Skin Tears: Prevention, Assessment and Treatment

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Objectives
Upon completion of this presentation the learner will:

- Describe the intrinsic and extrinsic factors associated with skin tear risk.
- Discuss the two skin tear classification systems.
- Describe the latest recommendations for skin tear management.

Skin Tear Overview
- 1.5 million elderly residents of facilities in the U.S. have skin tears.
- Of 115 LTC facilities reviewed in 2011, 22% of the residents had skin tears.
Skin Tear Definition

A wound caused by shear, friction, and/or blunt force resulting in separation of skin layers. A skin tear can be **partial thickness** (separation of the epidermis from the dermis) or **full-thickness** (separation of both the epidermis and dermis from underlying structures).

(Skin Tear Consensus Panel 2011)

Intrinsic Factors Associated with Skin Tear Risk

- Age.
  - Very young (neonate)
  - Very old (>75 y.o.).
- Inadequate nutrition.
- Cognitive impairment.
- Immobility.
- Female.
- Caucasian.
- Altered sensory status.
- Limb stiffness, spasticity.
- Polypharmacy.

Intrinsic Factors Associated with Skin Tear Risk

- History of previous skin tears.
- Presence of ecchymosis, hematoma and/or edema.
- Long-term corticosteroid use.
Extrinsic Factors Associated with Skin Tear Risk

- Assistance required for bathing, dressing, toileting and transferring.
- Frequent bathing leading to dry skin.
- Having blood drawn.
- Using assistive devices.
- Applying and removing stockings, tapes and dressings.

Skin Tear Prevention

- Assess risk on admission.
- Use of long sleeves, pants or knee high socks for those “at risk”.
- Shin guards for those with repeat skin tears.
- Ensure safe patient handling with proper lighting and removing potential causes for trauma (i.e. padding of furniture, equipment).

Prevention Measures

- Proper transfer and lifting techniques.
- Promote adequate nutrition and hydration. Consult dietician.
- Lubricate skin to prevent Xerosis cutis (2x/day with hypoallergenic moisturizer).
- Responsible bathing and use of appropriate pH balanced products.
- Avoid adhesive products on the skin.
- Keep fingernails and toenails short to avoid self-inflicted skin tears.
- Educate staff.
**Assessment Parameters**

Assess like any other wound, PLUS:
1. The presence of bleeding.
2. Degree of flap necrosis.

**Skin Tear Classification**

- Payne-Martin
- STAR tool

Skin Tear Audit Research

**Payne-Martin: Category 1**

Skin tear can fully approximate wound

1a. **Linear skin tear**

Full thickness wound; the epidermis and dermis are pulled apart as if an incision had been made exposing tissue below. No tissue loss.

1b. **Flap-type skin tear**

Epidermal flap can be reapproximated so that no more than 1 mm. of dermis is exposed.
Payne-Martin: Category 2
Skin tear with partial tissue loss

2a. Scant tissue loss
25% or less of epidermal flap is lost.

2b. Moderate to large tissue loss
More than 25% of the epidermal flap is lost.

Payne-Martin: Category 3
Skin tear with complete tissue loss.

Epidermal flap is absent.

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

STAR Classification System

Category 1a
A skin tear when the epidermis can be palpated to the normal anatomical position (without undue stretching) and the skin or flap colour is not pale, dusky or discoloured.

Category 1b
A skin tear when the epidermis cannot be palpated to the normal anatomical position and the skin or flap colour is not pale, dusky or discoloured.

Category 2a
A skin tear when the epidermis can be palpated to the normal anatomical position and the skin or flap colour is not pale, dusky or discoloured.

Category 2b
A skin tear when the epidermis cannot be palpated to the normal anatomical position and the skin or flap colour is not pale, dusky or discoloured.

Category 3
A skin tear when the epidermis is completely absent.
STAR Classification: Category 1

1a: Edges can be realigned in normal position. Flap color is **not** pale, dusky or darkened.

1b: Edges can be realigned in normal position. Flap color **is** pale, dusky or darkened.

STAR Classification: Category 2

2a: Edges **can't** be realigned in normal position. Flap color is **not** pale, dusky or darkened.

2b: Edges **can't** be realigned in normal position. Flap color **is** pale, dusky or darkened.

STAR Classification: Category 3

Skin flap is completely absent.
Skin Tear Treatment

- Control bleeding.
- Cleanse with NS or surfactant cleanser.
- Re-approximate flap.
- Remove debris and/or necrotic tissue.
- Tetanus immunoglobulin.
- LE skin tears: assess perfusion and manage edema.

Topical Management

- Use of adhesive strips is outdated (EO).
- Absorbent clear acrylic dressings. Category I-III with low to moderate exudate. Can be left in place up to 21 days.
- 2-octylcyanoacrylate topical bandage (skin glue). One application, no reports of infection.
- Silicone contact layers, mesh or foams.
- Use of transparent film dressings and hydrocolloids is not recommended due to skin stripping.

Ongoing Assessment

- 24-48 hrs: check condition of skin flap.
- Weekly: check for signs of infection.
  - Pain
  - Exudate
  - Erythema
  - Induration
  - Edema
Summary

- Skin tears are prevalent.
- Assess risk.
- Not all skin tears are preventable.
- Utilize a classification tool.
- Review current protocols and update based on current treatment approach.