PREVENTION AND MANAGEMENT OF SKIN TEARS

## WHAT IS A SKIN TEAR?

- "A skin tear is a traumatic wound caused by mechanical forces, including removal or adhesives. Severity may vary by depth." (ISTAP).
- Skin tears are caused by a partial or full separation of the skin's outer layers.
  - Epidermis from dermis = partial thickness.
  - Epidermis and dermis from underplaying structures = full thickness.
- Skin tears can result from friction, blunt trauma, falls, poor handling, removal of adhesive dressing.
- In aged or very young skin, less force is needed to cause trauma, resulting in increase incidence of skin tears.
- A skin tear can be uncomplicated = heals in 4 weeks Or complicated = complex or chronic.

# INTRODUCTION

- A skin tear is a different classification to laceration or abrasion.
- Skin tears can cause pain, reduced quality of life and distress.
- Skin tears can increase likelihood of hospitalisation and prolonged hospitalisation.
- Skin tears can occur in any age group but are more common in the elderly due to their frail skin.
- More common on extremities and dorsal of hands.

# CAUSES OF SKIN TEARS

- Skin tears are caused by a combination of intrinsic and extrinsic factors.
- It is important to determine the cause of the skin tear or documentation purposes and to prevent further skin tears.
- 1. Blunt trauma
- 2. While performing activities of daily living
- 3. Dressing/treatment related
- 4. Falls
- 5. Equipment injury (wheelchair, side rail, bed)
- 6. During patient transfer (friction and shear)

## **INTRINSIC RISK FACTORS**

- The natural aging process causes skin to become frail and vulnerable to damage.
- Older adults are at increased risk even from minor trauma due to the skin's reduced ability regenerate and its less effective immune system.
- Age related changes:
  - Thinning of the epidermis
  - Less collagen and elastin
  - Atrophy and contraction of the dermis
  - Decrease activity of the sweat and sebaceous glands cause skin to dry out
  - Thinning of blood vessel walls and reduced blood flow to extremeties

### EXTRINSIC RISK FACTORS

- Patient who need assistance with activities of daily living are at increased risk due to increased handling, force and/or trauma.
- How to reduce extrinsic risk:
  - Keep fingernails short and avoid wearing jewellery.
  - Either pad or remove potentially dangerous furniture or equipment (wheelchair, bed rail).
  - Cover skin with appropriate clothing, skin guards, or bandages/stockinettes.
  - Protect skin by using a neutral pH skin products.

## MINIMISING RISK

- Recognise patients who are at increased risk as this is essential for prevention.
- Determining risk means that recourses can be put in place to prevent skin tears.

#### General health

- Chronic disease
- Aggressive behaviour Mobility
- Dependant of ADLs
- History of falls

#### Skin

- History of previous skin tears
- Age related skin changes
- Sun damage



- shear, friction, blunt force trauma
- Individual/care-giver/healthcare
- Knowledge of preventing skin tears
- Attitude
- Approach to providing care
  - Physical environment Healthcare setting
- Skin tear audits
- Support for skin tear reduction programmes
- Interprofessional approach to care

#### Skin tear developmen t

#### Skin tear risk assessment

#### **Risk categories**

- Skin: extremes of age, dry/frail skin, previous skin tear
- M**obility**: history of falls, impaired mobility, dependant for ADLs, mechanical trauma

- *General health*: comorbidities, polypharmacy, impaired cognition, malnutrition

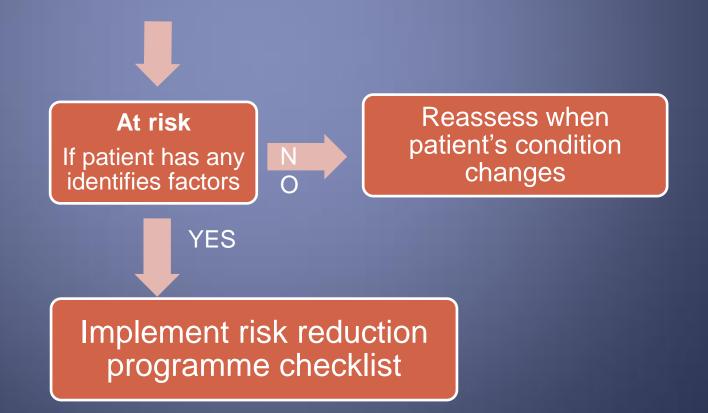


Table 1. Risk reduction programme checklist (adapted from LeBlanc and Baranoski, 2011)	
RISK FACTOR	ACTION
Skin	<ul> <li>Inspect skin and investigate previous history of skin tears</li> <li>If patient has dry, fragile, vulnerable skin, assess risk of accidental trauma</li> <li>Manage dry skin and use emollient to rehydrate limbs as required</li> <li>Implement an individualised skin care plan using a skin-friendly cleanser (not traditional soap) and warm (not hot) water</li> <li>Prevent skin trauma from adhesives, dressings and tapes (use silicone tape and cohesive retention bandages)</li> <li>Consider medications that may directly affect skin (e.g. topical and systemic steroids)</li> <li>Be aware of increased risk due to extremes of age</li> <li>Discuss use of protective clothing (e.g. shin guards, long sleeves or retention bandages)</li> <li>Avoid sharp fingernails or jewellery in patient contact</li> </ul>
Mobility	<ul> <li>Encourage active involvement/exercises if physical function is impaired</li> <li>Avoid friction and shearing (e.g. use glide sheets, hoists), using good manual handling techniques as per local guidelines</li> <li>Conduct falls risk assessment</li> <li>Ensure that sensible/comfortable shoes are worn</li> <li>Apply clothing and compression garments carefully</li> <li>Ensure a safe environment — adequate lighting, removing obstacles</li> <li>Use padding for equipment (as per local policy) and furniture</li> <li>Assess potential skin damage from pets</li> </ul>
General health	<ul> <li>Educate patient and carers on skin tear risk and prevention</li> <li>Actively involve the patient/carer in care decisions where appropriate</li> <li>Optimise nutrition and hydration, referring to dietician if necessary</li> <li>Refer to appropriate specialist if impaired sensory perception is problematic (e.g. diabetes)</li> <li>Consider possible effects of medications and polypharmacy on the patient's skin</li> </ul>

### IDENTIFICATION AND ASSESSMENT

- Identifying skin tears is important to manage appropriate care going forward.
- Initial wound assessment:
  - Cause of wound
  - Anatomical location and duration of injury
  - Dimensions (width, length and depth)
  - Wound bed characteristics (percentage of viable and non-viable tissue)
  - Type and amount of exudate
  - Bleeding or haematoma
  - Integrity of surrounding skin
  - Associated pain
- Holistic assessment
  - Medical history
  - Previous skin tears
  - Comorbidities
  - Polypharmacy use
  - Mental health issues
  - Quality of life
  - Mobility/ dependence for ADLs
  - Nutrition and hydration

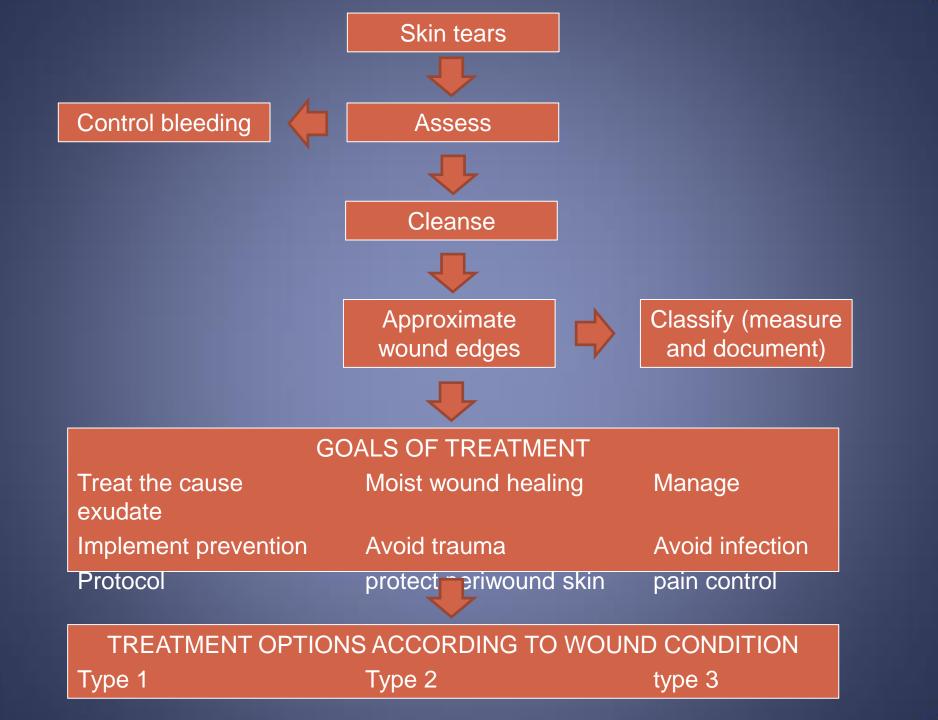
### IDENTIFICATION AND ASSESSMENT

#### Classification

- Type 1 skin tear no skin loss
  - Linear or flap tear where the skin flap can be repositioned to cover the wound bed.
- Type 2 skin tear partial flap loss
  - The skin flap cannot be repositioned to cover the whole wound bed.
- Type 3 skin tear total flap loss
  - Total skin flap loss that exposes the entire wound bed.

### MANAGEMENT OF SKIN TEARS

- When possible the aim of treatment should be to preserve the skin flap and maintain the surrounding tissue, re-approximate the edges of the wound and reduce the risk of infection and further injury.
- Caregivers should be encouraged to perform first aid to preserve the flap.



# INITIAL TREATMENT GOALS

- Control bleeding
  - Apply pressure and elevate the limb if appropriate.
  - If the wound is bleeding then apply dressings to assist with haemostasis.
- Cleanse and debride
  - Irrigate the wound as per WDHB policy and remove debris or haematoma gently then pat dry.
  - If the skin flap is necrotic then it should be removed taking care not to damage viable skin.
  - If the skin is viable the re-approximate the wound edges. Use a gloved finger, damp cotton bud or tweezers.
- Manage infection/inflammation
  - Wound infection can cause pain and delayed wound healing.
  - Check patient's tetanus immunisation status.
- Consider moisture balance/exudate control
  - Moisture balance is important foe would healing to protect the peri-wound.
  - Observe the volume and viscosity of the exudate when selecting a wound dressing.
- Monitor wound edge/closure
  - Skin tears are acute injuries therefore proceed to closure promptly.
  - Ensure all factors that can lead to delayed healing are addressed (diabetes, oedema, malnutrition).

# PREVENTING SKIN TEARS

- Avoid friction and shear by ensuring good manual handling and using hoists and sliding sheets when appropriate.
- Use padding for furniture or equipment.
- Ensure the environment is safe: good lighting and clutter free particularly for patients with cognitive or visual impairment.
- Complete falls risk assessment.
- Complete delirium screen.
- Use of protective clothing. Bandages or stockinettes.
- Avoid sharp fingernails and jewellery.

### DRESSINGS THAT ARE NOT RECOMMENDED

- Iodine based dressings can dry the wound and the peri-wound.
- Film/hyrocolloid dressings are a strong adhesive and can cause further skin tears.
- Steristrips can cause further skin tears.
- Gauze as it does not secure the flap and there is increase risk of flap displacement when changing the secondary dressing and increases risk of necrosis.

## **REMOVING DRESSINGS**

- Mark the dressing with an arrow to indicate in which direction the dressing should be removed to prevent further injury.
- Adhesive removers should be used when removing dressings to prevent trauma.
- Take time to remove dressings.
- Use a skin barrier to protect surrounding skin.

### **RECOMMENDED DRESSING**

- At risk skin: moisturise twice daily.
- Type 1 skin tear: mepitel, absorbent dressing then fixation dressing (crepe).
- Type 2 skin tear: mepitel, absorbent dressing then fixation dressing (crepe).
- Type 3 skin tear: a dressing with absorbent centre and adhesive edges.

#### Gentle

#### Reduces pain and skin damage for patients<sup>2,3,6</sup>

- One sided Safetac<sup>®</sup> interface minimises patient discomfort during dressing removal<sup>3</sup>
- Safetac technology seals the wound margins and a reduces risk of maceration<sup>2,3</sup>
- Safetac technology will not adhere to the moist wound bed, only dry skin<sup>2,3</sup>

### MEPITEL

#### Durable

Mepitel<sup>®</sup> One

#### Supports optimal undisturbed healing<sup>1-5</sup>

- Advanced dressing maintains product properties over time leaves no residue<sup>7</sup> and will not dry out
- Safetac adhesive technology provides optimal fixation<sup>3</sup> - can remain in place for up to 14 days<sup>4</sup>

#### **Easy** Supports healing progress<sup>4</sup> and care providers

- Pre-printed symbol facilitates safe removal on skin tears with a fully or partially intact flap\*
- Transparent net enables optimal wound assessment avoiding unnecessary dressing changes<sup>5</sup>
- Perforated structure allows topical preparations to pass through to wounds effectively<sup>18</sup>
- \* Available in three sizes 6x7cm, 9x10cm and 13x15cm

#### How Mepitel® One works

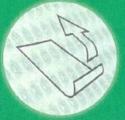
Mepitel One can be left in place for up to 14 days<sup>4</sup> depending on the condition of the wound. This reduces the necessity for frequent primary dressing changes. The open, perforated structure of Mepitel One allows exudate to pass into an outer absorbent dressing. The Safetac<sup>®</sup> layer prevents the outer dressing from sticking to the wound and protects it during the healing phase. The Safetac layer seals around the wound edges preventing exudate from leaking onto the surrounding skin minimising the risk of maceration.

#### Areas of use

Mepitel One is a wound contact layer designed for the management of a wide range of exuding wounds such as: skin tears, skin abrasions, surgical incisions, partial thickness burns, traumatic wounds, partial and full thickness grafts, radiated skin, leg and foot ulcers. It can also be used as a protective layer on non-exuding wounds, blisters and on areas with fragile skin.

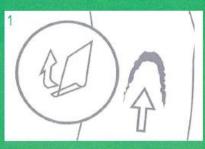
#### Precautions

- If you see signs of infection e.g. fever, the wound or surrounding skin becoming red, warm or swollen, consult a health care professional for appropriate treatment
- Always consult a health care professional before using Mepitel One on Epidermolysis Bullosa patients
- Do not use Mepitel One on patients with known sensitivity to silicone or polyurethane
- Sterile. Do not use if inner package is damaged or opened prior to use. Do not re-sterilise
- Do not reuse. If reused performance of the product may deteriorate and cross contamination can occur



Mepitel One with this symbol can help you apply and remove the dressing on skin tears. For these wounds, there is a risk of re-opening the flap when removing the dressing.

#### How to use Mepitel® One



1. Cleanse the wound in accordance with clinical practice and dry the surrounding skin thoroughly. Choose a size of Mepitel One that covers the wound and the surrounding skin by at least 2cm. If needed, the dressing can be cut.







2. Apply the dressing with the arrow pointing in the same direction as the flap. When removing the dressing, begin removal in the direction the arrow is pointing, from the back of the skin flap.

Place the back of the arrow to the back of the flap.

3. Apply Mepitel One with the sticky side to the wound. The dressing is applied in a correct way when you can read the text printed on the dressing. Smooth the dressing in place onto the surrounding skin to ensure a good seal.

4. Apply an outer absorbent dressing, such as Mesorb® over the top of Mepitel One and fixate with a gentle retention bandage such as Tubifast®

## ADDITIONAL LEARNING

- Go to bit.ly/32c18Hs to watch a 20minute video on skin tears.
- Hours can go towards your CPD.