

A Peaceful Old Age, Begins with “SKIN”

安享晚年，從「膚」開始

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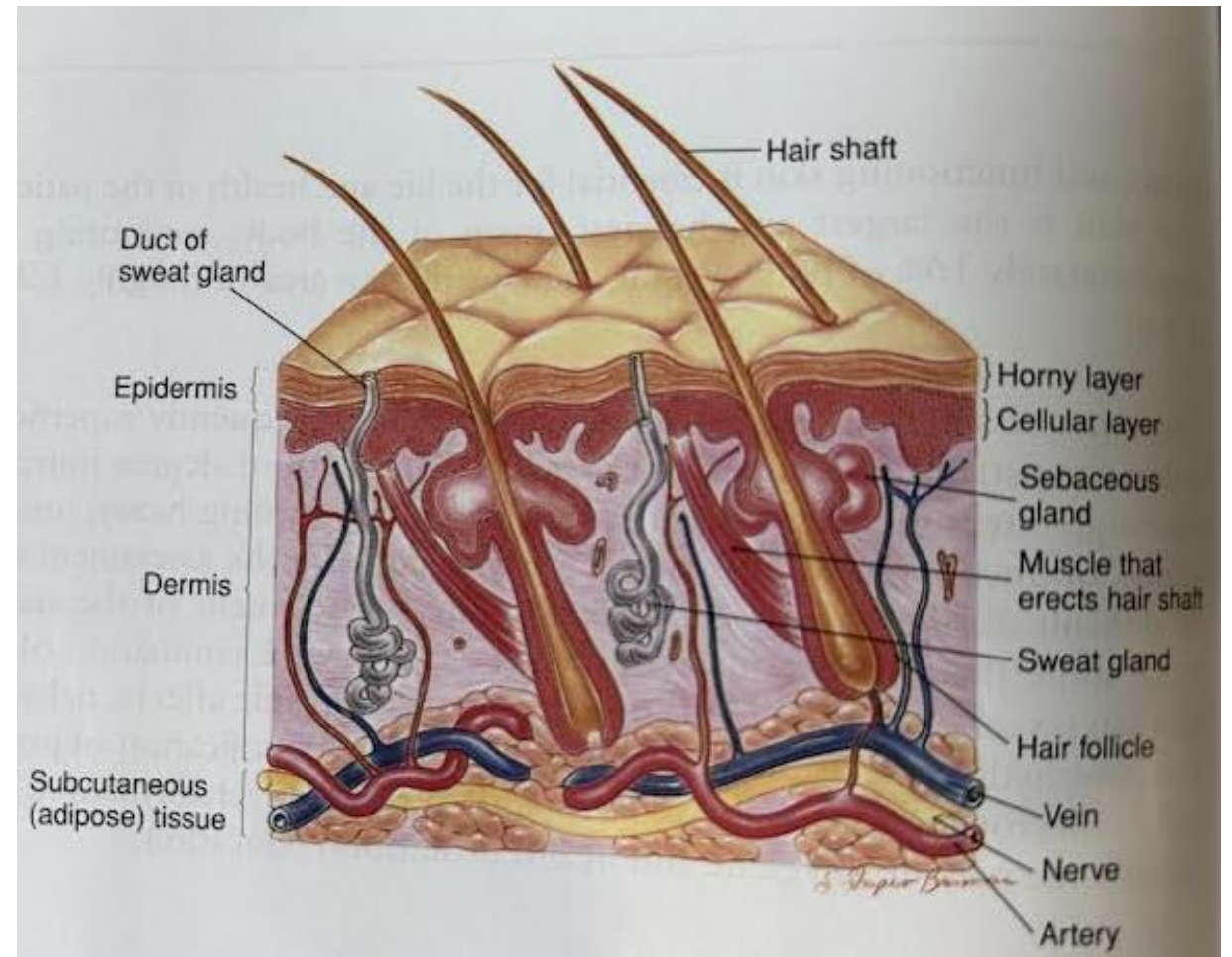
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Content

- Understand the skin
- The prevention and management of Incontinence Associated Dermatitis(IAD)
- The prevention and management of Skin Tear

The Skin

- Skin
- Sweat gland
- Sebaceous gland
- Hair
- Nail



Understand The Skin

- Biggest and heaviest organ
- 16% of the body weight
- Cover the area roughly 1.2 - 2.3m²

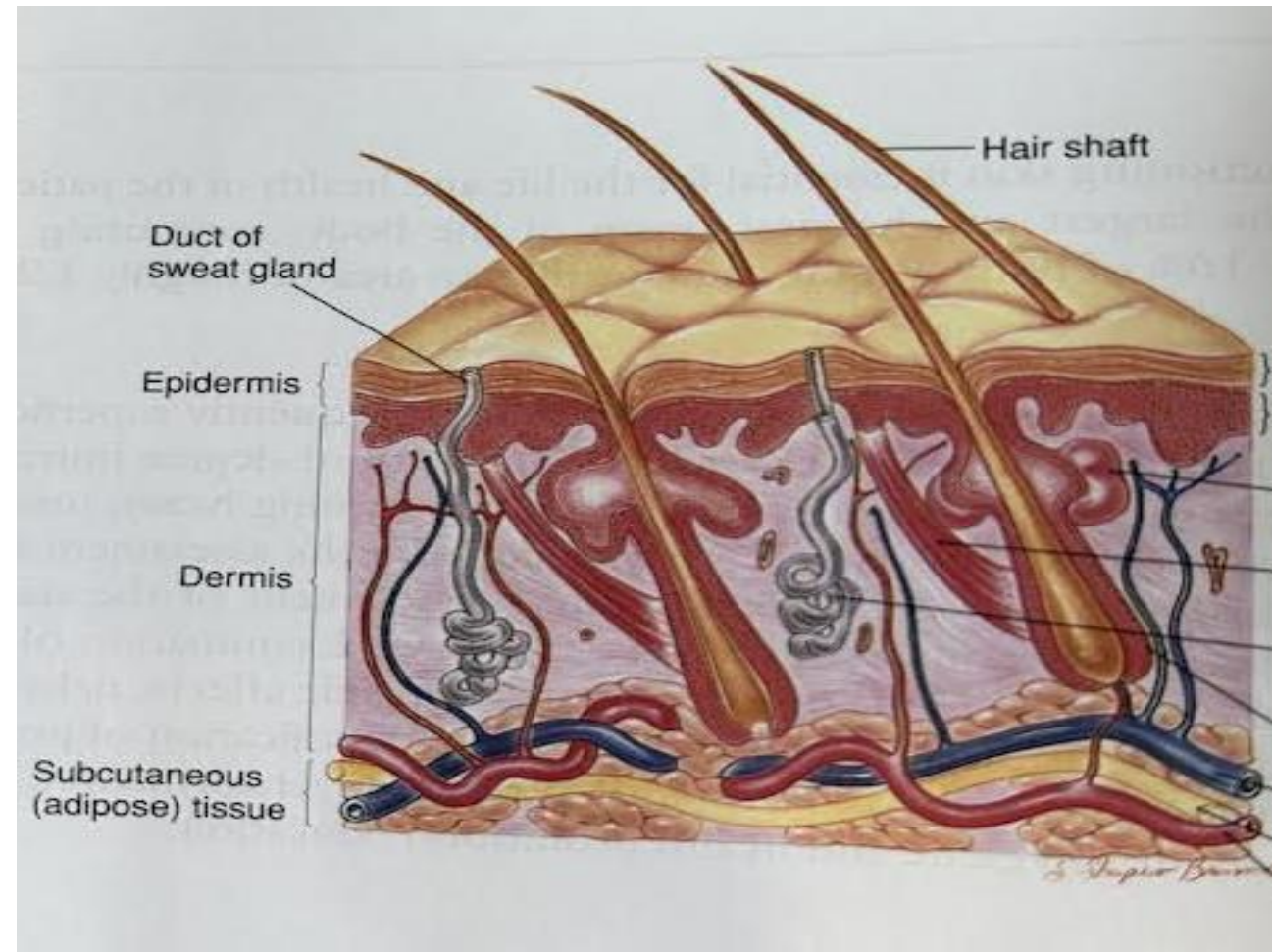
The Function of the Skin

- Provides a barrier protect the body from
 - penetration by micro-organism
 - injury secondary to mechanical ,chemical ,thermal and ultraviolet
 - loss of water and electrolytes
- Regulates body temperature
- Allows sensory perception : touch ,pain ,pressure and temperature
- Allow wound repair
- Allow excretion of metabolic wastes
- Synthesizes Vitamin D
- Provide non –verbal communication

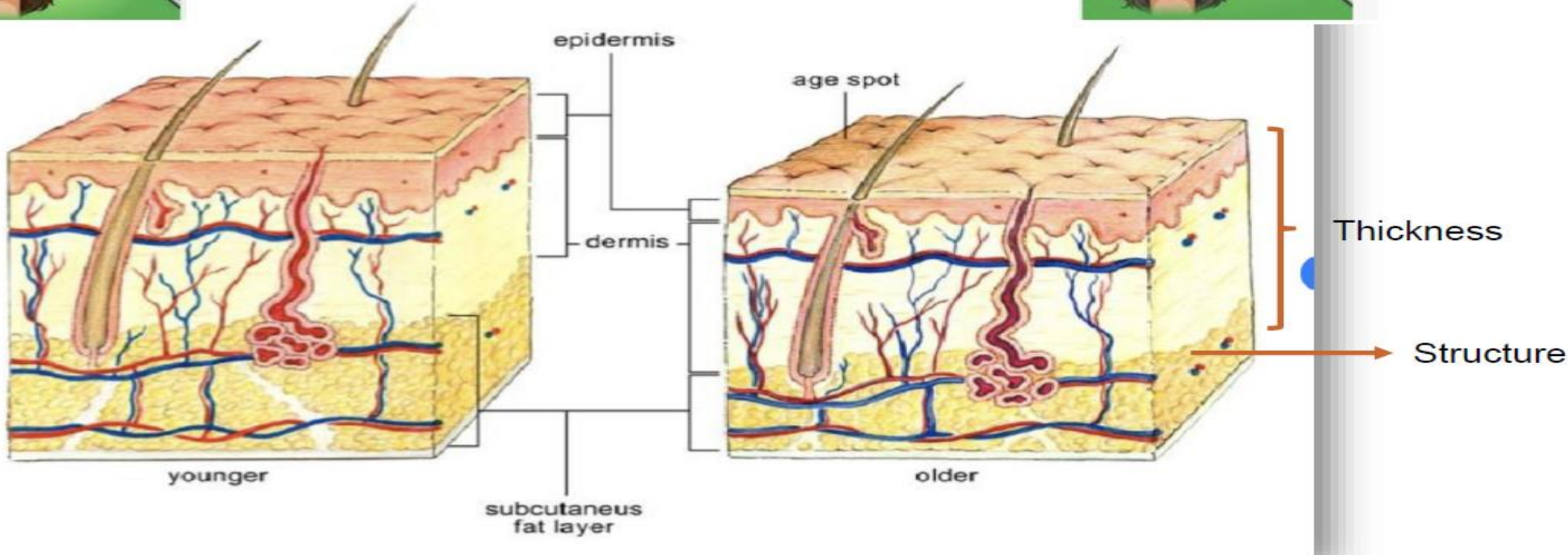
The Structure of the Skin

It consists of three layers:

- Epidermis
- Dermis
- Subcutaneous Tissue



Aging Affect Skin



When Skin Goes Aging

- 📖 Fragility
- 📖 Risk of ischemic ulcers
- 📖 Risk of injury
- 📖 Vulnerability to shear forces



- Immune Function
- Wound healing
- Skin elasticity
- Sensation to light, touch, pressure
- Production of Vitamain D

All these bring negative impacts to the elderly

Assessment of Skin

- Colour
- Moisture
- Temperature
- Texture and turgor
- Edema

2 Common Wounds in Elderly



Incontinence Associated
Dermatitis (IAD)



Skin tear

The Prevention and Management of Incontinence Associated Dermatitis(IAD)



Incontinence Associated Dermatitis (IAD)

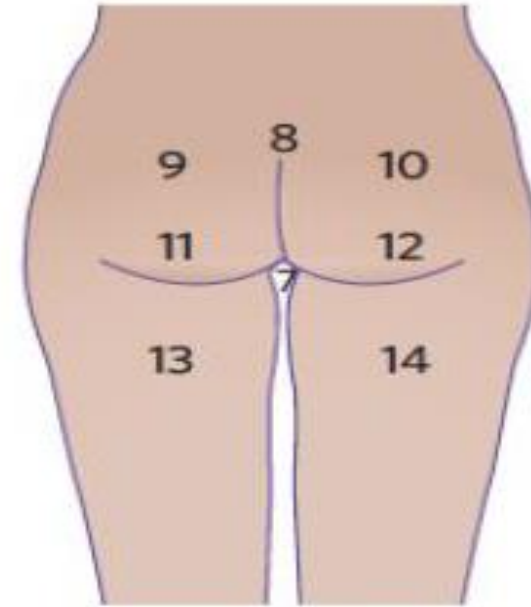
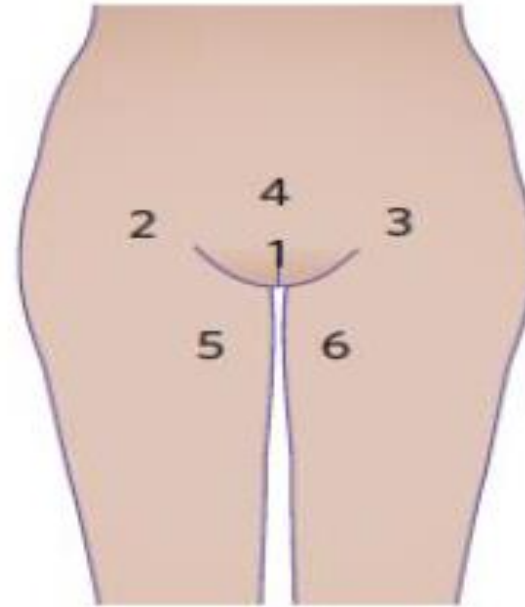
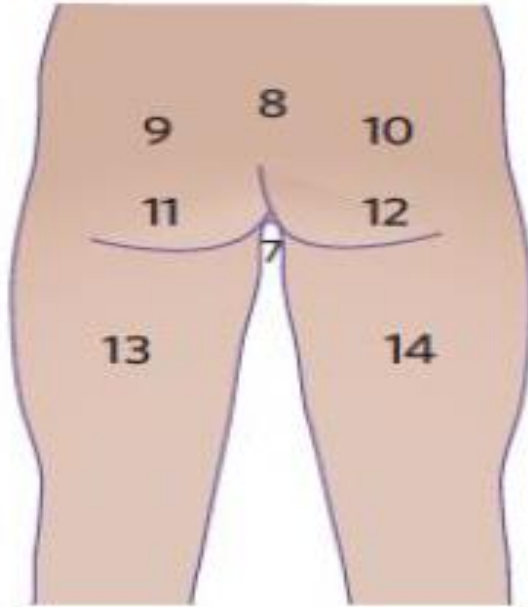
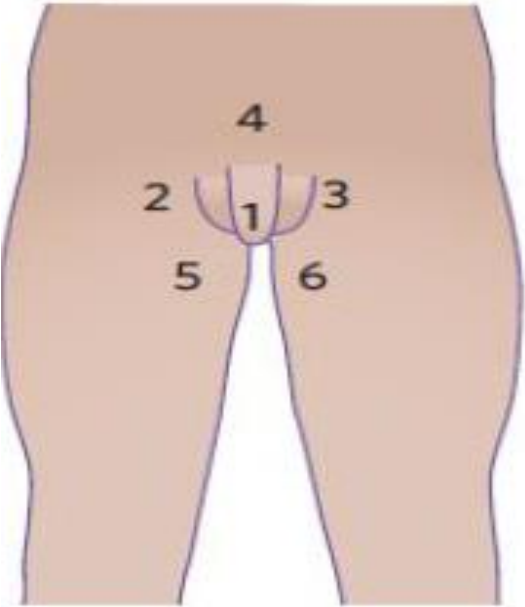
- Is a type of Moisture-associated skin damage (MASD) or irritant contact dermatitis (inflammation of the skin)
- Skin damage associated with exposure to urine +/- stool
- Cause dermatitis over perineal or related areas



Causes of IAD

- Prolonged exposure to urine and faeces
- Absorptive or incontinence containment devices
- Thick occlusive skin protectant products
- Frequent skin cleansing with water and soap
- Aggressive cleansing technique

Common IAD Affected Area



1. Genitalia (labia/scrotum)
2. Right groin fold (crease) between genitalia and thigh
3. Left groin fold (crease between genitalia and thigh)

4. Lower abdomen/suprapubic
5. Right inner thigh
6. Left inner thigh
7. Perinanal skin
8. Gluteal fold (crease between buttocks)

9. Left upper buttock
10. Right upper buttock
11. Left lower buttock
12. Right lower buttock
13. Left posterior thigh
14. Right posterior thigh

IAD Categorization :1 Persistent redness

1A - Persistent redness without clinical signs of infection



Critical criterion

- Persistent redness
A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour.

Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

1A

1B - Persistent redness with clinical signs of infection



Critical criteria

- Persistent redness
A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour.
- Signs of infection
Such as white scaling of the skin (suggesting a fungal infection) or satellite lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection).

Additional criteria

- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- The skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

1B

IAD Categorization :2 skin loss

2A - Skin loss without clinical signs of infection



Critical criterion

- Skin loss
Skin loss may present as skin erosion (may result from damaged/eroded vesicles or bullae), denudation or excoriation. The skin damage pattern may be diffuse.

Additional criteria

- Persistent redness
A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour
- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

2A

2B - Skin loss with clinical signs of infection



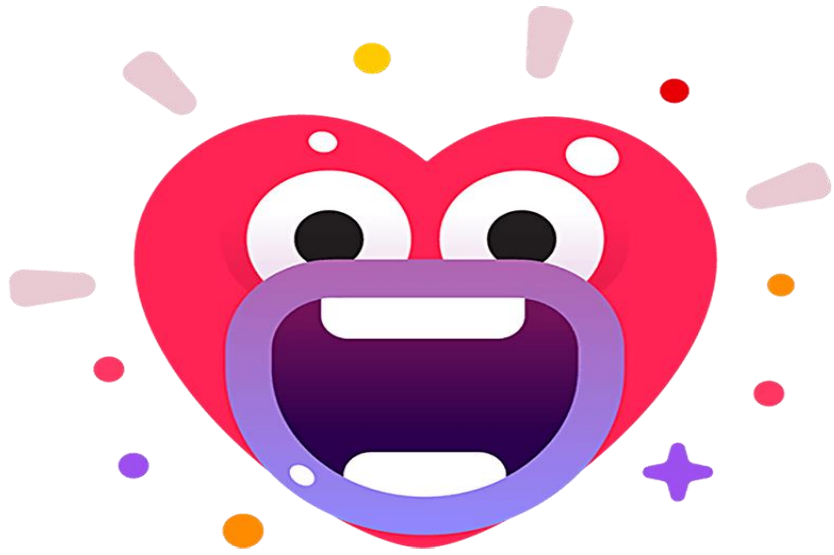
Critical criteria

- Skin loss
Skin loss may present as skin erosion (may result from damaged/eroded vesicles or bullae), denudation or excoriation. The skin damage pattern may be diffuse.
- Signs of infection
Such as white scaling of the skin (suggesting a fungal infection) or satellite lesions (pustules surrounding the lesion, suggesting a Candida albicans fungal infection), slough visible in the wound bed (yellow/brown/greyish), green appearance within the wound bed (suggesting a bacterial infection with Pseudomonas aeruginosa), excessive exudate levels, purulent exudate (pus) or a shiny appearance of the wound bed.

Additional criteria

- Persistent redness
A variety of tones of redness may be present. Patients with darker skin tones, the skin may be paler or darker than normal, or purple in colour
- Marked areas or discolouration from a previous (healed) skin defect
- Shiny appearance of the skin
- Macerated skin
- Intact vesicles and/or bullae
- Skin may feel tense or swollen at palpation
- Burning, tingling, itching or pain

2B



Once **IAD occurs** , there is a high risk for
pressure injury development

Management 1/2

1) Treat the infection (if any)

2) Manage Incontinence

- Treat the reversible causes
- Promote continence
- Use the high absorbent incontinence devices
- In severe case, may consider temporary diversion of urine / faeces



Selection of the diaper

- Suitable size
- Diaper with lower PH value
- high absorbent diaper



9 滴



10 滴



夜用

臀圍(cm):

S - 70-90 cm

M - 85-120 cm

L - 115-145 cm

XL - 140-175 cm

量度最闊臀圍 (不要量度腰圍)



吸濕量:

S - 2546 ml

M - 3521 ml

L - 3856 ml

XL - 3951 ml



夜用

臀圍(cm):

S - 70-90 cm

M - 85-120 cm

L - 115-145 cm

XL - 140-175 cm

量度最闊臀圍 (不要量度腰圍)



吸濕量:

S - 2771 ml

M - 3588 ml

L - 4085 ml

XL - 4380 ml



Management 2/2

3) Implement a structure skin care regime

- Cleaning
- Protection



Structure Skin Care Regime :Cleaning

- Soap & water are not recommended
- Suggest skin cleaner with pH similar with normal skin and contain of surfactants to effective remove debris by minimum force

BOX 5 | Principles of CLEANSE in the prevention and management of IAD (adapted from^{16,65,66})

- Cleanse daily and after every episode of faecal incontinence
- Use gentle technique with minimal friction, avoid rubbing/scrubbing of skin
- Avoid standard (alkaline) soaps
- Choose a gentle, no-rinse liquid skin cleanser or pre-moistened wipe (designed and indicated for incontinence care), with a pH similar to normal skin
- If possible, use a soft, disposable non-woven cloth
- Gently dry skin if needed after cleansing

Type of skin care product: Cleaning



Type of Skin care product	Description
Bath Wipe	No rinse saturated wet disposable towel
Cleanser (foam / wipe)	No rinse, close to pH, mild acidic with surfactant <u>+/- dimethicone or other skin care formula</u>



Aim to remove all the irritants!

Structure Skin Care Regime :Protecting

Protecting:

- Doing after cleaning
- Form a barrier
- skin protectant should help promote resolution of IAD and allow the skin barrier to recover.

BOX 6 | Principles of skin protectant use in the prevention and management of IAD

- Apply the skin protectant at a frequency consistent with its ability to protect the skin and in line with manufacturer's instructions
- Ensure the skin protectant is compatible with any other skin care products, e.g. skin cleansers that are in use
- Apply the skin protectant to all skin that comes into contact with or potentially will contact urine and/or faeces

Structure Skin Care Regime: Protecting

TABLE 4 | Characteristics of the main types of skin protectant ingredients (adapted from^{3,13,17,28,67,68})

Principal skin protectant ingredient	Description	Notes
Petrolatum (petroleum jelly)	Derived from petroleum processing Common base for ointments	<ul style="list-style-type: none">■ Forms an occlusive layer, increasing skin hydration■ May affect fluid uptake of absorbent incontinence products■ Transparent when applied thinly
Zinc oxide	White powder mixed with a carrier to form an opaque cream, ointment or paste	<ul style="list-style-type: none">■ Can be difficult and uncomfortable to remove (e.g. thick, viscous pastes)■ Opaque, needs to be removed for skin inspection
Dimethicone	Silicone-based; also known as siloxane	<ul style="list-style-type: none">■ Non-occlusive, does not affect absorbency of incontinent products when used sparingly■ Opaque or becomes transparent after application
Acrylate terpolymer	Polymer forms a transparent film on the skin	<ul style="list-style-type: none">■ Does not require removal■ Transparent, allows skin inspection



Take Home Messages



- IAD is difference with PI(Pressure Injury)
- It is **PREVENTABLE**
- Early intervention can minimize the risk of PI development

The Prevention and Management of Skin Tear

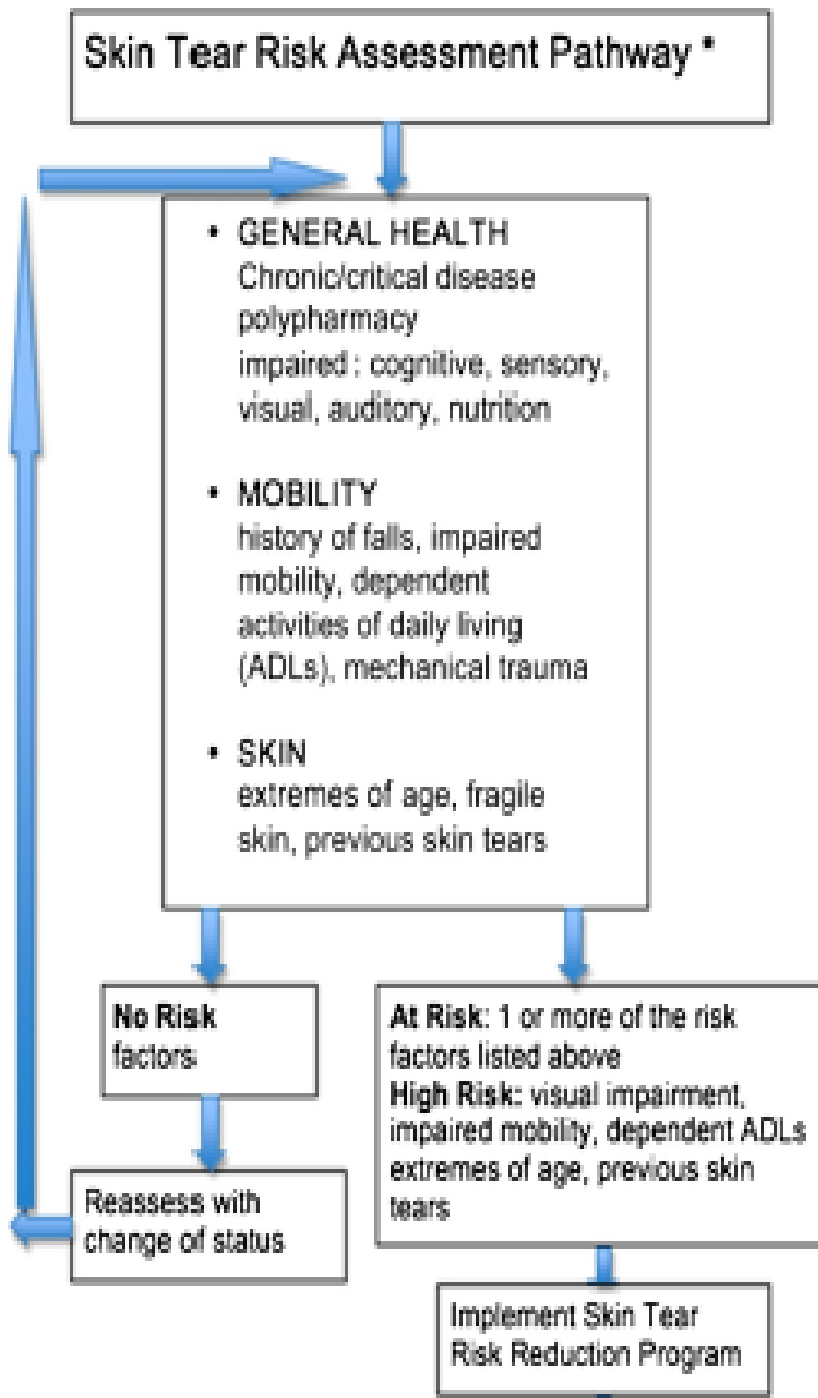


Skin Tear

A skin tear is a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth .

2018 International Skin Tear Advisory Panel (ISTAP)

International skin Tear Advisory Panel (ISTAP)



Category of Skin Tear

ISTAP Skin Tear Classification

Type 1: No Skin Loss Type 2: Partial Flap Loss Type 3: Total flap loss



Linear or Flap Tear which can be repositioned to cover the wound bed

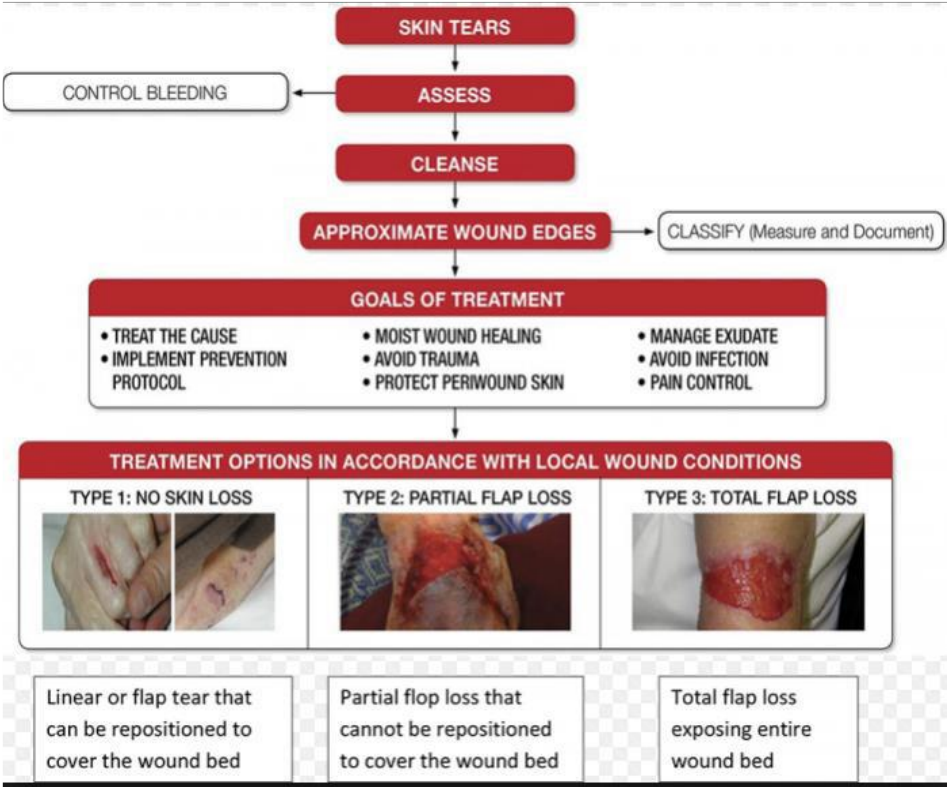
Partial Flap loss which cannot be repositioned to cover the wound bed

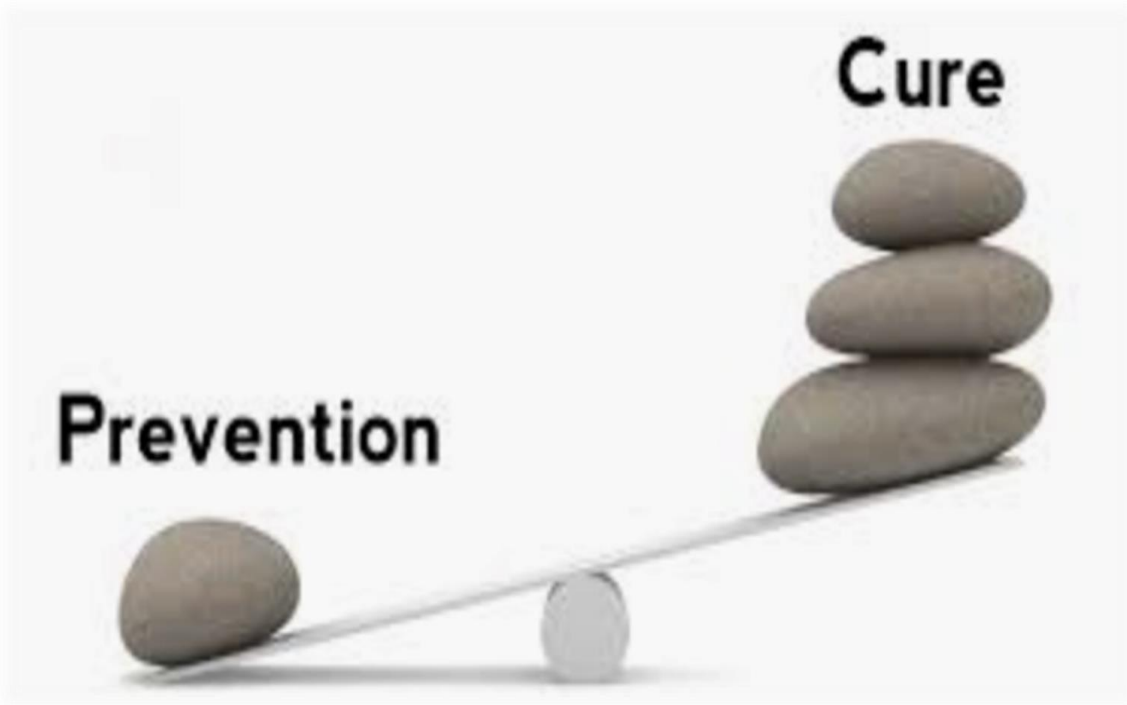
Total Flap loss exposing entire wound bed

LeBlanc et al 2013

The image displays three clinical photographs of skin tears. The first shows a linear laceration on a hand. The second shows a partial flap laceration on a forearm. The third shows a total flap loss on a forearm, exposing the underlying tissue.

Management Plan for Skin Tear





What Can We DO?



Skin Tear Care Plan

- Regular skin assessment
- Assess the risk factor for early prevention
- Promptly intervention for skin tear

Prevention of Skin Tear 1/2

Maintain skin integrity

- Hypoallergenic moisturizer, maintain moisture of skin
- Consider of fewer bath, avoid bath with hot water
- Avoid strong alkaline cleaner
- Avoid over moist
- Maintain hydration status



Prevention of Skin Tear 2/2

Prevent injury

Skin Protection

- Avoid dry skin, avoid scratch
- Prevent injury, e.g. avoid tape, physical restrain
- Protective sleeves / clothes with sleeves
- Handle with care, proper handing technique
- Use assistive device, e.g. draw sheet, if needed



Skin Tear Protective Sleeves for Arm or Leg

Environmental

- Pad equipment / furniture
- Beware sharp objects with patient contact
- Safe environment with good lighting



Wound Cleaning

Irrigate the wound by N.S (low pressure)

- To remove debris, blood clot
- To minimize further trauma
- To control pain

Gently pat dry the surrounding skin

-> avoid further injury



Reserve Flap

- If the flap is viable --> place it back gently (by cotton tip / gloved dinger)
- If the flap is difficult to align --> rehydrate the flap by moistened non woven swab for 5 10 mins
- **ONLY** remove the significant non viable flap in last resort

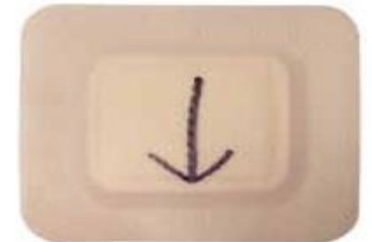


Wound Dressing

- Keep moist
- If possible, leave the dressing for several days, e.g. 7 days for type 1 / 3-5 days for type 2-3 (depends on exudate), to avoid disturbing the flap
- If opaque dressing is used, mark the arrow to indicate the direction



Skin tear



Arrow to indicate direction of dressing removal



Remove in the direction of the arrow

Selection of the Dressing

Condition of the wound	Choices of dressing
NO exudate	Hydrogel
Clean Mild –Moderate exudate	Acrylic dressing
Active Bleeding	Calcium Alginate
Moderate to heavy exudate	Hydrofiber Foam
Infected	Ionic silver

Possible Wound Dressing

- Not consider for suturing& stapling due to fragile skin
- If sterile strap is used, not really recommended in nowadays, if use, avoid tension and leave spaces between for exudate drainage



Secure of the Dressing

- Minimize tape on skin, avoid strong tape on skin
- Use stocking like products or cotton gauze wraps





Take Home Message

Most of skin tears are avoidable !

Prevention:

- Moisturizer +tube gauze

Management:

- Stop bleeding
- Reserve the flap
- Control Pain
- Prevent infection
- Prevent further trauma



Thank
You

