Differentiating Between Pressure Injuries—Comprehensive Care Standard

Brighton Subacute Services

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Learning outcomes

- Describe how to differentiate a pressure injury from other similar wounds
- Explain the importance of correct diagnosis
- Discuss wound assessment factors that allow correct classification of skin integrity breakdown
- Identify two classification systems for skin tears
- Recognize significant factors that assist in classifying wounds correctly
Causes?

Pressure/Shear at Injury Site?

YES

Deepest tissue type visible or palpable?

YES

- Unstageable (obscured by slough or eschar)
- Deep Tissue Pressure Injury
- Non-Visible (under non-removable dressing or device—NDMCI/CMS only)

- Mucosal Membrane Pressure Injury (name, count, but do not stage)

NO

Exception: On Mucous Membrane

Wounds & skin injuries due to:

Disease:
- Arterial ulcers
- Venous ulcers
- Diabetic Foot ulcers

Moisture:
- MASD
- IAD
- Intertriginous dermatitis

Trauma:
- Skin tears
- MARSI
- Burns
- Abrasions
- Bruises

*See NPUAP staging definitions.

Classify/stage first. THEN determine if etiology is related to a medical device.
Pressure injuries

Pressure/Shear at Injury Site?

- YES
  - Deepest tissue type visible or palpable?
    - YES
      - Stage 1
      - Stage 2
      - Stage 3
      - Stage 4
    - Exception: On Mucous Membrane
      - Unstageable (obscured by slough or eschar)
      - Deep Tissue Pressure Injury
      - Non-Visible (under non-removable dressing or device—NDM/NDH only)
    - Mucosal Membrane Pressure Injury (name, count; but do not stage)
      - Classify/stage first. THEN determine if etiology is related to a medical device.

- NO
  - NO (or other causes also exist)

Wounds & skin injuries due to:

- Disease:
  - Arterial ulcers
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- Trauma:
  - Skin tears
  - MARS
  - Burns
  - Abrasions
  - Bruises

.... and many other causes.

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Why is it important to get it right?

- Correct treatment
- Assessment of healing
- Financial implications – fines, treatment costs
- To continue to develop your skills as a nurse
Assessing pressure injuries in dark-skinned individuals

Tangential lightening
- Avoid bright, direct light
- Moistening skin may help
- Palpate bony prominences and surrounding tissue for differences in:
  - Temperature
  - Tissue consistency (firm, boggy)
  - Pain with palpation
- New Technologies: (e.g. thermography, ultrasound)
True Extent of Injury Revealed after Debridement

What are the clues on initial assessment?
How Should I Stage “DTPI in evolution”?

Day 1 - Classify intact, discolored skin with pressure as a Deep Tissue Pressure Injury
• Day 3 - Classify discolored skin with epidermal blistering as a Deep Tissue Pressure Injury
• Day 10 - If the Deep Tissue Pressure Injury becomes necrotic, classify it as an Unstageable Pressure Injury

Used with permission J Black.
How would you stage this pressure injury?
It depends…

If stage of healing is:

• 1. A closed pressure injury is one that has *completely epithelialized.*

• 2. A healed pressure injury exhibits *fully restored epidermal integrity and stability.*

• 3. A mature resolved pressure injury is one that has transitioned through the *remodeling phase of healing.*

Then new injury is:

1. A *reopened* pressure injury is one where the epithelium reopens before the wound has fully matured.

2. A healed pressure injury that reopens before reaching the mature resolved pressure injury status should be considered a *recurrent pressure injury.*

3. The breakdown of previously unwounded tissue or breakdown at the site of a *mature* resolved pressure injury would be considered a *new pressure injury.*

Differentiating Pressure Injuries from Other Types of Wounds

Pressure/Shear at Injury Site?

YES

Deepest tissue type visible or palpable?

YES

*Stage 1

or

*Stage 2

or

*Stage 3

or

*Stage 4

or

*Unstageable (obscured by slough or eschar)

*Deep Tissue Pressure Injury

or

Non-Visible (Under non-removable dressing or device—NDNQI / CMS only)

*Mucosal Membrane Pressure Injury

(Name, count; but do not stage)

Exception: On Mucous Membrane

NO

NO (or other causes also exist)

Wounds & skin injuries due to:

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Wound Descriptions

- Time – how long has it been there?
  - Acute vs. Chronic
- Size – measure dimensions and record
- Depth – use sterile cotton bud to measure depth
  - Partial vs. Full Thickness
- Aetiology – Why has it happened?
  - Pressure, Diabetic Neuropathy, Arterial, Venous, Skin Tears, Lymphatic, Surgical, Traumatic, Radiation, Malignant, Thermal, Vasculitis, Thrombotic, Calciphylaxis
Wound Categories

- Pressure Injuries
  - Staging and Aetiology (Mechanical Device and Mucosal)

- Diabetic Neuropathic Ulcerations

- Venous Stasis Ulcerations
  - CEAP Classification (clinical, etiology, anatomy, and pathophysiology)

- Skin Tears
  - Payne-Martin Classification System
  - STAR Skin Tear Classification System
Payne-Martin Classification of Skin Tears

Payne-Martin Classification System for Skin Tears

<table>
<thead>
<tr>
<th>Skin Tear Category</th>
<th>Sub-Category and Description</th>
<th>Photograph</th>
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</table>
| Category 1*: Skin tears without tissue loss | 1A - Linear:  
   - Full thickness or flap partial thickness                                               | ![Image](image1.png) |
|                             | 1B - Flap Type:  
   - Partial thickness  
   - Epidermis and dermis are separated  
   - Flap can be completely approximated or approximated to expose no more than 1mm of the dermis | ![Image](image2.png) |
| Category 2*: Skin tears with partial tissue loss | 2A - Scant Category II Skin Tear:  
   - 25% or less of the epidermal flap is lost                                               | ![Image](image3.png) |
|                             | 2B - Moderate Category II Skin Tear:  
   - More than 25% of the epidermal flap is lost                                              | ![Image](image4.png) |
| Category 3: Skin tears with complete tissue loss |  - Epidermal flap is absent                                                                 | ![Image](image5.png) |

* Category 1 and 2 photographs are courtesy of Kim LeBlanc, Dawn Christensen and Wound Care Canada. Used with permission.

Resource
STAR Classification of Skin Tears

STAR Skin Tear Classification System Guidelines
1. Control bleeding and clean the wound according to protocol.
2. Realign (if possible) any skin or flap.
3. Assess degree of tissue loss and skin or flap colour using the STAR Classification System.
4. Assess the surrounding skin condition for fragility, swelling, discoloration or bruising.
5. Assess the person, their wound and their healing environment as per protocol.
6. If skin or flap colour is pale, dusky or darkened reassess in 24-48 hours or at the first dressing change.

STAR Classification System

Category 1a
A skin tear where the edges can be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour is not pale, dusky or darkened.

Category 1b
A skin tear where the edges can be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour is pale, dusky or darkened.

Category 2a
A skin tear where the edges cannot be realigned to the normal anatomical position and the skin or flap colour is not pale, dusky or darkened.

Category 2b
A skin tear where the edges cannot be realigned to the normal anatomical position and the skin or flap colour is pale, dusky or darkened.

Category 3
A skin tear where the skin flap is completely absent.

Skin Tear Audit Research (STAR). Silver Chain Nursing Association and School of Nursing and Midwifery, Curtin University of Technology. Revised 4/2/2010.
Skin tear
Determining an Aetiology

- History and examination of the patient
- An isolated picture of a wound -- without a measuring tape, location identification, history, pertinent history, comorbidities -- is an isolated picture of a wound!
The Wounds In-between

- Mixed arterial and venous of the lower extremities
- The surgical wound of the ankle that opens up underneath a cast due to device pressure and venous insufficiency
- The pressure injury/ulcer of the heel that will heal as if it were a diabetic ulcer in a patient with that affliction
- Reopened pressure injury in the sacrum in an area of a scar

How would you classify this one?
Location, Disease, History

- Sacral Wound
  - Thinking pressure or moisture
- Plantar Foot Wound
  - Thinking diabetic neuropathic or ischemic ulcer
- Distal Toe Wound
  - Thinking arterial disease or pressure
Classify this!
Remember the Flowchart

Pressure/Shear at Injury Site?

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In Summary

• It is essential to differentiate a pressure injury from other similar wounds
• Using the flowchart will help in determining which kind of wound you are dealing with
• Investigate any wound assessment factors that give you clues to the type of injury, such as location, co-morbidities and history
• There are significant factors that assist in classifying wounds correctly
• Remember the two classification systems for skin tears so that you are ‘speaking the same language’
• If you are not sure, ask your team leader to help
Resources

- **Australian Commission on Safety and Quality in Health Care (ACSQHC) National Safety and Quality Health Services Standards (NSQHSS), Comprehensive Care Standard.**
- [http://www.npuap.org/resources/educational-and-clinical-resources/](http://www.npuap.org/resources/educational-and-clinical-resources/)