Pressure Injuries:
Choosing the Right Treatment

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Shield HealthCare

MEDICAL SUPPLIES FOR CARE AT HOME SINCE 1957

Pressure injuries: Choosing the Right Treatment

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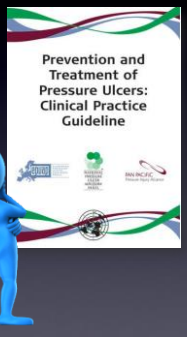
How do we know What is "Right"

- Standards of Care
- Progress through healing phases
- Individualized
- No cookbook medicine!!



Step 1 - Assessment

Include:

- Wound Characteristics
  - Exudate, Odor, Dry
- Tissue Types
  - Necrotic, Granulation
- Location
- Size

Assessment

- Individual's and family's goals of care
- Health History
- Factors that may affect healing
  - Perfusion
  - Sensation
  - Infection

Assessment

- Vascular assessment in the case of extremity ulcers
- Laboratory tests
- Nutrition

Assessment

- Risk
- Pain

Assessment

- Social and financial support systems
- Environment
- Physical Limitations
- Knowledge about Pressure injuries

"The Best Way To Solve Any Problem Is To Remove Its Cause."

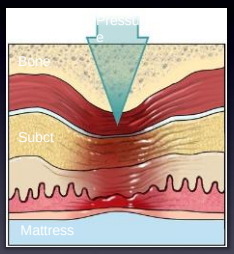
The Fresh Quotes

Pressure injuries cannot form without pressure on the tissues!

Remove the pressure with

Repositioning

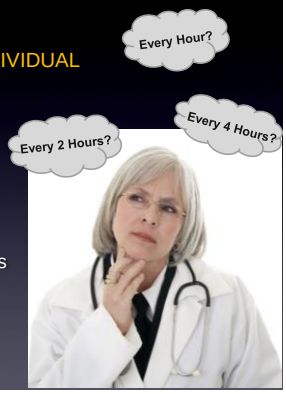
(change in position of the lying/seated individual at regular intervals)



Remove the Cause!

Positioning

- Frequency based upon INDIVIDUAL
  - Tissue tolerance
  - Activity and mobility
  - General medical condition
  - Overall treatment objectives
  - Skin condition
  - Support surface in place

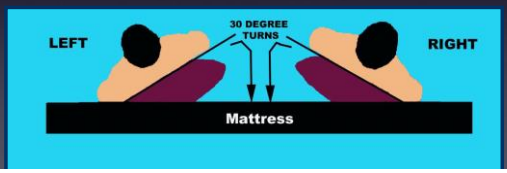


Positioning Bed

- Pillows or foam wedges
- Prevent bony prominences from direct contact with one another

Positioning Immobile/Bed Bound

- "Rule of 30"
  - The head of the bed is elevated at no more than 30° (Including tube fed patients)
  - On side in 30° laterally inclined position
  - Hips and shoulders are tilted 30°



Lift — Don't Drag!

- Lift sheets
- Mechanical lift
  - *Split leg sling*

Mechanical Lift

- Remove the sling immediately after transfer
  - unless specifically designed to stay in place

Position to prevent sliding & shear

- Auto-contour Beds
- Raise the knee-gatch before raising the HOB
- Pillows under arms

Positioning

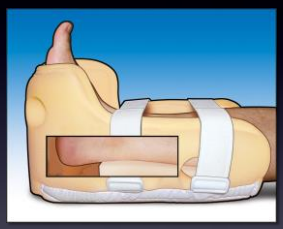
- Do not position patient directly on wound.

Heel Pressure Injuries

- Stage 1 or 2
  - "Float the heels" *or*
  - Devices with heel suspension

Heel Pressure Injuries

- Stage 3, 4, and Unstageable
  - Use device that elevates the heel from the surface of the bed



- Pillow alone is inadequate

Heel Devices

- Not too tight
- Remove the device periodically to assess skin integrity

Inappropriate fit of offloading device can cause skin breakdown

Heel offloading devices are not the same thing as heel padding devices.

Seating Interventions

- Weight shifts every 15 minutes
- If unable to weight shift reposition patient every hour

Seating Support Surfaces

- For chair-bound or decreased mobility
  - Use a pressure redistributing seat cushion
  - Stretchable/breathable cover that fits loosely on top of cushion

Stretch Breathe

Seating With Pressure Injury

When sitting is necessary with ulcers on the sacrum/coccyx or ischia, limit sitting to:

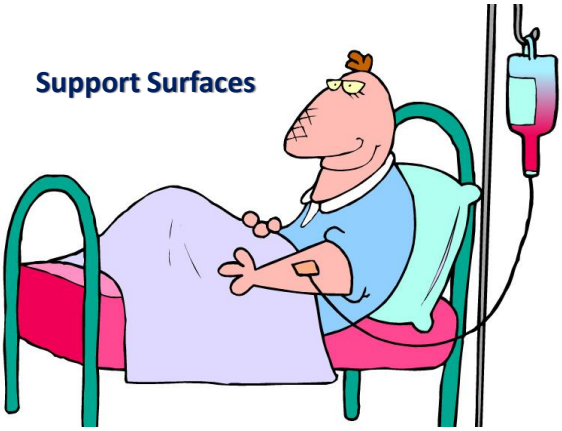
3X Day

< 60 minutes

Seating With Pressure Injury

- Consult a seating specialist for:
  - Appropriate seating surface
  - Positioning techniques

Support Surfaces



Support Surfaces

- For at Risk patients
  - Use a high specification reactive foam mattress or surface

Support Surfaces

- Use an active (AP) support surface:
  - High risk patient
  - When frequent repositioning is not possible

Do NOT USE

- *Synthetic* sheepskin pads
- Cutout, ring, or donut-type devices
- IV bags
- Water-filled gloves

DO NOT USE

Small-cell
(Less than 1 inch)
alternating pressure air mattresses or overlays

Stage 1 and 2 Pressure Injuries

- Use high specification reactive foam mattress or non-powered pressure redistribution support surface

Stage 3, 4, unstageable & DTI Pressure Injuries

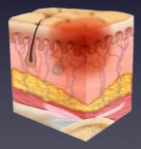
- Surface that provides enhanced pressure redistribution, shear reduction, and microclimate control
  - Low air loss
  - Air Fluidized
  - Alternating Air

Factors to Consider

- Wound Characteristics
  - Tissue
  - Size
  - Location
  - Peri-wound
- Patient's Goals
- Purpose of the Treatment
- How often – less is best!

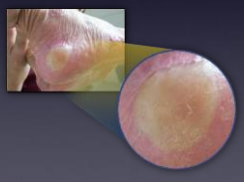
Stage 1

Non-blanchable erythema
(not purple or maroon)
of INTACT SKIN
which may appear
differently in darkly
pigmented skin



Stage 2

- Partial-thickness skin loss with exposed dermis
- Wound bed is
  - pink or red
  - moist OR
  - intact or ruptured serum-filled blister

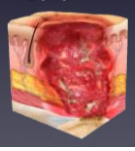


Stage 3

- Full-thickness loss of skin
- Adipose (fat) is visible
- May be present:
  - Granulation tissue
  - Epibole
  - Slough
  - Eschar
  - Undermining/Tunneling
- NO Bone, tendon, ligament

Stage 4

- Full thickness tissue loss with exposed or palpable
  - Fascia
  - Muscle
  - Tendon
  - Ligament
  - Cartilage
  - Bone

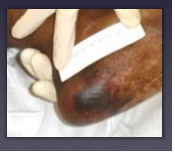


Deep Tissue Injury

- Non-blanchable deep red, maroon or purple discoloration
- Intact or non-intact skin
  - epidermal separation revealing a dark wound bed
    OR
  - blood filled blister







Unstageable

- Full thickness tissue loss
- Base is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

Basic Guidelines

- Choose a dressing to keep the wound bed moist
- Cleanse at each dressing change
  - Using potable water (i.e., water suitable for drinking)
  - Normal Saline
  - Non-cytotoxic Cleanser

Basic Guidelines

- Follow manufacturer recommendations
  - Especially related to frequency of dressing change

Do not place V.A.C.® Dressings in direct contact with exposed vital structures, such as exposed organs, blood vessels, tendons, ligaments or nerves.

DOSAGE AND ADMINISTRATION: Collagenase SANTYL® Ointment should be applied once daily (or more frequently if the dressing becomes soiled, as from incontinence). When clinically indicated, crosshatching thick eschar with a #10

Basic Guidelines

- Update or change Treatment plan if no progress in 2 weeks

Stable Eschar on Heel

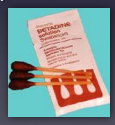
- Goal
  - Keep dry and intact
  - Do not debride
- Assess daily for signs of infection
- If infection present
  - Consult a vascular surgeon
  - Debride urgently

Stable

Unstable

Stable Eschar on Heel

- Topical Treatment
  - Leave wound open to air
  - Dry dressing for Protection
  - Paint with betadine or alcohol daily to keep dry.



Unstable Necrotic Tissue

- Necrotic tissue impairs healing, increased risk of infection

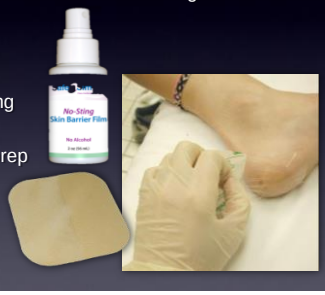
- Topical treatments
  - Hydrocolloid
  - Transparent dressings
  - Foams
  - Impregnated gauze
  - Hydrogel
  - Santyl® Enzymatic debriding ointment

Unstable Necrotic Tissue

- Adjunctive therapy
  - Sharp Debridement
  - Maggot Debridement Therapy
  - Pulsed Lavage
  - Hydrotherapy
  - Electrical Stimulation

Stage 1 Pressure Injury

- Interventions
  - Remove the cause BEFORE further damage occurs
  - DO NOT massage
- Topical treatments
  - Transparent dressing
  - Hydrocolloid
  - Liquid skin barrier prep
  - Thin foam



Stage 2 -4 Pressure Injury

Dry Wound Bed

- Goal: Add moisture to wound bed
- Topical treatments
  - Hydrogel
  - Foams
  - Hydrocolloids
  - Transparent film

Stage 3 or 4 Pressure Injury with *Slough and Exudate (Drainage)*

- Treat cause of exudate
  - High Bacteria Counts
  - Necrotic Tissue
  - Edema
- Protect peri-wound
  - Skin Barriers
  - Sealants

Stage 3 or 4 Pressure Injury with *Slough and Exudate*

- Moderate to Heavy Exudate
  - Calcium alginate dressing
- Heavy Exudate
  - Hydrofiber dressing
  - Wound drainage collector

Stage 2 – 4 Pressure Injury *Red Base Light to Moderate exudate*

- Foam dressing
- Polymeric membrane foam

Stage 3 – 4 Pressure Injury – *Red Base Moderate to Heavy exudate*

- Calcium Alginate
  - Absorb up to 20 times its weight
  - Change as needed -24 to 48 hrs

Stage 3 – 4 Pressure Injury – *Red Base Heavy* Exudate

- Hydrofiber dressing
- Capacity to absorb up to 33% more than alginate dressings
- Examples: Aquacel, Aquacel AG

Stage 3 – 4 Pressure Injury – *Red Base Heavy Exudate*

- Negative Pressure Wound Therapy
- Wound Drainage Collector

Stage 3 – 4 Pressure Injury *Red Base Heavy Exudate*

- Specialty Absorptive Dressings
  - Absorbs large quantities of exudate forming a gel that locks exudate away from the wound

Fragile Tissue

- Contact Layer Dressing
- Silicone Dressing
  - Protection of wound base
  - Prevent dressings from sticking to wound

Infected- High Bio-Burden

- Use commercial cleansing solutions with surfactants and/or antimicrobials to clean wounds with
  - Debris
  - Confirmed infection
  - Suspected
  - Infection
  - High levels of bacteria

Infected- High Bio-Burden

- Use systemic antibiotics for systemic infection such as
  - Positive Blood Cultures
  - Cellulitis
  - Osteomyelitis
  - Sepsis

Infected with multiple organisms

- Offer broad antimicrobial coverage
  - Topical Antimicrobial Silver Dressings
  - Medical-grade Honey Dressings

Silverlon®

Acticoat™

Infected- High Bio-Burden

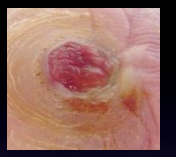
- Methylene Blue
  - Hydrofera Blue®

- Sodium Chloride
  - Mesalt®

- Cadexomer Iodine
  - Iodoflex®

Hypergranulation

- Will not heal if hypergranulation tissue is present



- Intervention
  - Silver Nitrate
  - Foam dressing
  - Sharp debridement

Epibole (Rolled/curled under edges)

- Margins must be re-injured to "jump start" the healing process
- Intervention
  - Rub and rough up wound edges with dry cotton gauze
  - Silver Nitrate
  - Surgical debridement



Odor

- Debridement of necrotic tissue
- Silver dressings
- Topical antiseptic
- Charcoal dressings



Odor

- Apply ostomy or wound collection appliance to prevent dispersion of odor
- 0.75% topical metronidazole gel
  - Once or twice a day

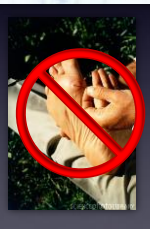


Moisture Associated Skin Damage where dressing will not adhere

- Calmoseptine® Ointment
- Triad™ Wound Dressing
- Liquid Film Barrier

Intact Heel Blister

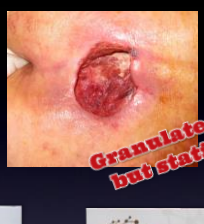
- **DO NOT** de-roof an intact blister
  - Less prone to infection
  - More comfortable
- Best dressing for a blister is its own roof

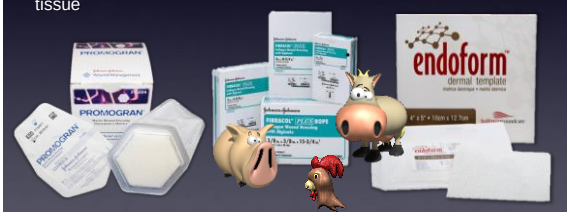


Slow healing

Collagen dressings

- Made from bovine, porcine or avian sources
- Encourages deposition and organization of newly formed collagen fibers and granulation tissue





Choosing the right dressing to suit the conditions is vital for optimum healing and quality of life.

Shield HealthCare

For more resources and educational information, visit
www.shieldhealthcare.com/community

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