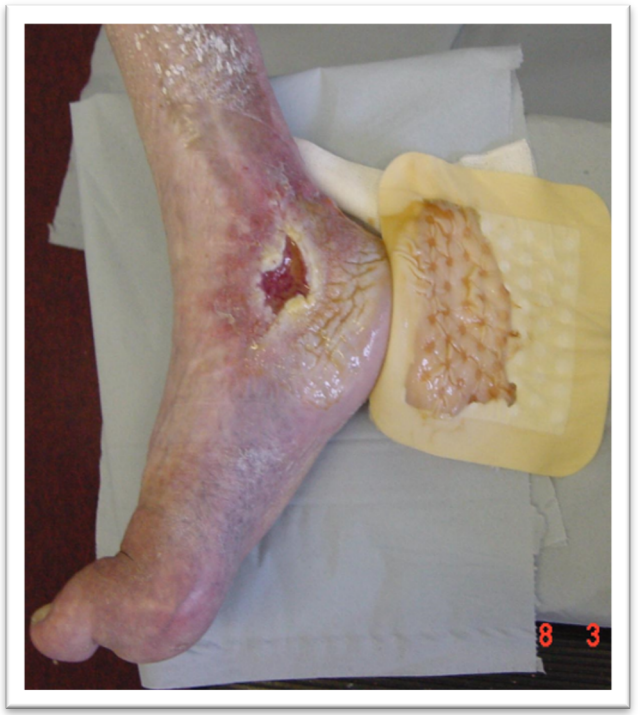
(Wounds UK, 2021)

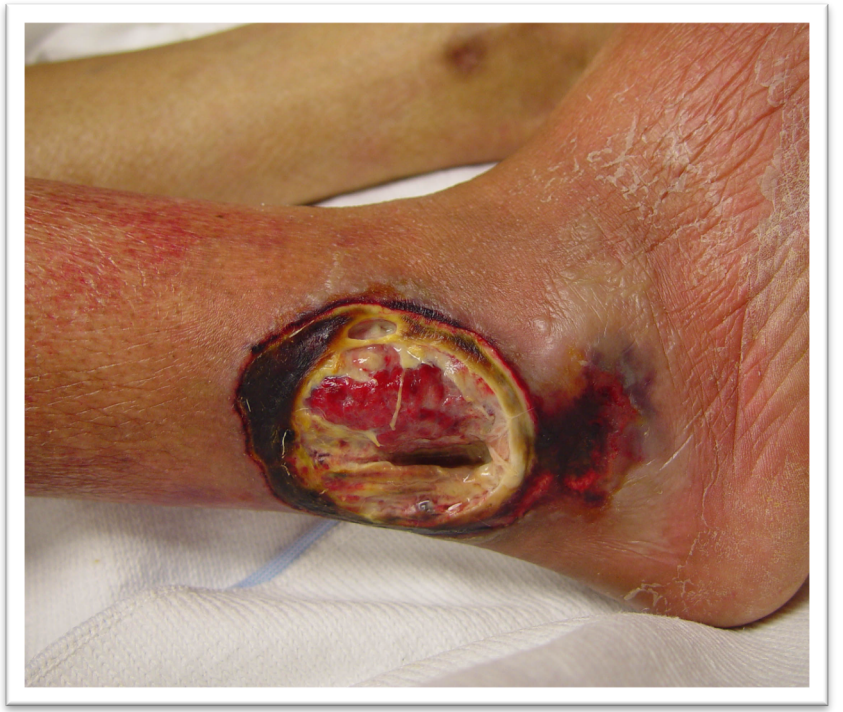
VISUALS

- Colour leads us to suspect many things
  - A violaceous margin?
  - A white edge?
  - Blue green exudate?

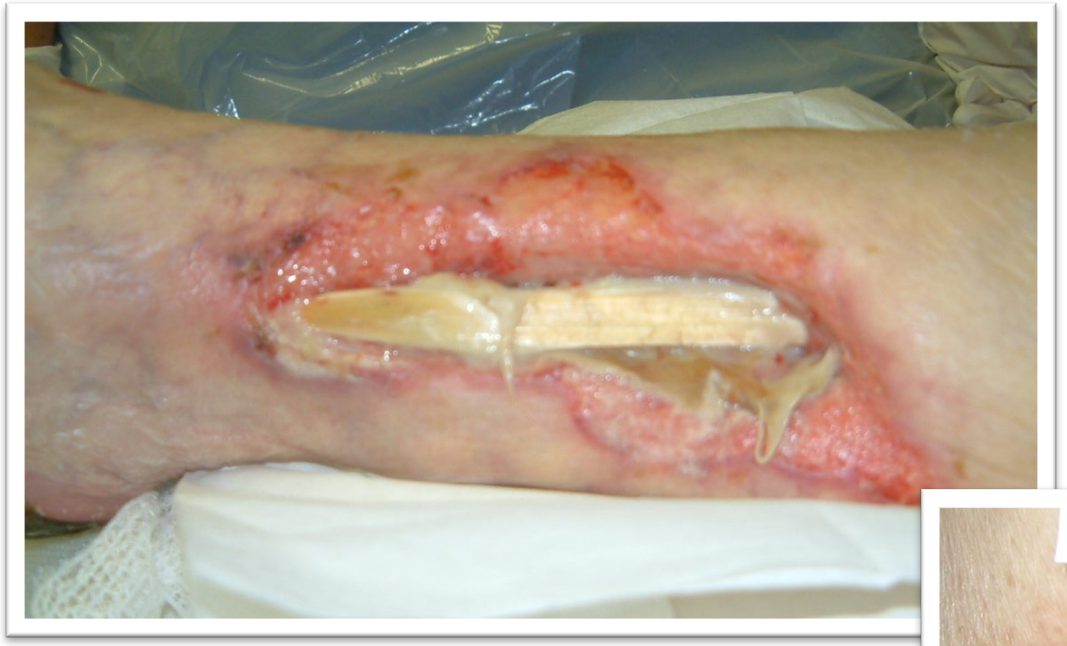


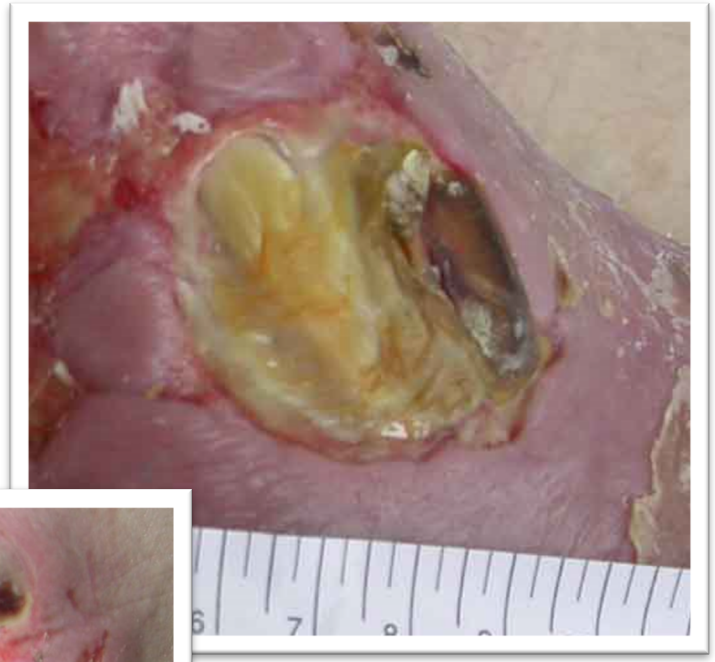


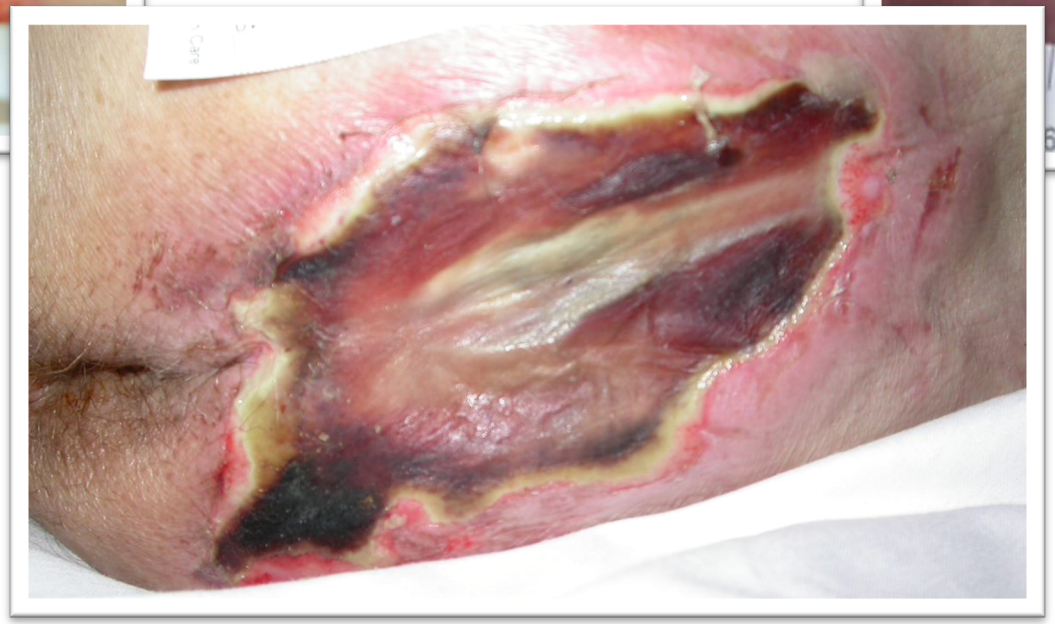




COLOUR CAN BE MISLEADING



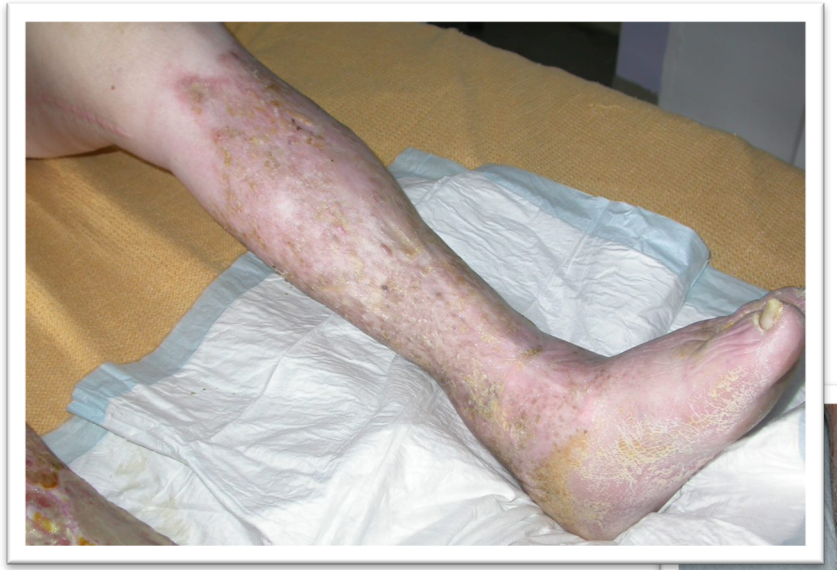


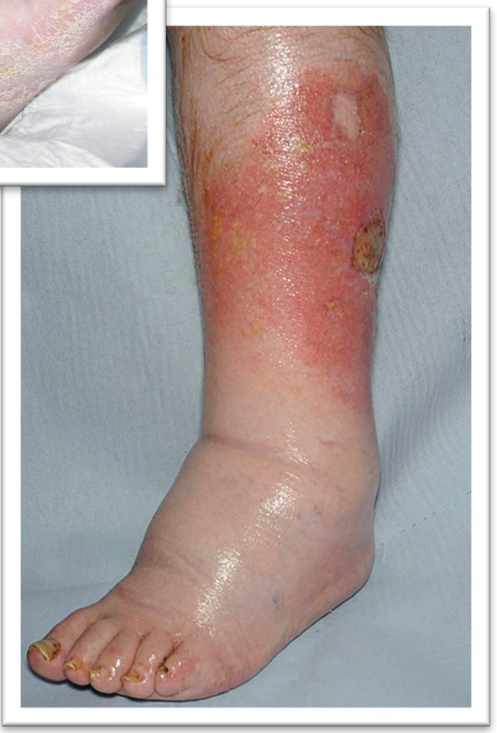


Tendon or slough?

TEXTURE CHANGE

- What can texture indicate?
  - Hard:
    - Oedema
    - Inflammation — many causes
    - Callus
  - Soft:
    - Tissue death
    - Detachment from underlying structures

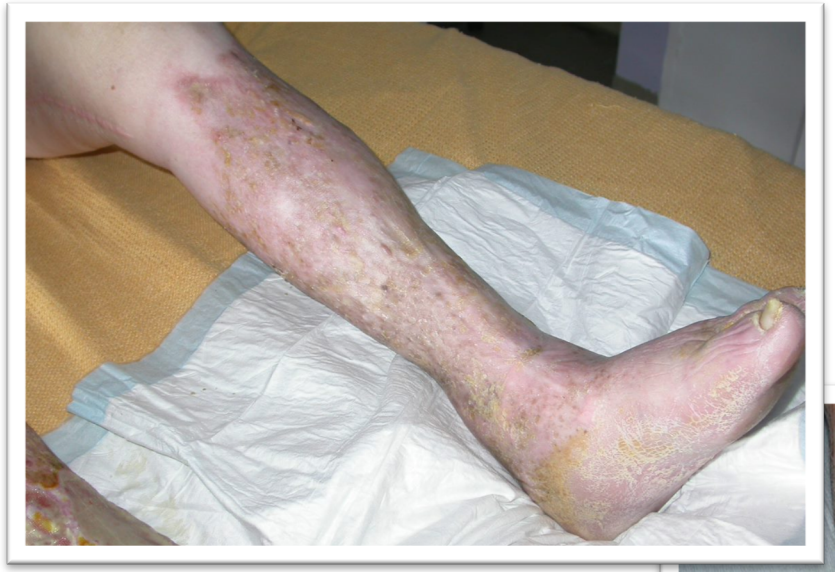


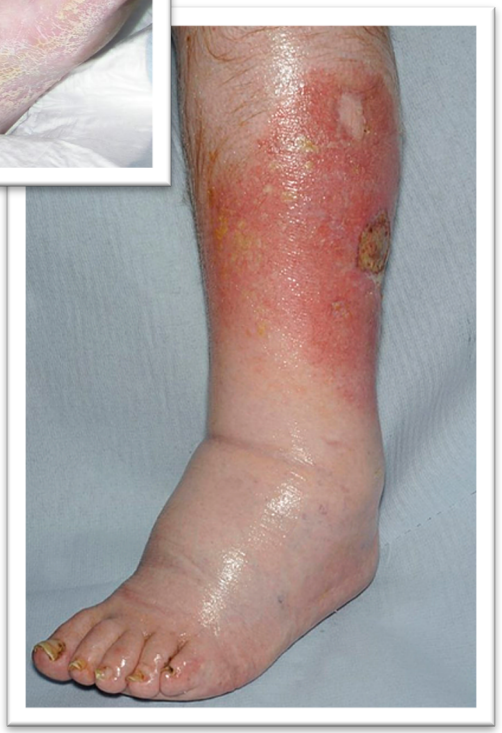


(Fletcher, 2019)

TEXTURE CHANGE *CONTINUED*

- Rough:
  - Dehydration
  - Skin scales
- Smooth:
  - all is well — or is it smoother because of oedema?
- Indication of underlying disease process

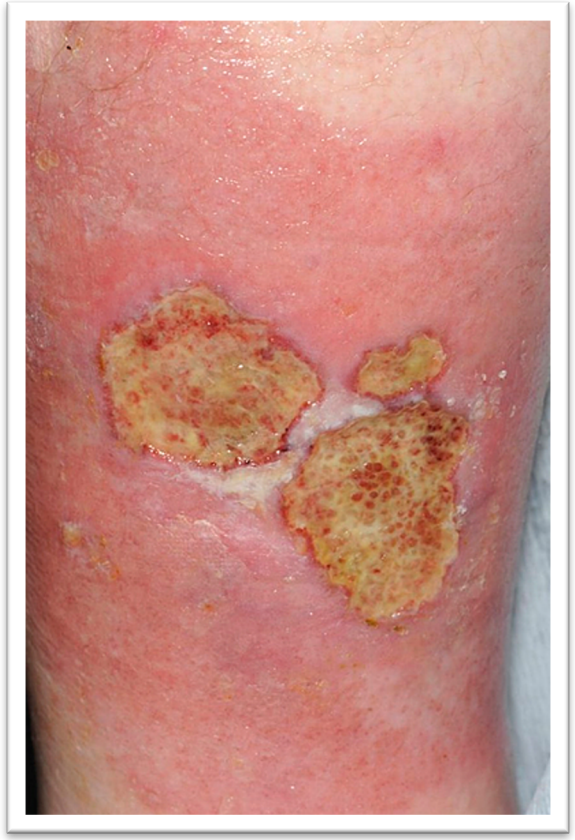


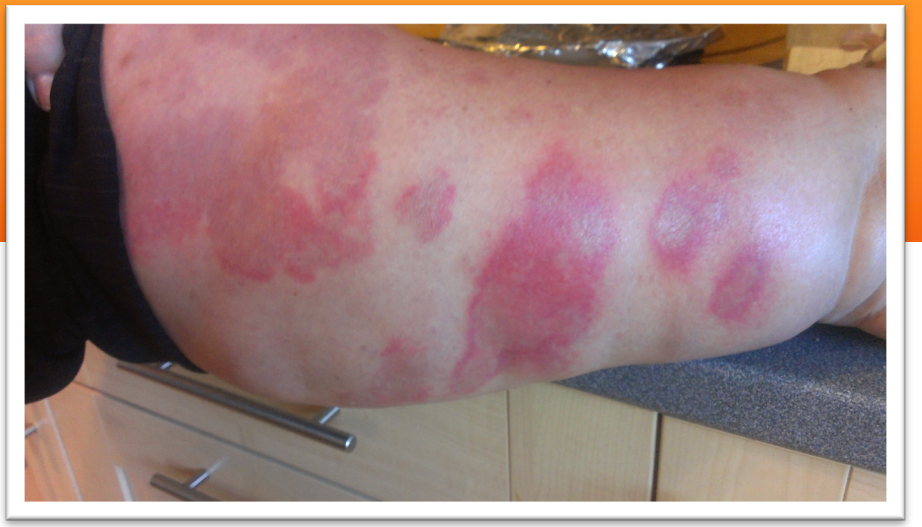


(Fletcher, 2019)

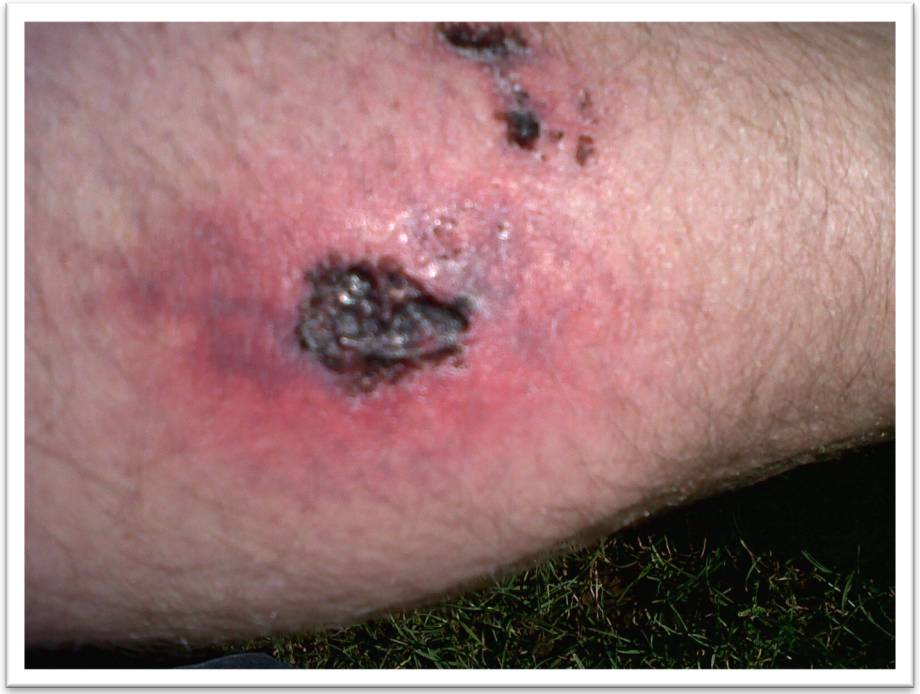
TEMPERATURE CHANGE

- Heat
  - Infection
  - Inflammation
  - Dermatitis
  - Environmental
  - Too many clothes





Hot, red and swollen



(Fletcher, 2019)

WOUND CARE TODAY

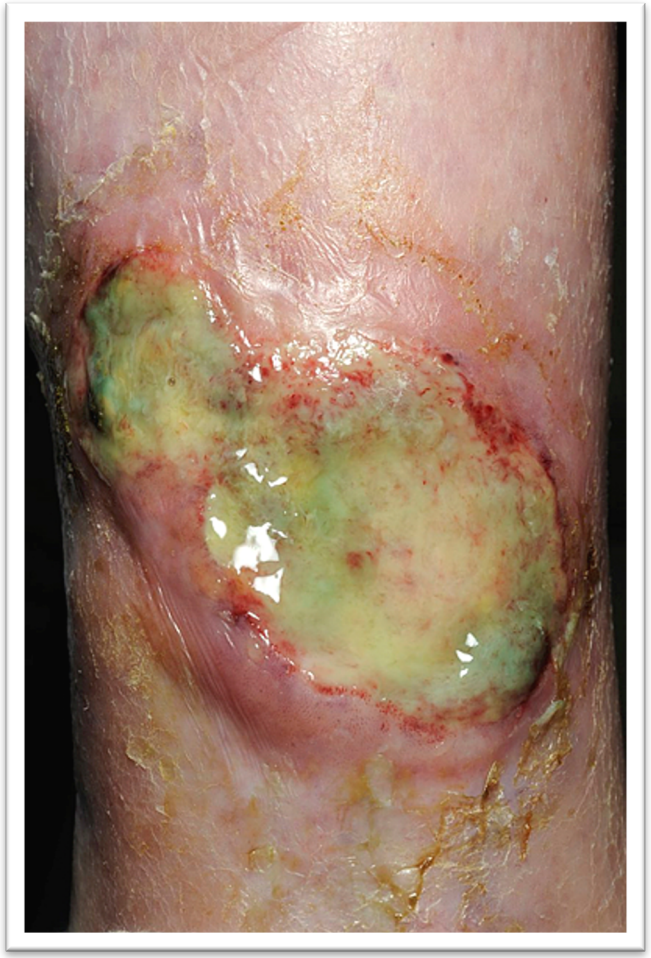
SENSATION CHANGE

- Loss or change in sensation, e.g. neuropathy
- Pain
- Itch — much underestimated
- Tingling

(Fletcher, 2019)

ODOUR

- Noticeable
- Indicative
- Pungent



INDICATION OF UNDERLYING DISEASE

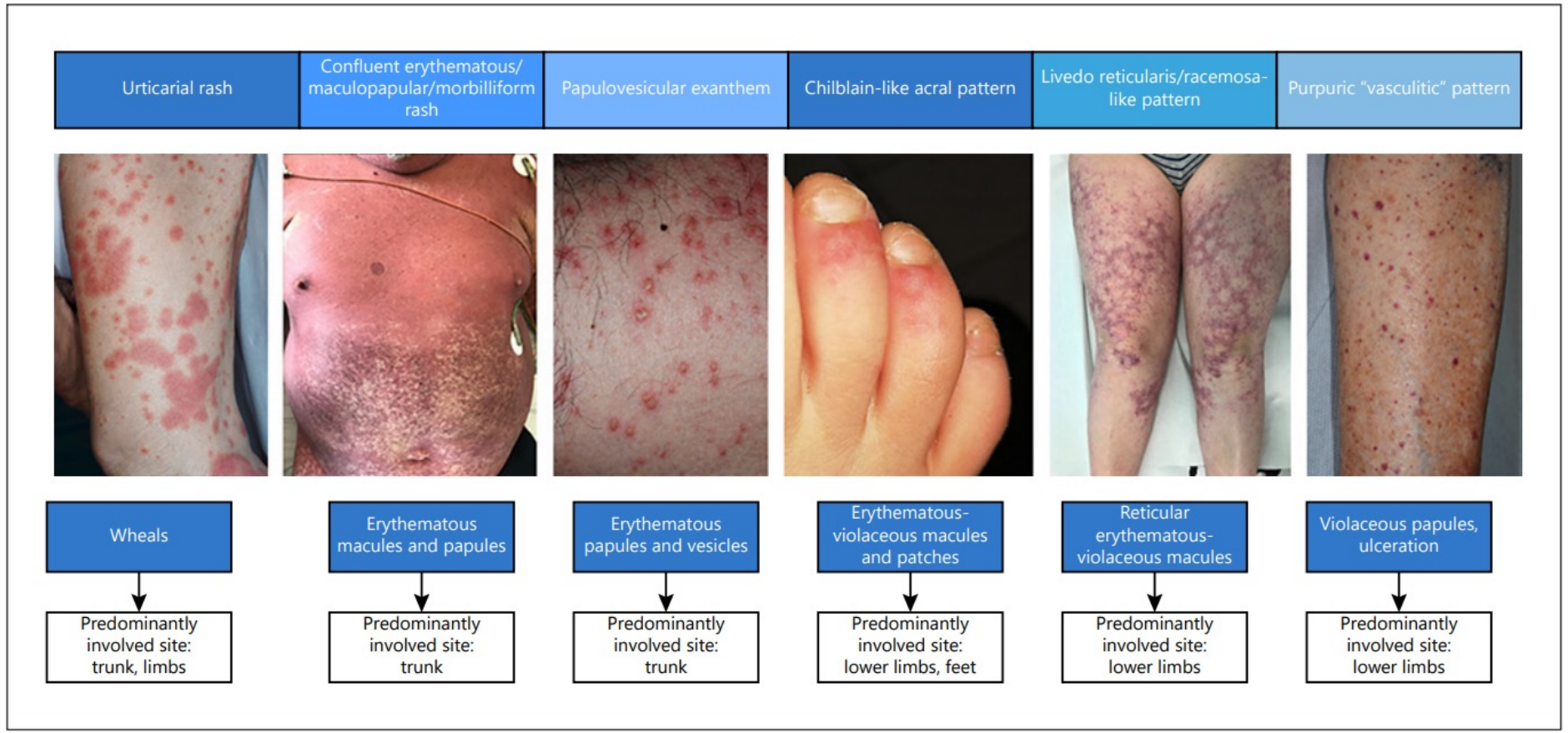
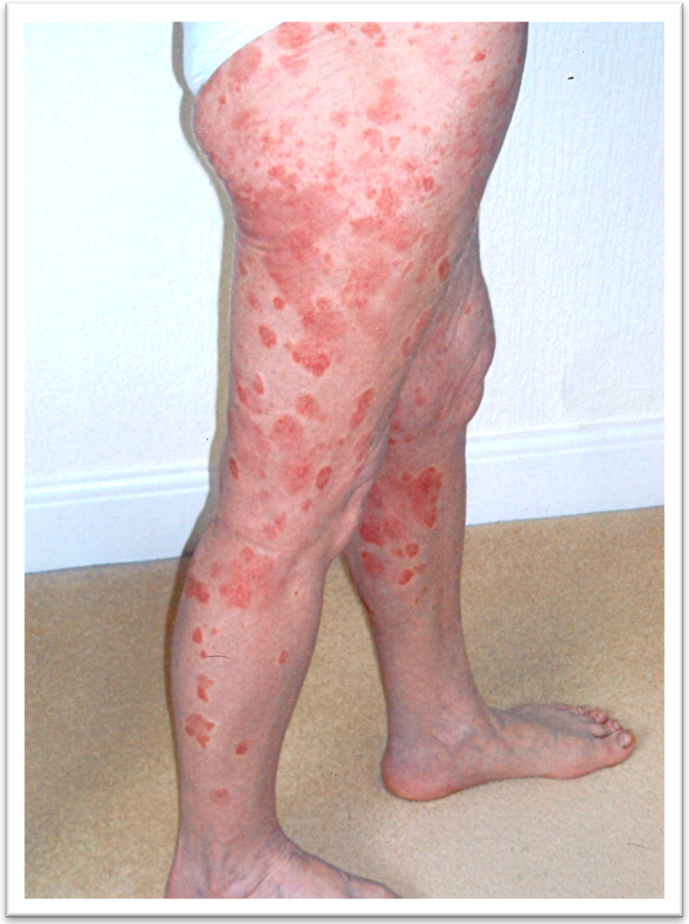


Fig. 1. Clinical features of COVID-19-associated cutaneous manifestations.

(Genovese et al, 2021)

SKIN ASSESSMENT

- Is a really fundamental aspect of care
- We all have skin
- It communicates with us and for us
- We need to treat it well



GOOD SKIN CARE

- The principles of maintaining good skin integrity are all the same
- Keep it clean
- Keep it dry
- Keep it well hydrated
- Protect it from external forces
  - Pressure, shear, friction
  - Moisture
  - Trauma

- Establish a baseline
- Determine the 'problem'
- Determine the cause
- Think about systemic care as well as topical approaches
- Think about psychological as well as physical care
- Standardise the approach:
  - Give step up and step down options

(Fletcher, 2019)

SKIN CARE PATHWAY

- When you would start
- What you use and how often
- When to step up or down
- When to refer on

Figure: Moisture-associated skin damage (MASD) pathway (Asset 29157)

WOUND CARE TODAY

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SKIN CARE PATHWAY

Moisture-associated skin damage (MASD) pathway[1]

Smith+Nephew

Helping you get **CLOSER TO ZERO**◊ delay in wound healing
smith-nephew.com

Assessment

General crieteria
- Mobility
- Nutritional status
- Previous skin disorders
- Allergies
- Patient's bathing and skin care routines

Is the skin at risk from body fluids? Is there evidence of skin breakdown?

MASD specific
- Urine or faecal incontinence
- Excessive sweating
- Excessive wound exudate
- Stoma leakage

Differential diagnosis

Is the skin damage caused by:

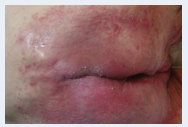
Note: Exclude pressure damage as a cause

1. Urine and/or faecal matter?
2. Excessive moisture from sweating?
3. Wound exudate?
4. Stoma leakage?

1. Incontinence-associated dermatitis (IAD)

Erythema and inflammation of the skin, sometimes with erosion or denudation

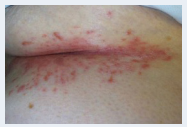
Source of MASD:
Urine or liquid faeces



2. Intertriginous dermatitis

Erythema and inflammation of the skin inside and adjacent skin folds, sometimes accompanied by erosions or denudation

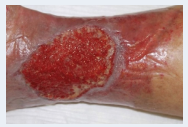
Source of MASD:
Perspiration



3. Periwound moisture-associated dermatitis

Erythema and inflammation of the skin within 4cm of the wound edge, sometimes accompanied by erosions or denudation

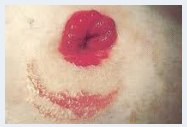
Source of MASD:
Wound exudate



4. Peristomal irritant contact dermatitis

Eythema and inflammation of the skin around the stoma, at times accopmanied by denudation

Source of MASD:
Urine or faecal effluent



Implement consistent use of an interventional, structured skin care regimen:

- Remove irritants from the skin **(PROSHIELD◊ Foam & Spray Skin Cleanser*)** and helps protect skin from incontinence associated dermatitis.[2-4,8] **(SORBADERM No Sting Barrier Cream*** or **PROSHIELD PLUS Skin Protectant*)**
- Use devices or products that wick away moisture from the affected skin
- Cleanse perineal skin after each incontinence episode using a pH-balanced cleanser **(PROSHIELD Foam & Spray Skin Cleanser)**[7]
- Check closely in skin folds for residual faces and urine, and remove as per local protocol.
- Moisturise and help protect the skin using skin barrier products **(SORBADERM No Sting Barrier Cream*** or **PROSHIELD PLUS Skin Protectant*)**[2-6,8]**
- Educate all care providers on preferred method of skin care

**Avoid the use of barrier cream and skin protectant on Periwound and Peristomal moisture associated dermatitis.

1. Incontinence-associated dermatitis (IAD)

- Keep skin clean and dry **(PROSHIELD Foam & Spray)**
- Apply either **PROSHIELD PLUS Skin Protectant** or **SORBADERM No Sting Barrier Film**
- Treat areas of cutaeneous candidiasis (thrush) with appropriate antifungal treatments
- Consider the use of appropriate products or devices to divert urine

2. Intertriginous dermatitis

- Examine entire area of the skin folds, including the base
- Enlist assistance in order to gently lift the fold without creating or exacerbating traction and fissure formation
- Consider tissue type and treatment aim when selecting treatment
- Avoid products containing chlorhexidine gluconate, alcohol, or perfumes as these can be absorbed by damaged skin
- Ensure ongoing drying of the skin fold must be a primary treatment strategy
- Protect affected area from further breakdown or maceration **(SORBADERM No Sting Barrier Film or SORBADERM No Sting Barrier Cream or PROSHIELD PLUS Skin Protectant)**

3. Periwound moisture-associated dermatitis

- Base dressing choice on exudate levels
- Some areas may be challenging to dress, utilise sacral and heel shapes **(ALLEVYN◊ LIFE Foam Dressings, ALLEVYN GENTLE BORDER Foam Dressings)**
- Consider the potential for wound infection
- If the wound is not healing or progressing, further investigation may be required to establish co-morbidities
- Manage necrotic and sloughy tissue using dressings with autolytic dressings. *This may be contraindicated in certain conditions such as diabetes and those with arterial disease*
- If bone is exposed consider the risk of osteomyelitis and refer to suitable health care professional
- Protect peri wound area from further breakdown and maceration (**SORBADERM No Sting Barrier Film**)

4. Peristomal irritant contact dermatitis

- Consult Stoma Nurse specialist for guidance on appliances
- Protect peri stomal area from further breakdown and maceration **(SORBADERM No Sting Barrier Film)**

Re-assess and evalute: record outcomes

*Use product dependent on MASD type and skin damage severity
Pathway adapted from: Dowsett D, Allen L (2013) Moisture-associated skin damage made easy. Wounds UK 9(4). Available from: www.wounds-uk.com/made-easy

For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product's applicable Instructions for Use (IFU) prior to use.

References **1.** Dowsett D, Allen L. (2013) Moisture-associated skin damage made easy. *Wounds UK* 9(4). Available from: www.wounds-uk.com/made-easy. **2.** Flynn D, Williams S. Barrier creams for skin breakdown. *Nursing & Residential Care*. 2011;13(11): 553-558. **3.** Ling L. PROSHIELD Skin Care Protective System: A sequence of evaluations. Paper presented at: Wounds UK; 2011; Harrogate, UK. **4.** Maxwell J, Sinclair D. Treatment of moisture lesions in children. Paper presented at: European Wound Management Association 2012; Vienna, Austria. **5.** Hoggarth A, Waring M, Alexander J, Greenwood A, Callaghan T. A controlled, three-part trial to investigate the barrier function and skin hydration properties of six skin protectants. *Ostomy Wound Manage*. 2005;51(12):30-42. **6.** Howers L. Evaluation of PROSHIELD PLUS in nursing homes for inclusion onto formulary in a healthcare trust. Paper presented at: Wounds UK; 2012; Harrogate, United Kingdom. **7.** Smith+Nephew 2020.Review of certificate of analysis for PROSHIELD FOAM & SPRAY Incontinence Cleanser. Internal Report. RD/20/015. **8.** Meuleneire F. A New Solution in the Treatment of Moisture Lesions. Paper presented at: 13th Annual European Pressure Ulcer Advisory Panel Meeting; 2010; Birmingham, UK.

WOUND CARE TODAY

Figure: Moisture-associated skin damage (MASD) pathway (Asset 29157)

woundclub live with Smith+Nephew

WHAT TO DO WHEN THE OVERALL PICTURE DOESN'T QUITE ADD UP....

- Or looking for things that are out of the ordinary

AGING AND COMPLEX SKIN CONDITIONS

Jackie Dark

Tissue Viability Clinical Nurse Specialist

Great Western NHS Hospitals Foundation Trust

WOUND CARE TODAY

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AGING SKIN

Intrinsic:

'Biological aging' regardless of skin type

Additional:

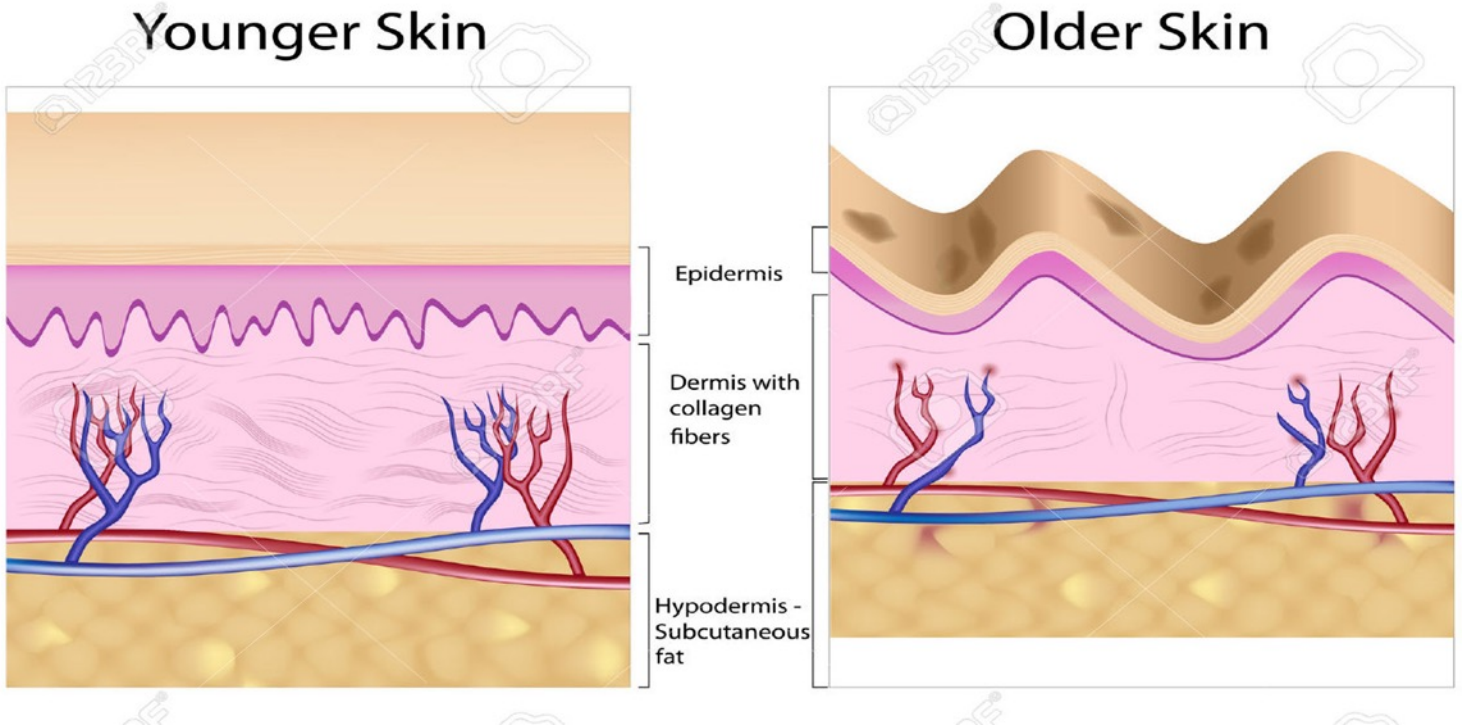
Extrinsic factors:

- Ultraviolet radiation
- Smoking
- Pollutants

(Ayer, 2018)

IMPACT OF AGING SKIN

- Epidermal and dermal thickness declines by 20%
- Basement membrane reduces contact between epidermal and dermal layers
- Collagen and elastic fibres reduce
- Keratinocytes — cannot repair DNA damage so well



(Image from: Skincare physicians.net)

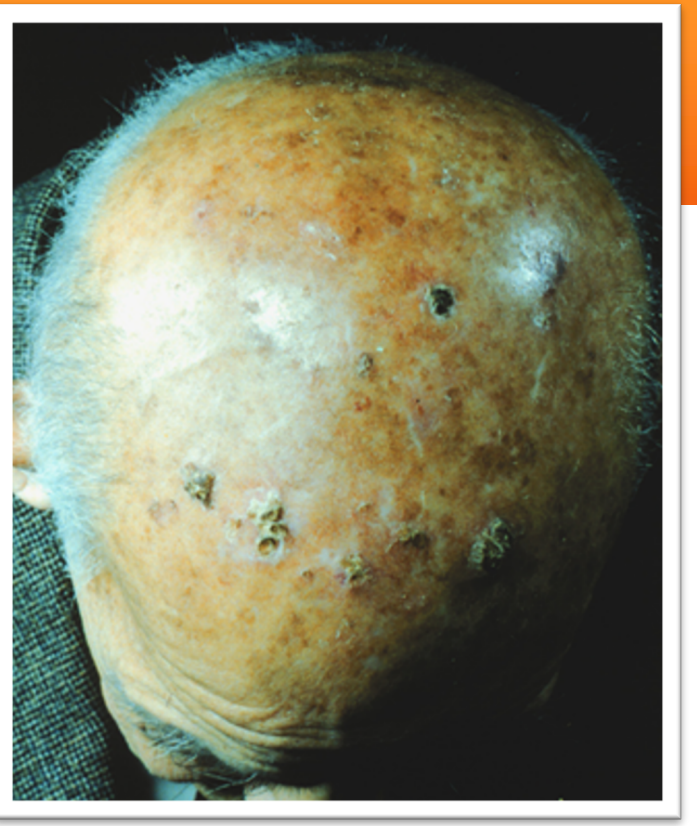
IMPACT OF AGING SKIN

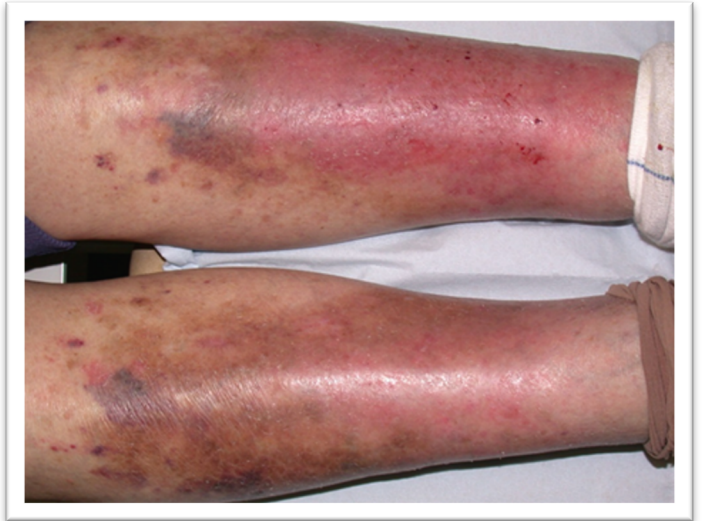
- Decline in cell regeneration and renewal
- Fewer fat cells — reduced protection pressure
- Immune cells sparse and less mobile — increase in melanocytes
- Degeneration of connective tissue and elastic fibres — reduced firmness and elasticity
- Reduced sebaceous and sweat gland secretions

IMPACT OF AGING SKIN

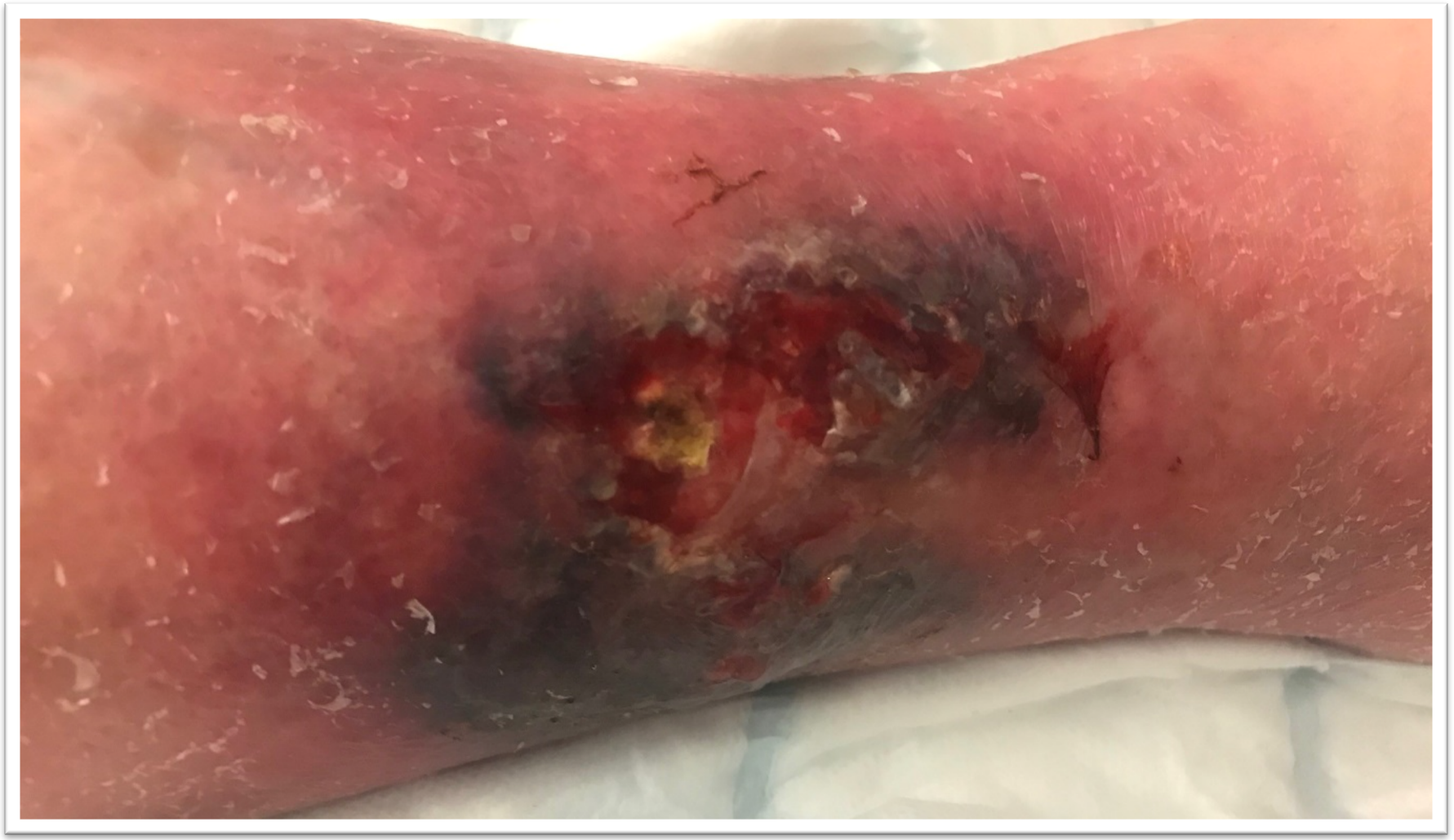
- Fragility/skin tears/wounds — delayed healing
- Atrophy/wrinkles/laxity (skin sagging)
- Skin infections/infestations
- Haematomas/bruising/pigmentation
- Benign and malignant skin lesions

- Cellulitis
- Bullous pemphigoid
- Skin tears



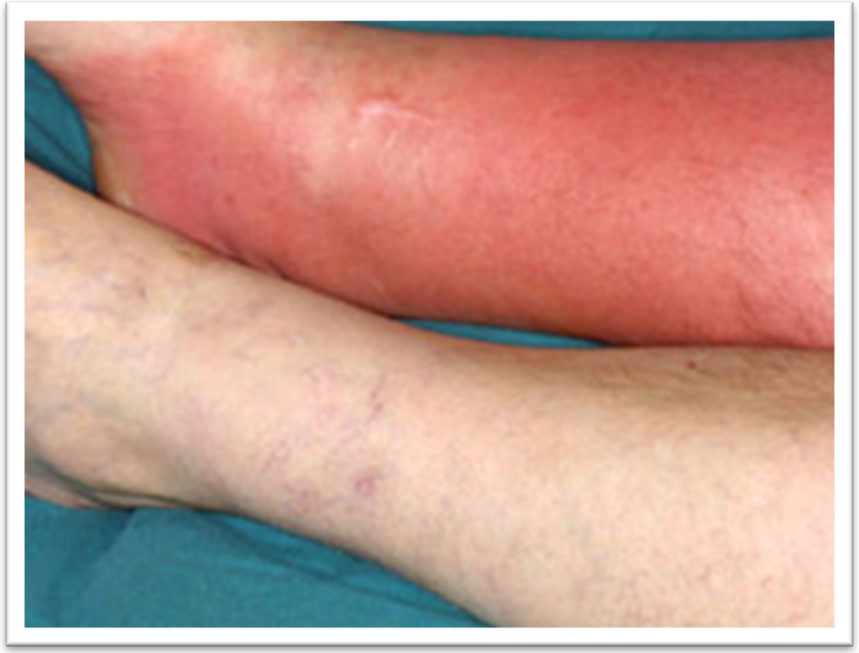


CELLULITIS



CELLULITIS – WHAT IS IT?

- Bacterial skin infection affecting the lower dermis and subcutaneous tissue
- Commonly caused by *Staphylococcus aureus* and *Streptococcus pyogenes*
- **Complications:** ulceration, endocarditis, osteomyelitis and sepsis
- Legs are the most common site, in the elderly
- **Rare: bilateral occurrence**

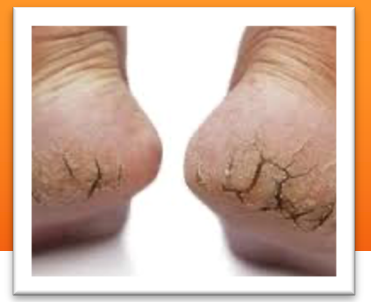


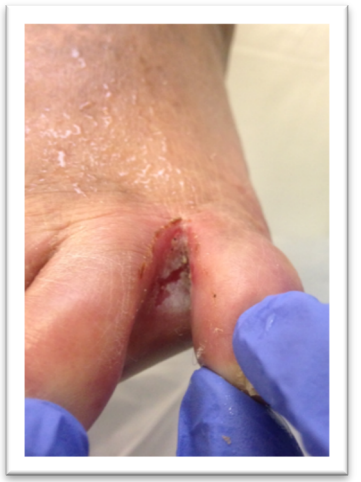
RED FLAG SYMPTOM REQUIRING IMMEDIATE ATTENTION

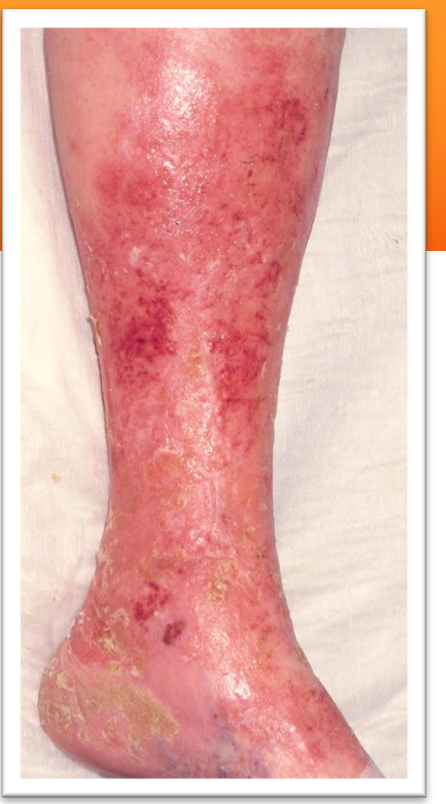
National Wound Care Strategy Programme (NWCSP) lower limb recommendations

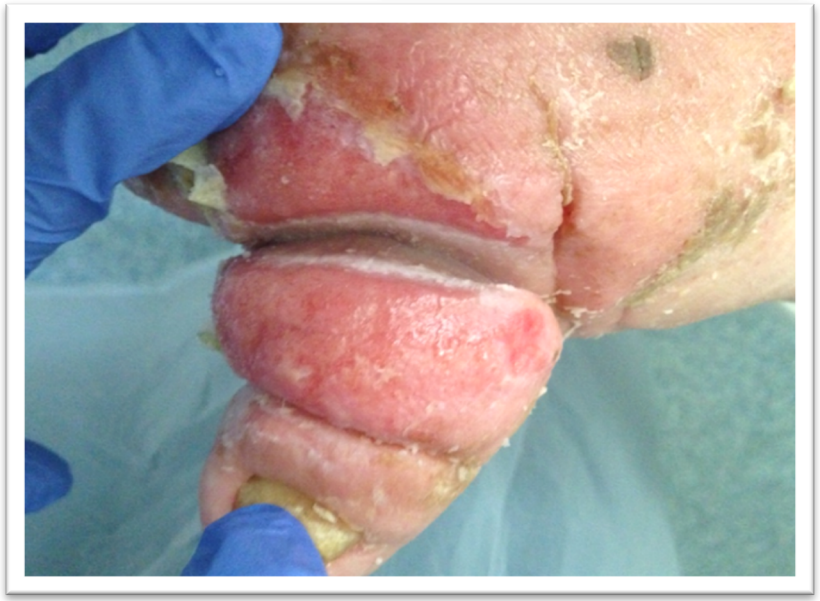
(NWCSP, 2020)

CELLULITIS









Risks:

- Previous episode(s) of cellulitis
- Immune suppression: disease/medication

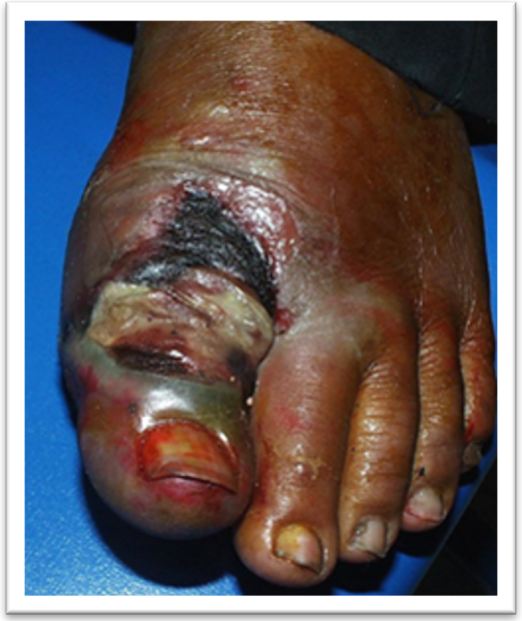
Skin integrity changes:

- Fissuring of toes or heels: tinea pedis (athlete's foot) or cracked heels
- Varicose eczema, lymphoedema/ chronic oedema
- Blisters/cuts/trauma/leg ulceration

CELLULITIS – CLINICAL SIGNS AND SYMPTOMS

Acute onset:

- Increasing redness — limb/skin (unilateral)/ periwound skin
- Red/purple hue in darker skin tones
- Heat
- Swelling
- Pus/purulent exudate
- Pain (may be reduced for patients with neuropathy)
- Blisters/necrosis may develop
- Fever/malaise/nausea may precede skin changes
- Lymphangitis
- Raised erythrocyte sedimentation rate (ESR)/white blood count (WBC)/C-reactive protein (CRP)/wound swab



CELLULITIS MANAGEMENT – SHORT TERM

- Limb elevation
- Antibiotic therapy: consider severity of symptoms/infection site microbiological results/meticillin-resistant *Staphylococcus aureus* (MRSA) status, if known
- Give oral antibiotics first line if possible — review intravenously in 48 hours, consider switching to oral (National Institute for Health and Care Excellence [NICE], 2019)
- Refer to local AB guidelines/antibiotics formulary

Diabetic foot ulcer (DFU): refer to DFU multidisciplinary team (MDT)

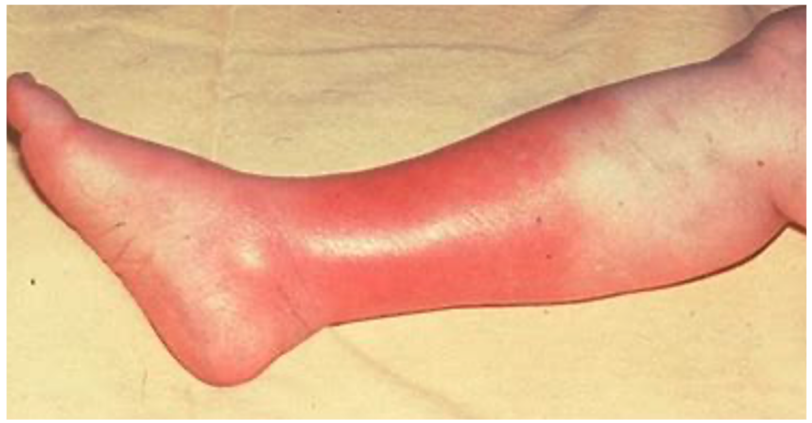
No compression if lower limb (NWCSP, 2020)

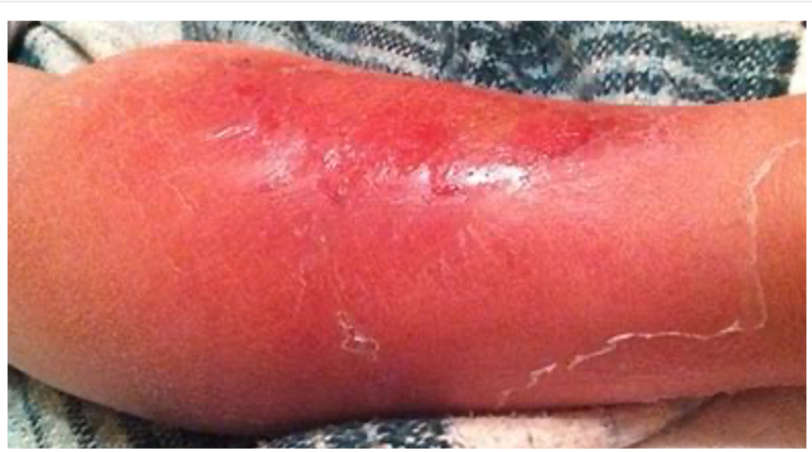
CELLULITIS MANAGEMENT – LONG TERM

- Patients with two or more episodes of cellulitis within 12 months may benefit from prophylaxis antibiotic treatment:
  - Phenoxymethylpenicillin — 250mg twice a day, or
  - Erythromycin 250mg twice daily for penicillin allergy — review six monthly
- Treat coexisting skin conditions, i.e. eczema/fungal infections
- Manage and maintain chronic oedema
- Optimise comorbidities

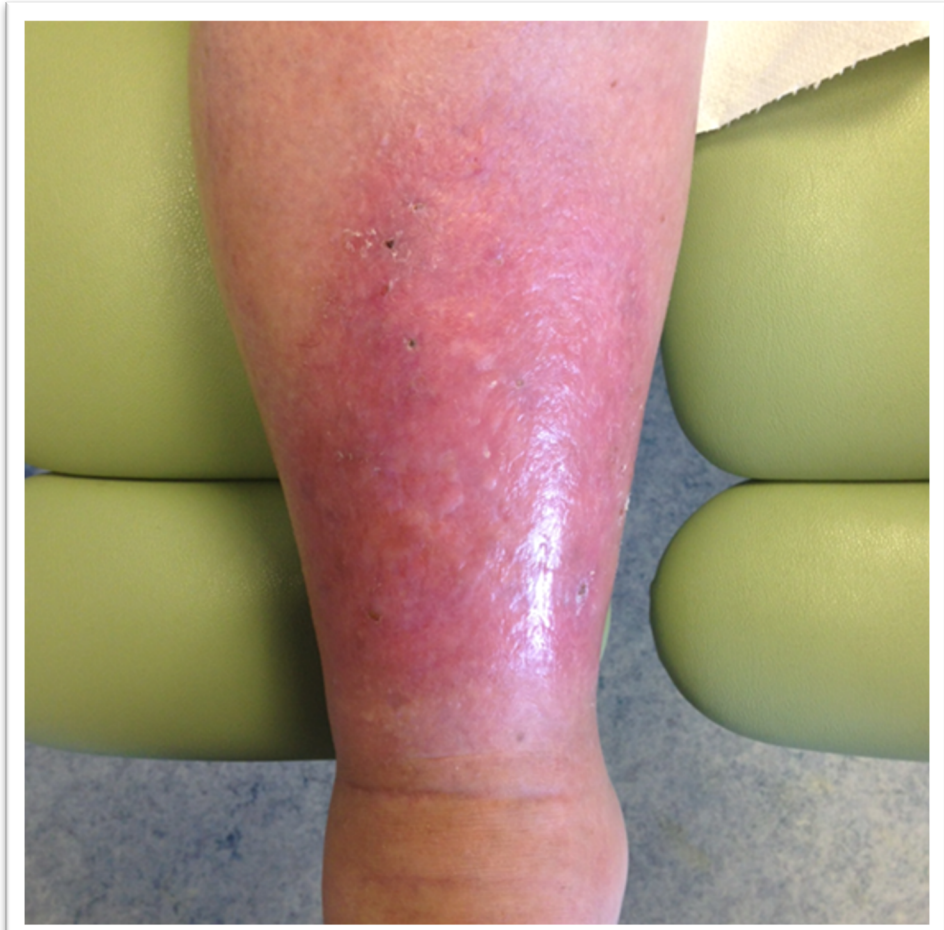
DIFFERENTIAL DIAGNOSIS

Cellulitis



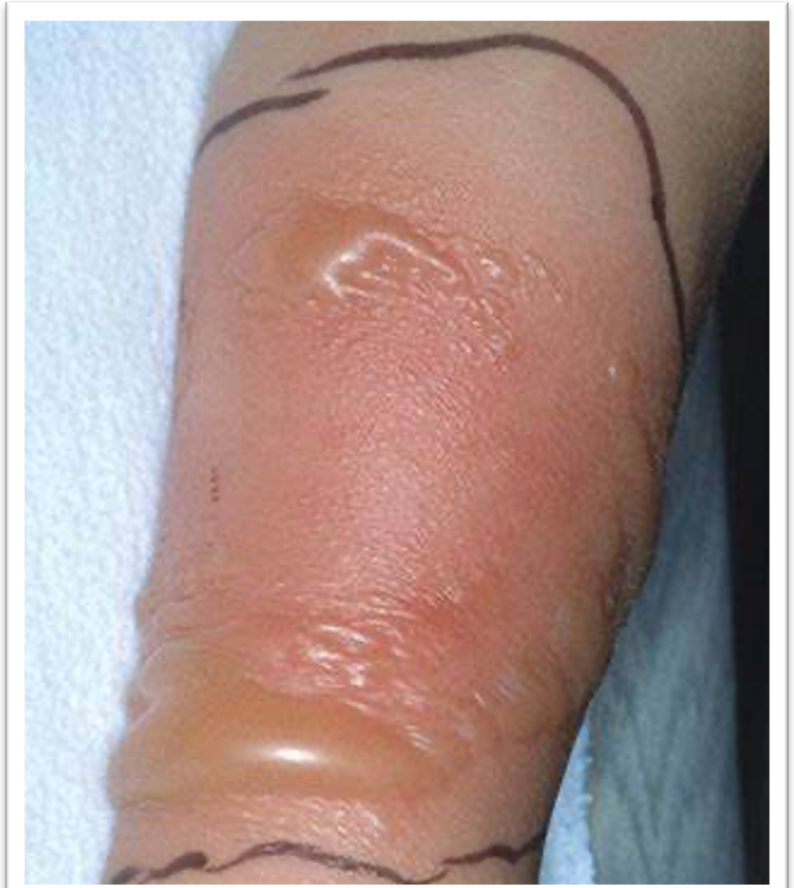


Lipodermatosclerosis

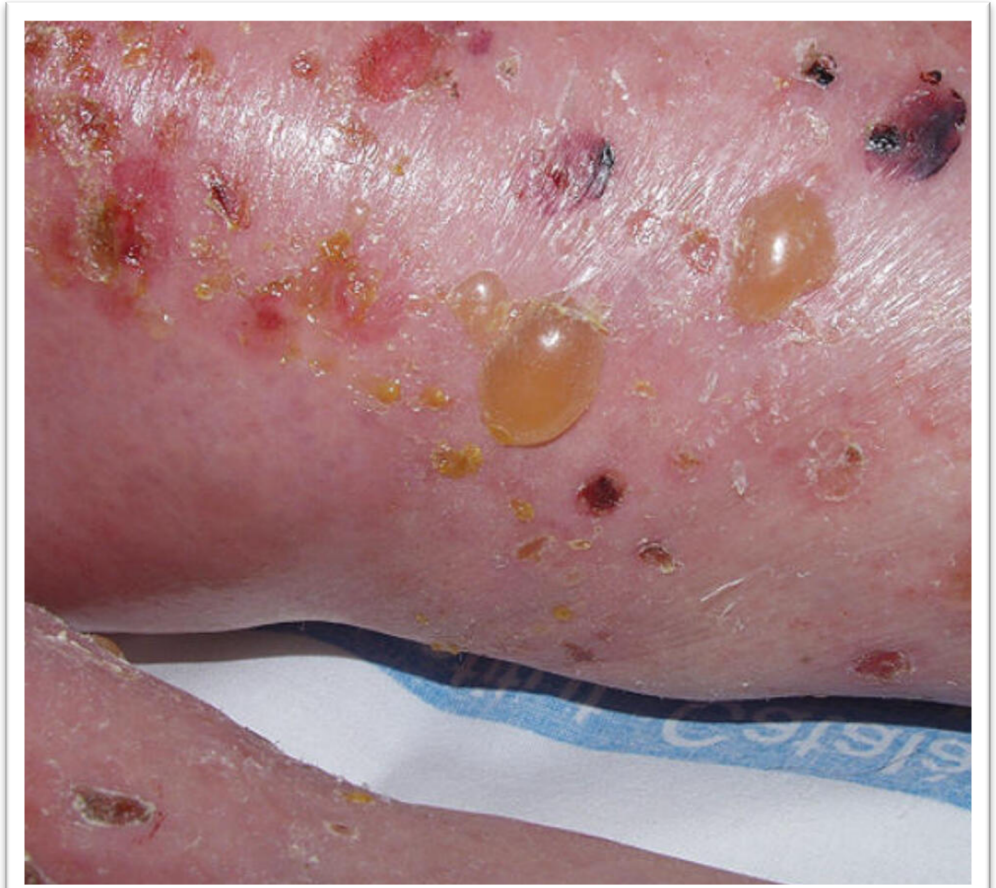


DIFFERENTIAL DIAGNOSIS

Cellulitis

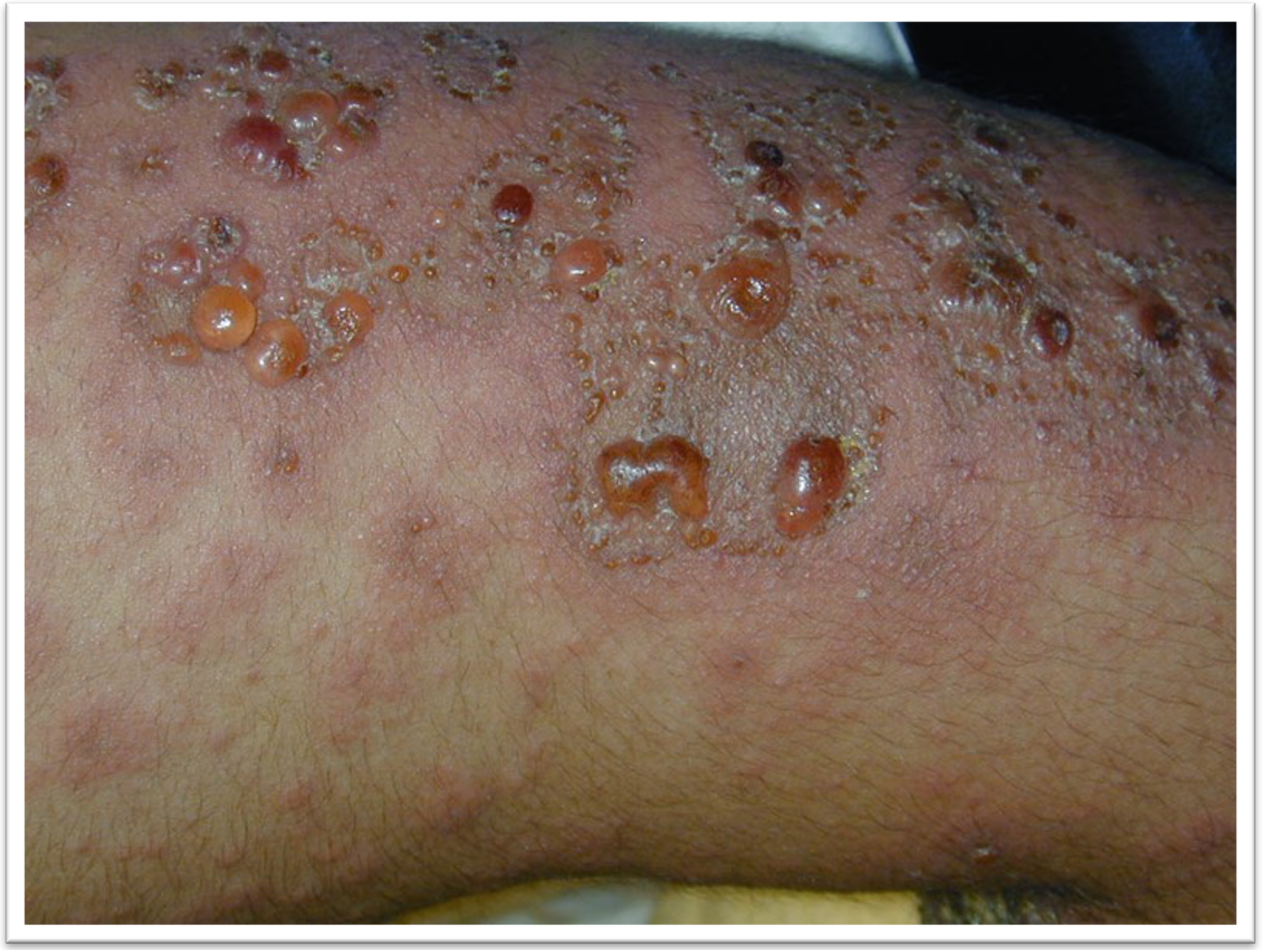


Bullous pemphigoid



BULLOUS PEMPHIGOID

Bullous pemphigoid (bullous disorders)

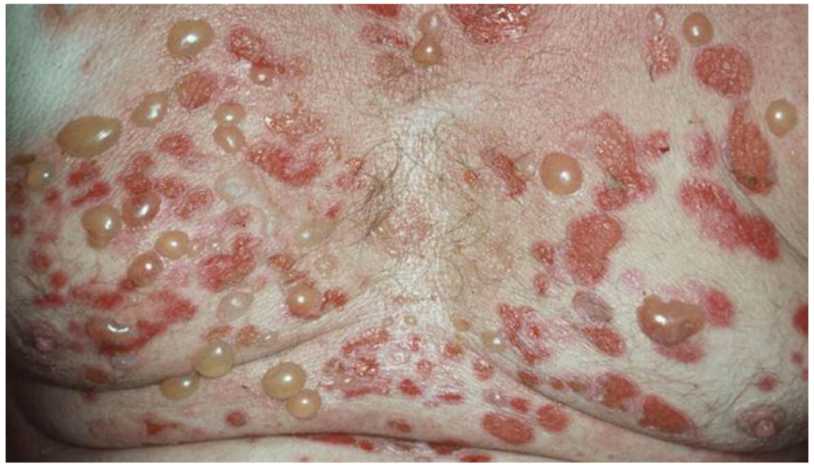


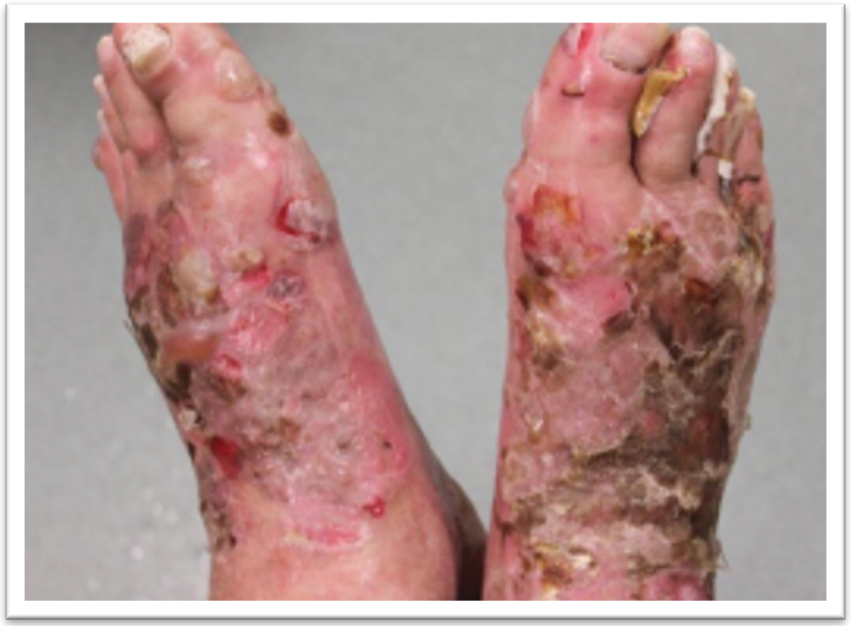
BULLOUS PEMPHIGOID

- Most common autoimmune blistering disease in the West
- Incidence in the UK of 4.3 per 100,000
  (Primary Care Dermatology Society, 2021)
- Onset 60 plus years, commonly 80

Causation:

- May be genetic disposition
- Skin infection/injury or drugs may be a trigger
- Several drugs have been implicated, including furosemide/betablockers



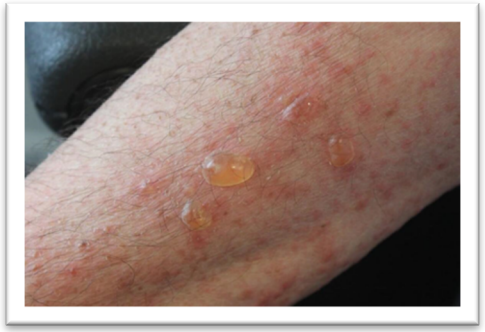


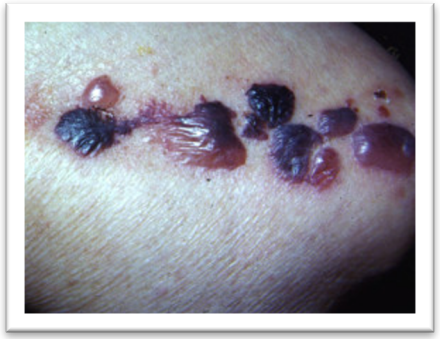
BULLOUS PEMPHIGOID – CLINICAL PICTURE

- Males and females are equally affected
- Generalised (more common) — trunk, arms and flexures
- Localised — limited to lower limbs
- Itch — common feature, often precedes rash by several months
- Even in cases of extensive blistering, patients otherwise appear well
- Mucosal blisters can occur mainly affecting the palate (mouth) — 25% of patients

BULLOUS PEMPHIGOID – CLINICAL PICTURE

Blisters — sub-epidermal





Large/tense
Fluid filled — clear or blood stained
Present for a few days — once ruptured → form crusted erosions

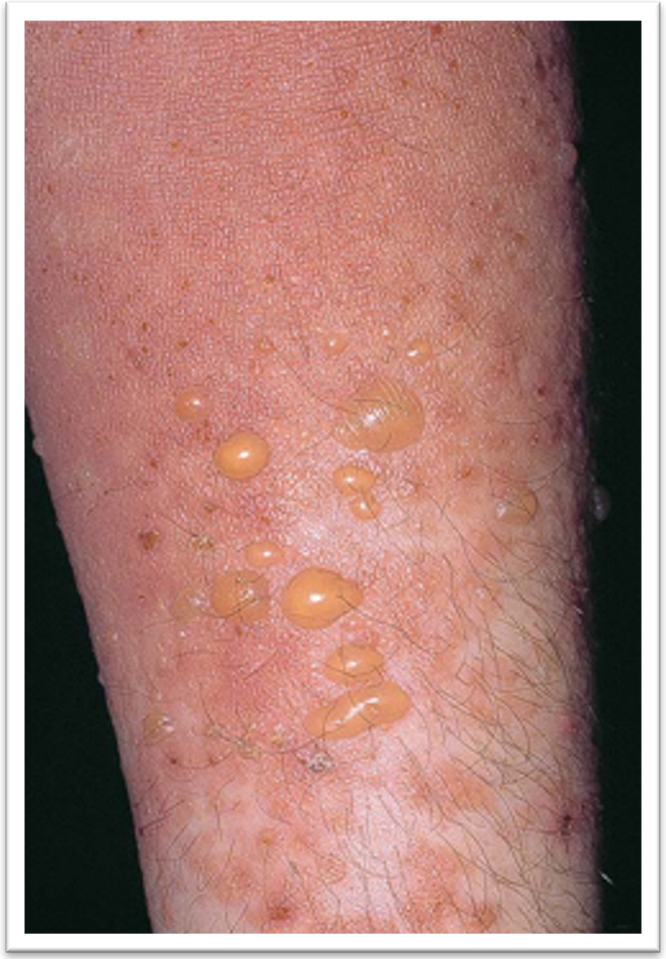
Heal without scarring — post inflammatory hyperpigmentation

BULLOUS PEMPHIGOID – DIAGNOSIS

Referral — dermatology

Diagnosis:

- Clinical history — signs and symptoms
- Skin biopsy and direct immunofluorescence
- Bloods: indirect immunofluorescence pemphigoid antibodies



BULLOUS PEMPHIGOID – MANAGEMENT

Over several years

Local:

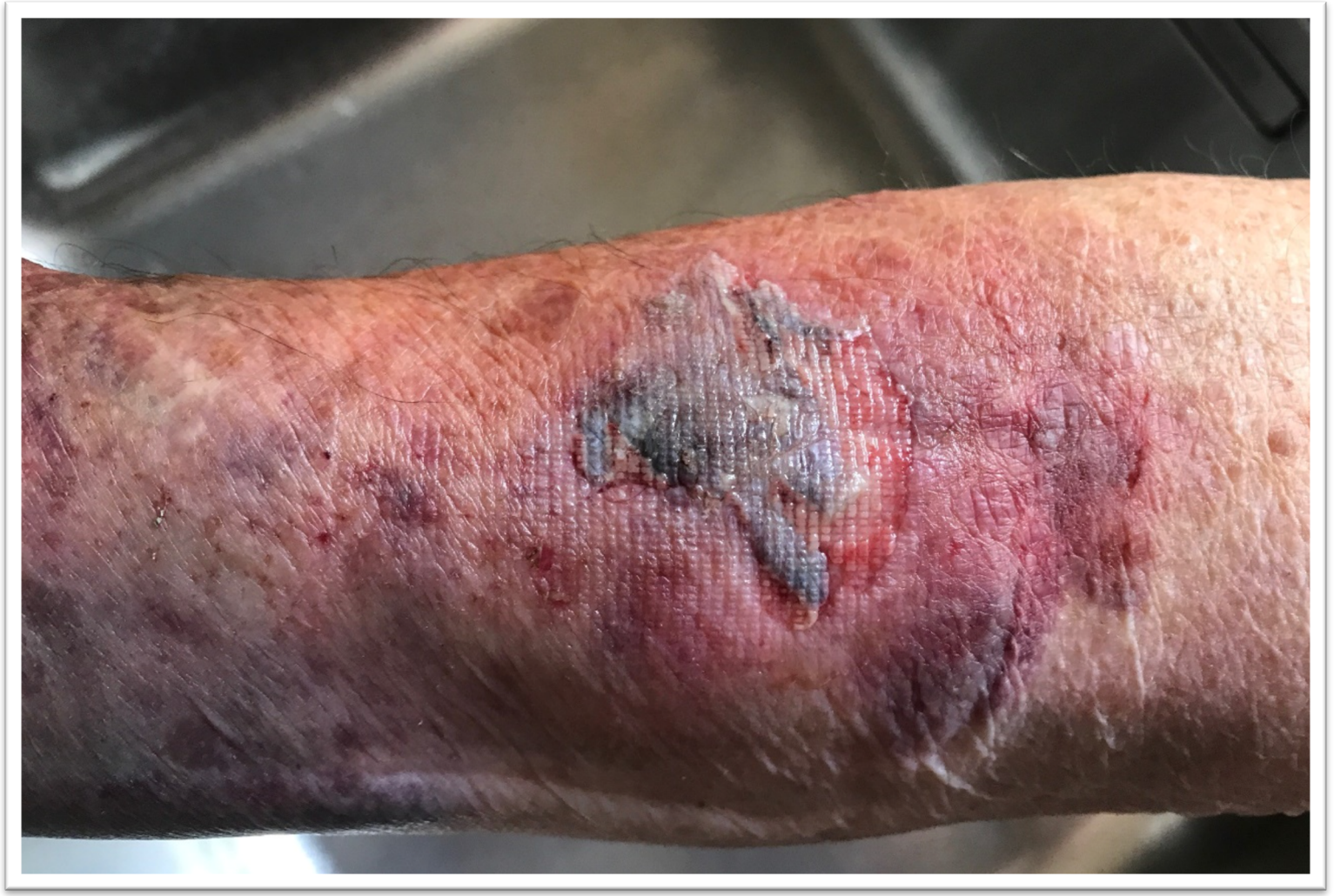
- Emollients: 'very potent'/'potent' topical steroids <10%

Systemic:

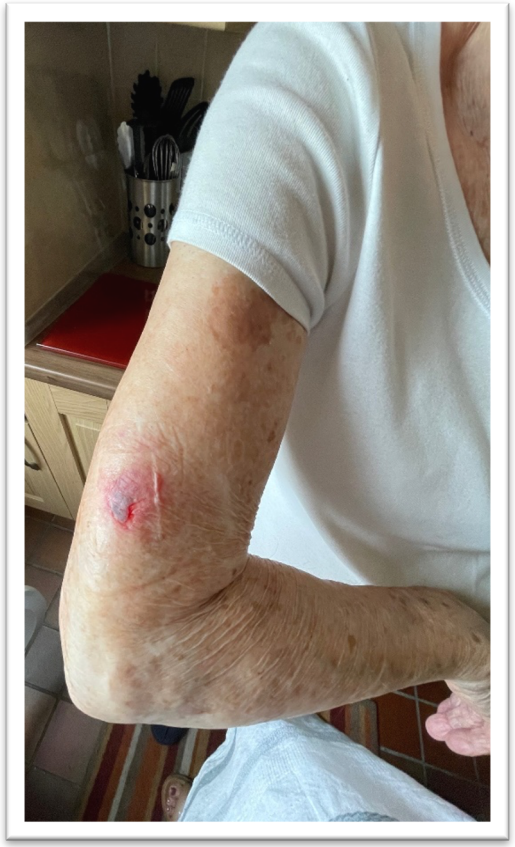
- Systemic steroids
- Tetracycline antibiotics: isolation/jointly with steroids (steroid sparing), adjust dose until no blister formation
- Long-term: systemic immunosuppressive agents, e.g. methotrexate/azathioprine

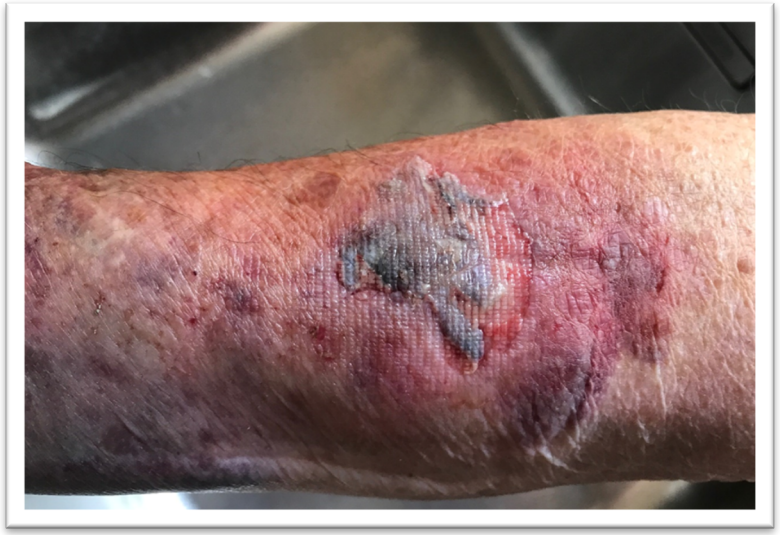
NB: side-effects of drugs → cutaneous malignancy

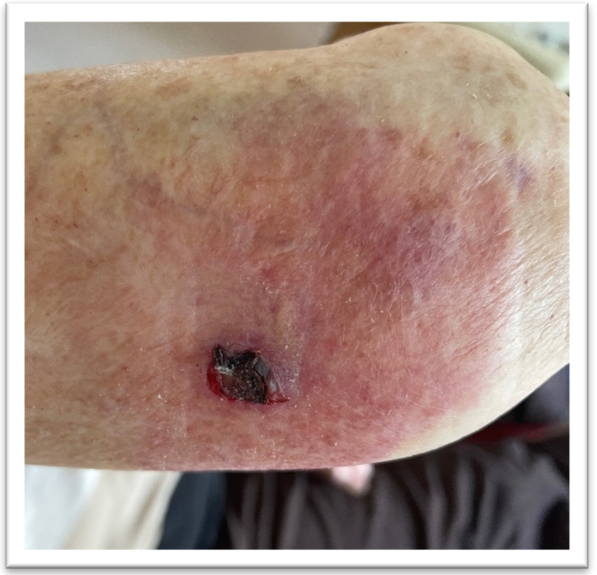
SKIN TEARS



SKIN TEARS







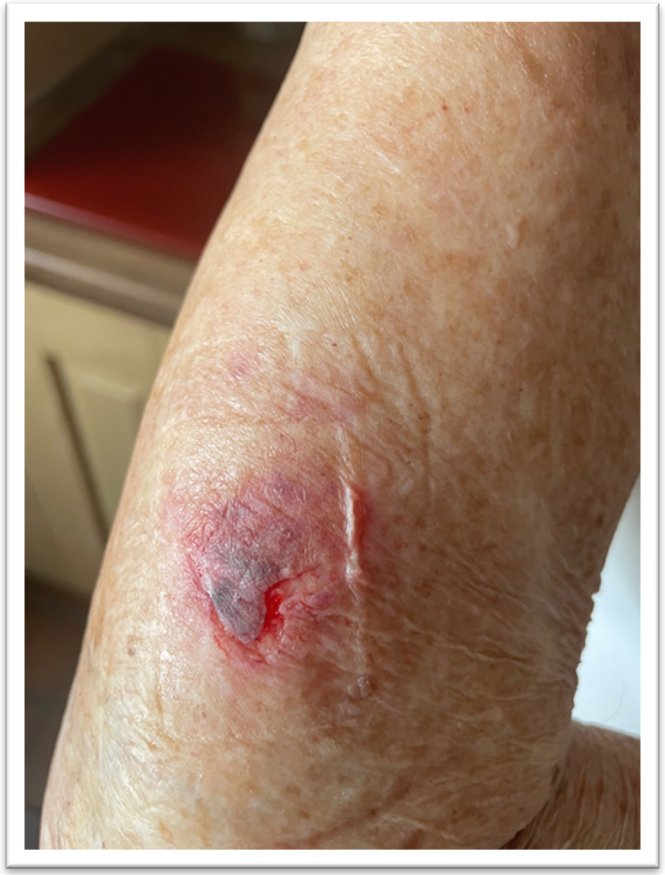
WOUND CARE TODAY

woundclub live with Smith+Nephew

SKIN TEARS – WHAT ARE THEY?

'A skin tear is a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth (not extending through the subcutaneous layer.'

International Skin Advisory Panel (ISTAP) (2018) *Best Practice Recommendations: The Prevention and Management of Skin Tears in Aged Skin*

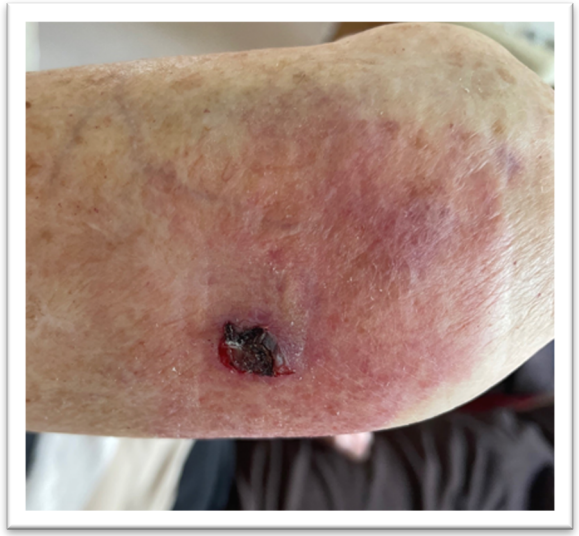


SKIN TEARS – RECOGNITION

Type one

No skin loss

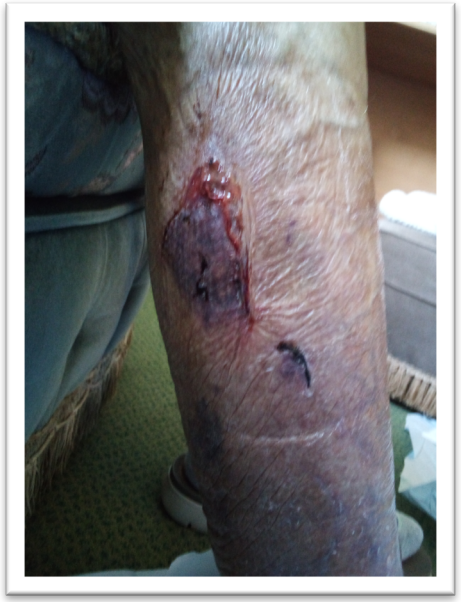
Linear or flap tear which can be repositioned to cover the wound bed



Type two

Partial skin loss

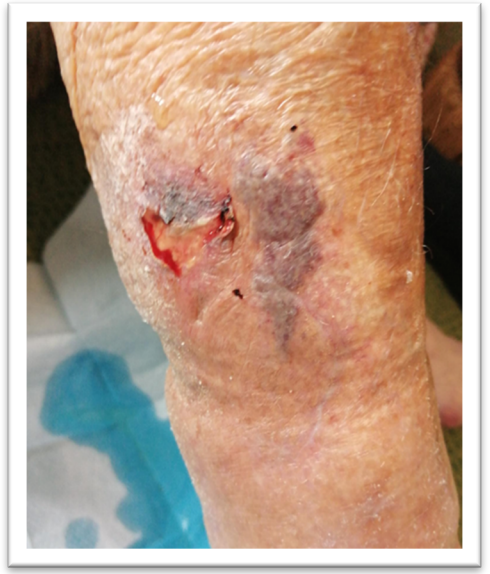
Partial flap loss which cannot be repositioned to cover the wound bed



Type three

Total skin loss

Total flap loss exposing entire wound bed



(ISTAP, 2018)

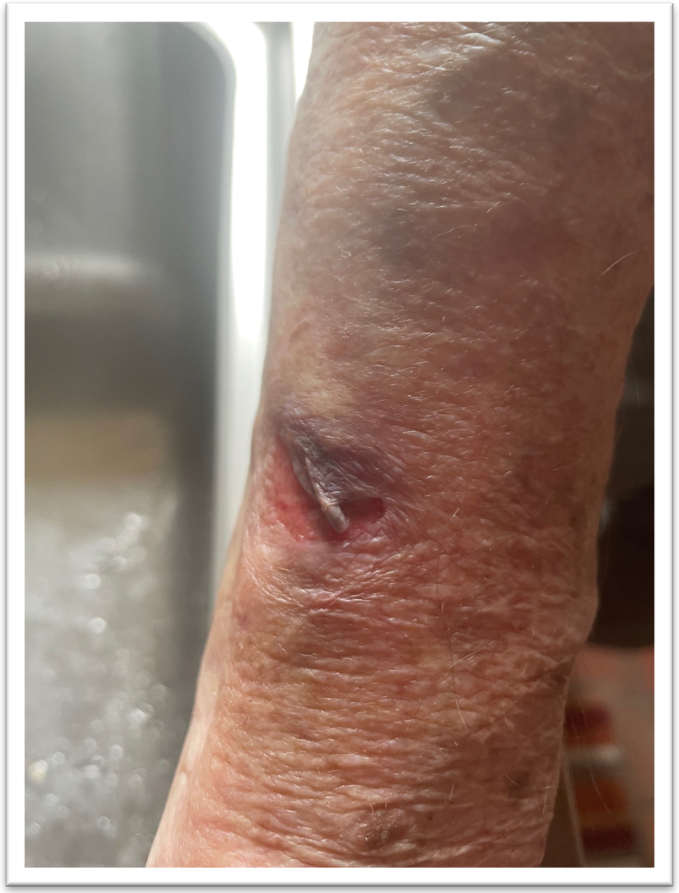
SKIN TEAR MANAGEMENT

Recommended:

- Control bleeding
- Cleanse wound
- Reapproximate flap — moistened gauze

Wound management product:

- Non-adherent
- Pain-free and atraumatic removal
- Optimise healing
- Avoid aggressive adhesive dressings
- Lower limb will require assessment/support

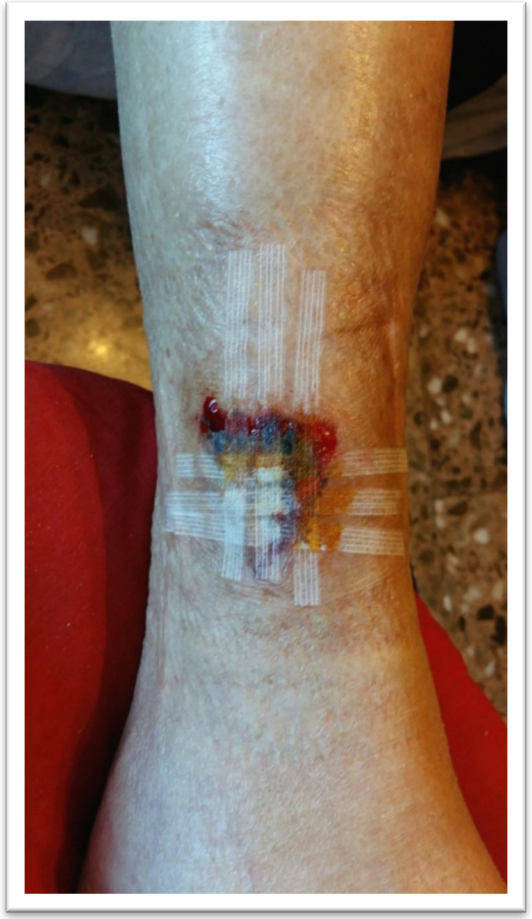


(ISTAP, 2018)

SKIN TEAR MANAGEMENT

Not recommended — consensus:

- Skin closure strips
- Staples/sutures (full-thickness lacerations only)
- Glue (type 1 only — expensive and generates hospital activity, iodine-based dressings)



(ISTAP, 2018)

DISCUSSION

NHS
Great Western Hospitals
NHS Foundation Trust

SKIN TEAR PATHWAY

5. DOCUMENT:

- Ensure all care plans, documentation, and templates are completed

6. REVIEW AND REASSESS:

- Monitor for any changes and observe for signs of infection, including increased pain, redness, exudate, heat, oedema and/or odour
- If the wound becomes infected, change the primary dressing to UrgoTul Silver for two weeks and review
- Consider systemic antibiotics only when indicated by clinical signs e.g. spreading erythema and/or if patient becomes systemically unwell
- Refer to the tissue viability team if flap deteriorates or becomes discoloured
- For any skin tears on the lower limb, refer to the Swindon Leg Ulcer Pathway to guide appropriate assessment and management, and escalate to the case load holder.

EXAMPLE:

Remove in the direction of the arrow

RISKS

- Age >75 years of age
- Dry/fragile skin
- History of previous skin tears
- Impaired mobility and/or vision
- History of Falls
- Cognitive /sensory impairment e.g. Dementia
- Poor nutrition and hydration
- Other conditions (diabetes; chronic heart disease; renal failure; venous stasis etc.)
- Medication – Consider those which may directly affect the skin e.g. topical/oral steroids

PREVENTION

- Daily skin inspection
- Use appropriate emollients to cleanse and rehydrate dry/fragile skin (i.e. Dermol 500 lotion as soap substitute/cleanser and warm water for cleansing; Doublebase Dayleve Gel as a moisturiser, applied twice daily to all at-risk skin)
- Make use of protective clothing i.e. long sleeves, trousers etc.
- Avoid sharp fingernails/jewellery for both staff and residents
- Avoid use of adhesive dressings and tapes where possible
- Ensure sensible, comfortable and correct fitting footwear
- Provide a safe environment – adequate lighting, removing any obstacles/barriers, padding for equipment and furniture
- Avoid friction and shear on skin – use slide sheets, hoists and good manual handling techniques
- Encourage adequate nutrition and hydration
- Make appropriate referrals to specialist services for support with impaired sensory impairment/perception (i.e. diabetes, visual impairment)
- Discuss reason for skin tear prevention strategies with family/carers to improve understanding and engagement

Skin Tear Pathway, Great Western Hospitals NHS Foundation Trust, 2021

SKIN TEARS – RISK ASSESSMENT

- Age — older than 75 years
- Dry, fragile skin
- History of previous skin tears
- Impaired mobility/vision
- History of falls
- Cognitive impairment, e.g. dementia
- Other conditions, e.g. diabetes
- Medication

SKIN TEARS – PREVENTION

- Daily skin inspection
- Emollients
- Protection of limbs — long sleeves or trousers
- Avoid sharp fingernails (in both patients and healthcare staff)
- Adequate light
- Safe environment to move around — good footwear
- Avoid friction/shear — good manual handling and slide sheets
- Adequate nutrition and hydration
- Refer if wound not progressing/infection

IN SUMMARY:

- Clinical signs observed may not just be a symptom of old age or mature skin, but may indicate underlying pathologies
- Treat your findings as per standard practice, monitor/re-evaluate in an appropriate timescale and escalate if no improvement, so that appropriate interventions can take place.

Contact details: Jacqueline.dark@nhs.net

SEND IN YOUR QUESTIONS FOR JACKIE & JACQUI

LIVE Q&A

SOLUTIONS TO SUPPORT GUIDELINES

Always aim for prevention, with effective dressings and skin care

For further information on the topics presented or the products below, please subscribe to Wound Club Online or contact us:

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