Trauma Wound or Superficial Injury?
Skin Tears

- Most skin tears or partial thickness wounds are coded as superficial injuries (910-919)
  - Require only simple wound care
  - Not covered under Medicare
- Since most are caused by some type of injury (e.g., bumped on wheelchair), may be tempting to code as a trauma wound.
- May code as trauma wound if:
  - If skin tear is extensive – i.e., extends into dermis – or no longer has a flap
  - Wound is complicated – i.e., delayed healing, foreign body, primary infection
  - There is an underlying condition, such as diabetes or atherosclerosis, that could complicate healing
- Documentation must support the need for skilled care!
Payne-Martin Category 1 Skin Tear - No Tissue Loss

1. **Linear type** - the epidermis and dermis have been pulled apart, as if an incision has been made.

2. **Flap type** - the epidermal flap completely covers the dermis to within 1mm of the wound margin.

* Illustration: Jan Rice, Wound Foundation of Australia
Payne-Martin Category 2 Skin Tear – Partial Tissue Loss

1. Scant tissue loss = 25% loss of epidermal flap

- 2. Moderate to large tissue loss - >75% loss of epidermal flap

Illustration: Jan Rice, Wound Foundation of Australia
Category 3 Skin Tear – Full Tissue Loss

• Epidermal flap is missing.

• Illustration source: Jan Rice, Wound Foundation of Australia
Complete Summary

GUIDELINE TITLE

Preventing pressure ulcers and skin tears. In: Evidence-based geriatric nursing protocols for best practice.

BIBLIOGRAPHIC SOURCE(S)


GUIDELINE STATUS

This is the current release of the guideline.


COMPLETE SUMMARY CONTENT

SCOPE
METHODODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

- Pressure ulcers
- Skin tears

GUIDELINE CATEGORY

Management
Prevention
Risk Assessment
Treatment

CLINICAL SPECIALTY

Geriatrics
Nursing
Physical Medicine and Rehabilitation

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Hospitals
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To provide a standard of practice protocol for:

- Prevention of pressure ulcers and early recognition of pressure ulcer development and skin changes
- Prevention of skin tears in elderly clients
- Identification of clients at risk for skin tears
- Fostering healing of skin tears

TARGET POPULATION

- Older adults with identified intrinsic and/or extrinsic risk factors for pressure ulcers, including:
  - Immobility as seen in bedbound or chair-bound patients and those unable to change positions
  - Undernutrition or malnutrition
  - Incontinence
  - Friable skin
  - Impaired cognitive ability
  - Braden scale risk score
- Older adults at risk for skin tears

INTERVENTIONS AND PRACTICES CONSIDERED

Assessment of Pressure Ulcers

1. Risk assessment
   - Braden Risk Score
2. Stage I pressure ulcers in patients with darkly pigmented skin
3. Prevention strategies
   - Braden Risk Score
Management of Pressure Ulcers

1. Risk assessment documentation
2. Care issues and interventions: mobilization, skin care, moisture, positioning, use of devices, nutrition, friction and shear

Assessment of Skin Tears

1. Risk assessment
   - Three group risk assessment tool
   - Payne-Martin classification system
2. Prevention
   - Safe environment
   - Staff/caregiver education
   - Protect from self-injury and skin injury during routine care

Management/Treatment of Skin Tears

1. Assess size of wound
2. Cleaning wounds
3. Application and removal of dressings
4. Use of skin sealants, protective ointments, liquid barriers

MAJOR OUTCOMES CONSIDERED

- Prevalence of new pressure ulcers
- Prevalence of nonhealing pressure ulcers
- Prevalence of skin tears
- Prevalence of nonhealing skin tears

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Although the AGREE instrument (which is described in Chapter 1 of the original guideline document) was created to critically appraise clinical practice guidelines, the process and criteria can also be applied to the development and evaluation of clinical practice protocols. Thus the AGREE instrument has been expanded for that purpose to standardize the creation and revision of the geriatric nursing practice guidelines.

The Search for Evidence Process
Locating the best evidence in the published research is dependent on framing a focused, searchable clinical question. The PICO format—an acronym for population, intervention (or occurrence or risk factor), comparison (or control), and outcome—can frame an effective literature search. The editors enlisted the assistance of the New York University Health Sciences librarian to ensure a standardized and efficient approach to collecting evidence on clinical topics. A literature search was conducted to find the best available evidence for each clinical question addressed. The results were rated for level of evidence and sent to the respective chapter author(s) to provide possible substantiation for the nursing practice protocol being developed.

In addition to rating each literature citation to its level of evidence, each citation was given a general classification, coded as "Risks," "Assessment," "Prevention," "Management," "Evaluation/Follow-up," or "Comprehensive." The citations were organized in a searchable database for later retrieval and output to chapter authors. All authors had to review the evidence and decide on its quality and relevance for inclusion in their chapter or protocol. They had the option, of course, to reject or not use the evidence provided as a result of the search or to dispute the applied level of evidence.

**Developing a Search Strategy**

Development of a search strategy to capture best evidence begins with database selection and translation of search terms into the controlled vocabulary of the database, if possible. In descending order of importance, the three major databases for finding the best primary evidence for most clinical nursing questions are the Cochrane Database of Systematic Reviews, Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Medline or PubMed. In addition, the PsycINFO database was used to ensure capture of relevant evidence in the psychology and behavioral sciences literature for many of the topics. Synthesis sources such as UpToDate® and British Medical Journal (BMJ) Clinical Evidence and abstract journals such as Evidence Based Nursing supplemented the initial searches. Searching of other specialty databases may have to be warranted depending on the clinical question.

It bears noting that the database architecture can be exploited to limit the search to articles tagged with the publication type "meta-analysis" in Medline or "systematic review" in CINAHL. Filtering by standard age groups such as "65 and over" is another standard categorical limit for narrowing for relevance. A literature search retrieves the initial citations that begin to provide evidence. Appraisal of the initial literature retrieved may lead the searcher to other cited articles, triggering new ideas for expanding or narrowing the literature search with related descriptors or terms in the article abstract.

**NUMBER OF SOURCE DOCUMENTS**

Not stated

**METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Weighting According to a Rating Scheme (Scheme Given)
RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

**Level I:** Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

**Level II:** Single experimental study (randomized controlled trials [RCTs])

**Level III:** Quasi-experimental studies

**Level IV:** Non-experimental studies

**Level V:** Care report/program evaluation/narrative literature reviews

**Level VI:** Opinions of respected authorities/Consensus panels


METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

The guideline developers reviewed a published cost-analysis.

METHOD OF GUIDELINE VALIDATION
DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC): In this update of the guideline, the process previously used to develop the geriatric nursing protocols has been enhanced.

Levels of evidence (I–VI) are defined at the end of the "Major Recommendations" field.

Pressure Ulcers

Parameters of Assessment

- Assess for intrinsic and extrinsic risk factors
- Braden Scale risk score
  - 18 or below for elderly and persons with darkly pigmented skin
  - 16 or below for other adults

Nursing Care Strategies and Interventions

- Risk assessment documentation
  - On admission to a facility
  - Reassessment intervals whenever the client’s condition changes and based on patient care setting:
    - Acute care: every 48 hours
    - Long-term care: weekly for first 4 weeks, then monthly to quarterly
    - Home care: every nursing visit
  - Use a reliable and standardized tool for doing a risk assessment such as the Braden Scale (see "Try This: Predicting Pressure Ulcers" in Resources at www.ConsultGeriRN.org)
  - Document risk assessment scores and implement prevention protocols based on cut score
- General care issues and interventions
  - Culturally sensitive early assessment for stage I pressure ulcers in clients with darkly pigmented skin
    - Use a halogen light to look for skin color changes--may be purple hues
    - Compare skin over bony prominences to surrounding skin--may be boggy or stiff, warm or cooler
• Agency for Health Care Policy and Research (now known as the Agency for Healthcare Research and Quality, AHRQ) (AHCPR, 1992) prevention recommendations:
  • Assess skin daily.
  • Clean skin at time of soiling; avoid hot water and irritating cleaning agents.
  • Use moisturizers on dry skin.
  • Do not massage bony prominences.
  • Protect skin of incontinent clients from exposure to moisture.
  • Use lubricants, protective dressings, and proper lifting techniques to avoid skin injury from friction/shear during transferring and turning of clients.
  • Turn and position bedbound clients every 2 hours if consistent with overall care goals.
  • Use a written schedule for turning and repositioning clients.
  • Use pillows or other devices to keep bony prominences from direct contact with each other.
  • Raise heels of bedbound clients off the bed; do not use donut-type devices (Gilcreast, et al. 2005 [Level II]).
  • Use a 30-degree lateral side lying position; do not place client directly on their trochanter.
  • Keep head of the bed at lowest height possible.
  • Use lifting devices (trapeze, bed linen) to move clients rather than dragging them in bed during transfers and position changes.
  • Use pressure-reducing devices (static air, alternating air, gel, water mattresses) (Iglesias et al., 2006 [Level II]; Hampton & Collins, 2005 [Level II]).
  • Reposition chair or wheelchair bound clients every hour. In addition, if client is capable, have them do small weight shifts every 15 minutes.
  • Use a pressure-reducing device (not a donut) for chair-bound clients.

• Other care issues and interventions
  • Keep the patient as active as possible; encourage mobilization.
  • Do not massage reddened bony prominences.
  • Avoid positioning the patient directly on their trochanter.
  • Avoid use of donut-shaped devices.
  • Avoid drying out the patient's skin; use lotion after bathing.
  • Avoid hot water and soaps that are drying when bathing elderly. Use body wash and skin protectant (Hunter et al., 2003 [Level III]).
  • Teach patient, caregivers, and staff the prevention protocols.
  • Manage moisture:
    • Manage moisture by determining the cause; use absorbent pad that wicks moisture.
    • Offer a bedpan or urinal in conjunction with turning schedules.
  • Manage nutrition:
    • Consult a dietician and correct nutritional deficiencies
    • Increase protein and calorie intake and A, C, or E vitamin supplements as needed (Houwing et al., 2003
• Offer a glass of water with turning schedules to keep patient hydrated.

• Manage friction and shear:
  • Elevate the head of the bed no more than 30 degrees.
  • Have the patient use a trapeze to lift self up in bed.
  • Staff should use a lift sheet or mechanical lifting device to move patient.
  • Protect high-risk areas such as elbows, heels, sacrum, back of head from friction injury.

• Interventions linked to Braden risk scores (Adapted from Ayello & Braden, 2001)

Prevention protocols linked to Braden risk scores are as follows:

• At-risk: score of 15 to 18
  • Frequent turning; consider every 2 hour schedule; use a written schedule.
  • Maximize patient's mobility.
  • Protect patient's heels.
  • Use a pressure-reducing support surface if patient is bed- or chair-bound.

• Moderate risk: score of 13 to 14
  • Same as above but provide foam wedges for 30-degree lateral position.

• High risk: score of 10 to 12
  • Same as above, but add the following:
    • Increase the turning frequency.
    • Do small shifts of position.

• Very high risk: score of 9 or below
  • Same as above, but use a pressure relieving surface.
  • Manage moisture, nutrition, and friction/shear.

Follow-up Monitoring of Condition

• Monitor effectiveness of prevention interventions.
• Monitor healing of any existing pressure ulcers.

Skin Tears

Parameters of Assessment

• Use the three-group risk assessment tool (White, Karam & Cowell, 1994 [Level IV]) to assess for skin tear risk.
• Use the Payne and Martin (1993 [Level IV]) classification system to assess clients for skin tear risk:
  • Category I: a skin tear without tissue loss
  • Category II: a skin tear with partial tissue loss
  • Category III: a skin tear with complete tissue loss, where the epidermal flap is absent.
Nursing Care Strategies and Interventions (Baranoski, 2000 [Level V])

- Preventing skin tears
  - Provide a safe environment:
    - Do a risk assessment of elderly patients on admission.
    - Implement prevention protocol for patients identified as at risk for skin tears.
    - Have patients wear long sleeves or pants to protect their extremities (Bank, 2005 [Level IV]).
    - Have adequate light to reduce the risk of bumping into furniture or equipment.
    - Provide a safe area for wandering.
  - Educate staff or family caregivers in the correct way of handling patients to prevent skin tears. Maintain nutrition and hydration:
    - Offer fluids between meals.
    - Use lotion, especially on dry skin on arms and legs, twice daily (Hanson et al., 2005 [Level III]).
    - Obtain a dietary consult.
  - Protect from self-injury or injury during routine care:
    - Use a lift sheet to move and turn patients.
    - Use transfer techniques that prevent friction or shear.
    - Pad bedrails, wheelchair arms, and leg supports (Bank, 2005 [Level IV]).
    - Support dangling arms and legs with pillows or blankets.
    - Use non-adherent dressings on frail skin.
      - Apply petroleum-based ointment, steri-strips, or a moist nonadherent wound dressing such as hydrogel dressing with gauze as a secondary dressing. Telfa type dressings are also used.
      - If you must use tape, be sure it is made of paper, and remove it gently. Also, you can apply the tape to hydrocolloid strips placed strategically around the wound rather than taping directly onto fragile surrounding skin around the skin tear.
      - Use gauze wraps, stockinettes, flexible netting, or other wraps to secure dressings rather than tape.
      - Use no-rinse soapless bathing products (Birch & Coggins, 2003 [Level IV]; Mason, 1997 [Level IV]).
    - Keep skin from becoming dry, apply moisturizer (Hanson et al., 2005 [Level III]; Bank, 2005 [Level IV]).
- Treating skin tears (Baranoski & Ayello, 2004 [Level V])
  - Gently clean the skin tear with normal saline.
  - Let the area air dry or pat dry carefully.
  - Approximate the skin tear flap.
  - Use caution if using film dressings as skin damage can occur when removing dressings.
  - Consider putting an arrow to indicate the direction of the skin tear on the dressing to minimize any further skin injury during dressing removal.
  - Skin sealants, petroleum-based products, and other water-resistant product such as protective barrier ointments or liquid barriers may be used to protect the surrounding skin from wound drainage or dressing/tape removal trauma.
• Always assess the size of the skin tear, consider doing a wound tracing.
• Document assessment and treatment findings.

Follow-up Monitoring of Condition

Continue to reassess for any new skin tears in older adults.

Definitions:

**Level I**: Systematic reviews (integrative/meta-analyses/clinical practice guidelines based on systematic reviews)

**Level II**: Single experimental study (randomized controlled trials [RCTs])

**Level III**: Quasi-experimental studies

**Level IV**: Non-experimental studies

**Level V**: Care report/program evaluation/narrative literature reviews

**Level VI**: Opinions of respected authorities/Consensus panels


**CLINICAL ALGORITHM(S)**

None provided

**EVIDENCE SUPPORTING THE RECOMMENDATIONS**

**REFERENCES SUPPORTING THE RECOMMENDATIONS**

References open in a new window

**TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is identified and graded for selected recommendations.

**BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

**POTENTIAL BENEFITS**

Pressure Ulcers

Patient
- Skin will remain intact.
- Pressure ulcer(s) will heal.

**Provider/Nurse**

- Accurate performance of pressure ulcer risk assessment using standardized tool
- Implementation of pressure ulcer prevention protocols for clients interpreted as at risk for pressure ulcers
- Performance of a skin assessment for early detection of pressure ulcers

**Institution**

- Reduction in development of new pressure ulcers
- Increased number of risk assessments performed
- Cost-effective prevention protocols developed

**Skin Tears**

- Absence of skin tears in at-risk clients
- Skin tears that do occur will heal

**POTENTIAL HAZARDS**

Not stated

**IMPLEMENTATION OF THE GUIDELINE**

**DESCRIPTION OF IMPLEMENTATION STRATEGY**

An implementation strategy was not provided.

**IMPLEMENTATION TOOLS**

Resources
Staff Training/Competency Material

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

**INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES**

**IOM CARE NEED**

Getting Better
Staying Healthy

**IOM DOMAIN**
IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)


ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 (revised 2008 Jan)

GUIDELINE DEVELOPER(S)

Hartford Institute for Geriatric Nursing - Academic Institution

GUIDELINE DEVELOPER COMMENT

The guidelines were developed by a group of nursing experts from across the country as part of the Nurses Improving Care for Health System Elders (NICHE) project, under sponsorship of The John A. Hartford Foundation Institute for Geriatric Nursing.

SOURCE(S) OF FUNDING

Supported by a grant from the John A. Hartford Foundation.

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Primary Author: Elizabeth A. Ayello and R. Gary Sibbald

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

12 of 14
This is the current release of the guideline.


GUIDELINE AVAILABILITY

Electronic copies: Available from the Hartford Institute for Geriatric Nursing Web site.


AVAILABILITY OF COMPANION DOCUMENTS

The followings are available:

- Predicting pressure ulcer risk. Try this: best practices in nursing care to older adults. 2007. Electronic copies available from the Hartford Institute for Geriatric Nursing Web site.
- Nursing care strategies/treatment/management and pressure ulcer staging system are available from the Hartford Institute for Geriatric Nursing Web site.
- Pressure ulcers/skin tears: post-test instructions are available from the Continuing education activity. Available from the Hartford Institute for Geriatric Nursing Web site.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on May 30, 2003. The information was verified by the guideline developer on August 25, 2003. This summary was updated on June 19, 2008. The updated information was verified by the guideline developer on August 4, 2008.

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Date Modified: 11/3/2008
SKIN TEAR
MANAGEMENT GUIDELINES

DEFINITION: A skin tear is a traumatic wound occurring primarily on the extremities of older adults, as a result of friction/sliding, or dropping and collision forces, or trauma which separate the skin from the underlying structures (full thickness).”age

PREVENTATIVE MEASURES
- Access & recognize fragile, vulnerable skin
- Protect the skin
- Use equipment in a safe, careful, soft-hand and long-term
- Ensure equipment with any sharp edges are padded e.g. footrest, bed rails
- Apply adhesive tape without tension and with caution
- Use tape with caution - slowly peel away from the skin
- Avoid use of adhesive removers/wipes
- Promote shoes that are well-fitted and refer to Podiatry if required.

IMMEDIATE ACTION
- Assess the extent of the skin tear
- Gently cleanse the skin tear site to remove any debris
- Gently remove skin back into position using moistened cotton buds
- Debride non-viable tissue

DRESSING CHOICE: Skin tear type (Payne-Martin Classification)

<table>
<thead>
<tr>
<th>CATEGORY 1</th>
<th>CATEGORY 2</th>
<th>CATEGORY 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Exudate</td>
<td>Amount of Exudate</td>
<td>Amount of Exudate</td>
</tr>
<tr>
<td>Immediate Dressing</td>
<td>Immediate Dressing</td>
<td>Immediate Dressing</td>
</tr>
<tr>
<td>Change secondary dressing (mild) 6 hourly</td>
<td>Change according to degree of exudate (6 hourly)</td>
<td>Change according to degree of exudate (6 hourly)</td>
</tr>
<tr>
<td>Remove Daily until healed</td>
<td>Remove Daily until healed</td>
<td>Remove Daily until healed</td>
</tr>
<tr>
<td>Change with hydrocolloid dressing (medicated) and thin Hydrocolloid (Duoderm thin)</td>
<td>Change with thin hydrocolloid dressing (e.g. Aquacel Ag) and Hydrocolloid (Duoderm thin)</td>
<td>Change with thin hydrocolloid dressing (e.g. Aquacel Ag) and Hydrocolloid (Duoderm thin)</td>
</tr>
<tr>
<td>Complete dressing change on Day 3</td>
<td>Leave sheet strips intact if they curl &amp; lift off</td>
<td></td>
</tr>
</tbody>
</table>

ON DISCHARGE
- Ensure patient education is provided on wound care and prevention strategies
- Ensure continuity of care is arranged including ongoing management plan and dressing supplies

DOCUMENTATION
- Document in medical notes
- Order specific interventions on bedside folder front sheet
- Complete coincident wound management chart
- Complete Payne Martin wound management chart
- Complete WCAR ward incident report

Sponsored by Convatec Medical