

# Skin Care and Pressure Ulcers: Trigger #16



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# Aspects of Pressure Ulcers

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- Two key aspects
  - Prevention of ulcers
  - Healing of existing ulcers
- Effective care delivery process relevant in both situations
- Very broad topic with many controversies
- A few key points for consideration



# Steps

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- Recognition / Assessment
- Diagnosis / Cause identification
- Management
- Monitoring



# Practitioner Roles: General

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- Practitioner should identify and address modifiable risk factors
- Facility should inform practitioner of development of a pressure ulcer
- Practitioner should evaluate complicated, extensive, or non-healing wound in a timely fashion



# Practitioner Roles: General

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- Practitioner should assess existing pressure ulcer during each routine visit
- Practitioner's documentation should at least address issues requiring medical expertise, for example
  - Is there soft tissue infection or just wound colonization?
  - Are medications affecting appetite or hydration?
  - What medical factors are affecting wound healing?



# Problem Identification

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- For prevention
  - Identify risk factors for pressure ulcers development
    - As basis for identifying specific preventive measures, based on relevant individual risk factors



# Problem Identification

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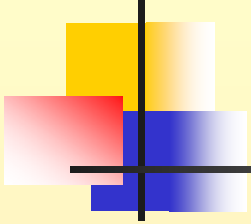
- For existing pressure ulcers
  - Define and interpret issues that will impact treatment and wound healing
  - Identify priorities in managing the situation
  - Identify factors influencing treatment plan



## Key Step

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- Review and summarize physical, functional, and social factors affecting the potential for getting a pressure ulcer
- Define and interpret factors that will impact treatment and wound healing of existing pressure ulcer





# Physical Factors

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- Physical factors impact
  - Speed and completeness of wound healing
  - Possibility of significant complications such as local infection
- Not all wounds will heal and some individuals with wounds will experience complications despite appropriate care
- Identify and document these factors at the start of treatment



# Physical Factors

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- Relevant physical factors include
  - Those causing or contributing to the wound=s development
  - Those that may impact wound=s healing and the development of complications



# Physical Factors

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- Examples

- Presence and severity of significant comorbidities such as anemia, hypoxia, or unstable congestive heart failure
- Degree of medical instability
- Overall nutrition and hydration status
- Use of medications such as corticosteroids that influence the immune system, host defenses, and skin characteristics



# Staging: Limited Value

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- Staging of ulcer is descriptive shortcut
  - Only reflects the depth of the wound in terms of tissue layers involved
  - May not accurately reflect problems such as soft tissue infection or tunneling
- Wound treatments often not stage-specific



# Functional Factors

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- Affect individual's ability to help relieve pressure and cooperate with the wound care program
  - For example, keeping the wound clean
- Impaired mobility, self-care deficit, continence problems, activity intolerance, and impaired ability to eat



# Psychosocial Factors

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- Individual's ability and willingness to comprehend and to adhere to treatment program, for example
  - Turn and position
  - Sit in a chair for extended periods
  - Cognitively incapable of understanding plan or remembering instructions
  - Stop smoking
  - Elevate an extremity to try to reduce edema



# Identifying These Factors

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- Document physical conditions, functional and psychosocial factors in initial and subsequent assessment and monitoring
- Indicate efforts try to address or correct them, and the related success or problems
- Efforts are not necessarily specific to managing patients with wounds



# Key Step

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- Define prognosis and identify realistic goals
- Before selecting treatments, identify the likelihood of wound healing and the desirability of pursuing a specific treatment plan
- Document the specific factors that may affect healing



# Ethical Issues

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- Review advance directives or other care instructions
- Identify those that limit scope, intensity, duration, and selection of various wound-related or adjunctive treatments
  - e.g., prior choice to forego artificial nutrition and hydration



# Ethical Issues

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- Basic wound care measures are compatible with palliative care plans
- Complete wound closure may not be realistic goal
- Identify and address these issues at start of wound care



# Key Step

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- Identify priorities in managing the wound and the patient
- Identify and correct etiologic factors
- Provide systemic support for wound repair
- Provide topical care to facilitate closure



# Priorities

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- Depending on findings and interpretations thus far, certain steps may have a higher priority
  - e.g., addressing predisposing or related systemic factors
  - managing infection
  - removing necrotic tissue
  - preventing additional skin breakdown
  - addressing psychosocial factors impacting treatment selection



# Wounds And Bacteria

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- Virtually all chronic wounds contaminated
- Contamination: bacterial presence on a wound surface
- Colonization: bacterial presence and multiplication with adherence to the superficial wound surface
- Infection: bacterial proliferation, invasion of healthy tissue inhibits healing



# Bacteria And Wounds

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- Bacteria may
  - cause systemic or local (osteomyelitis, cellulitis, abscess, etc.) soft tissue infection
  - simply be present (colonization or contamination)



# Bacteria And Wounds

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- Do not describe colonization or contamination as “infection” unless there is evidence of tissue invasion or impaired wound healing due to bacterial presence
- Localized soft tissue infection may be significant priority
- Colonization or contamination should be identified but usually not treated



# Possible Systemic Infection

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- Do not assume acute condition change in patient with wound is necessarily due to a local infection
  - e.g., altered mental status may be d/t fluid and electrolyte status, infection, medications



# Possible Systemic Infection

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- MD should initiate treatment of sepsis promptly or explain why more limited interventions are appropriate
- In most cases, IM or oral antibiotics, continued care in facility are appropriate
- Presence of both a fever and wound do not by themselves
  - reflect illness= severity or patient=s stability,
  - imply a need for hospitalization



# Nutrition

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- Minimal evidence for benefits of most routine wound-specific nutritional interventions in prevention or healing
- Follow basic nutrition approaches to try to maintain stable weight and give reasonable nutritional support



# Key Step

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- Cleanse & remove dead tissue from wound
- Necrotic tissue
  - delays wound healing
  - provides medium for bacterial growth
- Basic wound cleansing techniques only remove loose necrotic debris and remnants from dressings
- Use NSS initially and at start of each dressing change



# Key Step

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- Cover and protect wound and surrounding skin
- Goals of dressing wound are
  - keep ulcer bed moist
  - keep surrounding skin dry
  - protect wound from contamination



# Dressings

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- Choose based on
  - wound characteristics including location near contamination sources
  - presence and amount of exudate
  - depth
  - condition of surrounding skin



# Key Step: Monitoring

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- Document wound's progress and characteristics with initial assessment tools
- Show that care plan being followed and modified as needed
- Should indicate
  - Patient's overall status
  - progress of wound closure
  - status of other concerns such as reducing necrotic tissue, infections such as cellulitis



# Adjunctive Therapies

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- Aforementioned measures should be tried before adding or changing to adjunctive therapy
- Electrical stimulation benefits questionable
- Regenerative growth factors help some chronic non-healing wounds
  - Little evidence for use with pressure ulcers
- Other adjunctive measures
  - no proven advantage over more standard approaches



# Pressure Ulcers: F314 (2003)

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- F314 Interpretive Guidelines:
  - “Because there are no wound-specific nutritional measures, the interdisciplinary team should develop nutritional goals for the whole person.”
  - “Unless the resident has a specific vitamin or mineral deficiency, supplementation with additional vitamins or minerals may not be indicated.”



# Pressure Ulcers: F314

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- F314 Interpretive Guidelines:
  - “A low albumin level combined with the facility’s lack of supplementation, for example, is not sufficient to cite a pressure ulcer deficiency.”
  - “Current literature does not indicate significant advantages of any single specific [wound care] product over another, but does confirm that not all products are appropriate for all pressure ulcers.”



# Pressure Ulcer Treatment: Evidence Review (12/08)

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- Review of 103 randomized controlled trials (strongest level of evidence)
  - Reddy M et al. Treatment of pressure ulcers: A systematic review. JAMA. 2008;300(22):2647-2662.
- "There is little evidence from RCTs to justify the use of 1 support surface or dressing over alternatives. Similarly, there is little evidence to justify the routine use of nutritional supplements, biological agents, and adjunctive therapies compared with standard care. Clinicians should make decisions regarding pressure ulcer therapy based on fundamental wound care principles, cost, ease of use, and patient preference."

# Pressure Ulcers: Evidence Review



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- “Management of underlying contributing factors is likely more valuable in treating pressure ulcers than either topical or adjunctive therapies. Thus, priority should be given to addressing underlying causes.”
  - Reddy M et al. Treatment of pressure ulcers: A systematic review. JAMA. 2008;300(22):2647-2662.



# Pressure Ulcers: F314

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- JAMA article, published 2008
  - Supports the principles and practices
  - Basic, competent care of the whole patient
    - Including comorbid conditions
  - Basic wound care measures
  - No support surface is superior
  - No dressings or topical substances are that impressive
  - Nutrition matters—but only to a point



# Pressure Ulcers: F314

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- This makes sense, considering
  - The skin is one of a dozen (+/-) organ systems
  - The rest of the body influences what happens to the skin, and vice versa
  - As an organ system, skin can malfunction for reasons in addition to, or other than pressure