What to do with what you see....Continued
Wound Care Overview- Dynamics 2012 Vancouver, B.C.

Things to Remember:
- Know your patient’s history
- Goals for the wound- Are you looking to cure, control, palliate
- Consider a dressing that needs minimal changes so that wound is not being disrupted
- Explain the procedure to your patient
- Wound bed preparation-proper cleansing, protecting the peri wound area
- Minimize patient discomfort
- Assess wound after it has been cleansed
- Use warm irrigant (sterile saline or water) to cleanse your wounds
- Ensure you have the supplies you need before exposing the wound and the patient
- Date dressing
- Document accurately
- Keep kardex up to date-Consistent communication is key

Documentation:
- Describe what you see
- Measure wound eg. 12-6 o’clock and 3-9 o’clock for consistency
- Use disposable ruler to obtain measurement
- No more loonie/toonie size references

Get the **WOUND PICTURE:**

Wound or ulcer location
Odour: slight odour or filling the room
Ulcer: Proper staging
Necrotic Tissue?
Dimensions/Drainage: length, width, depth, shape, colour, consistency, amount.
Pain: When, what relieves it, rate 1-10
Induration: surrounding tissue hard or soft
Colour: wound bed (red, yellow, black, etc)
Tunneling: Length and direction
Undermining: Look for this in your wounds
Redness: to surrounding skin
Edge of Skin: loose or tightly rolled. Edges flat or rolled under

Goals for Dressings: **MEASURES:**
M inimize Trauma to the Wound Bed
E liminate dead space (undermining, tunneling)
A ssess and manage the amount of exudate
S upport the body’s tissue defense system
U se non toxic wound cleansers
R emove infection, debris and necrotic tissue
E nvironment maintenance including thermal insulation and a moist wound bed
S urrounding tissue, protect from injury and bacterial invasion
Pressure Ulcers - A few things to consider:

- Look at how you turn your patient and how often you reposition your patient, pay attention to bony prominences
- Consider alternate bed therapy for your patient (pressure relief surfaces, rental beds)
- Utilization of scoring tools such as the Braden Scale
- Adopt consistent review of the integumentary system just like any other system when assessing your patient

Documentation:
- The agitated/delirious patient
- The patient you can’t turn due to instability
- Prolonged procedures that prevent turning (proning, OR, scans)
- Shift to shift report
- Communicating these potential complications to the families and keeping them up to date
Extrinsic Factors
- Excessive Uniaxial Pressure
- Friction and Shear Forces
- Impact Injury
- Heat
- Moisture
- Posture

Intrinsic Factors
- Immobility
- Sensory Loss
- Age
- Disease
- Body Type
- Poor Nutrition
- Incontinence
- Infection

Pressure Ulcer

Diagram showing areas of the body at risk of pressure sores when sitting:
- Back of the head
- Shoulder
- Base of spine
- Heel
- Buttocks

Original diagram by the Tissue Viability Society
**Pressure Ulcers**

**Deep Tissue Injury:**
- Develop for various reasons
- Can evolve into a life threatening wound
- Often seen on the coccyx due to a lack of position change
  - Pt. admitted after lying on the floor for several hours before being found
  - Pt. on an OR table for even a few hours, hypothermic, no position change, compromised circulation

**Treatment of Deep Tissue Injury:**
- Remove the source of injury
- If skin intact, leave alone until wound evolves and tissue sloughs off
- Usually on the coccyx/buttocks-difficult to dress
- Barrier creams acceptable to use
- Consider alternate bed therapy
- Treatment options will change as the wound evolves-Reassess frequently

**Stage 1 Pressure Ulcer:**
- Very common in a critical care setting
- Skin reddened but is intact
- Can quickly progress if preventative measures not taken stop tissue damage
- Frequent repositioning of patient including their limbs (attention to elbows, heels, ankles)
Treatment of Stage 1 Pressure Ulcer:
- Remove the source of injury-repositioning
- Consider friction and shear as contributing to injury of tissue (VAP, HOB elevated)
- Protect skin from excess moisture
- Lubricants
- Barrier creams/lotions
- Okay to leave open to air or cover with transparent dressing to act as a second skin

Stage 2 Pressure Ulcer:
- Epidermis gone
- Part of dermis may also affected
- May bleed
- Can be very painful due to exposed nerves
- Want to keep dressing changes to a minimal

Stage 2 Pressure Ulcer Treatment:
- Remove cause of injury where possible to prevent wound from getting worse
- Consider location before selecting type of treatment
- Depends on amount of drainage
- Alginate (eg. kaltostat) if bleeding then a secondary dressing
- Hydrocolloid or acrylic dressing if not too much drainage
- If moderate to large amount of drainage, consider a foam dressing

Stage 3 Pressure Ulcer:
- Wound penetrates through the epidermis and dermis into the subdermal layers
- Wound may have sinus tracks and/or tunneling
- Likely to drain moderate amounts, maintaining proper moisture balance can be a challenge

Stage 3 Pressure Ulcer Treatment:
- Depends on the amount of drainage
- Consider hydrofibre, alginate, as filler if wound deeper with moderate drainage. Secondary dressing required
- Consider foam dressing for moderate to large amounts of drainage
- If undermining is present then packing these areas is important

Stage 4 Pressure Ulcer:
- Wound penetrates through to muscle and/or bone
- If probes to bone consider osteomyelitis
- Often seen at bony prominences eg. Heels, elbows, coccyx, hips, ankles
- These wounds can become life threatening depending on the size and location
Stage 4 Pressure Ulcer Treatment:
- Determine if you are looking to cure, control, modify, maintain or palliate
- Debride and treat infection if indicated
- Maintain moist wound environment
- Eliminate dead space-packing often required (hydrofibre, calcium alginate, etc)
- Pain management
- Thermal insulation (keep the wound warm)
- Generous irrigation with warmed saline, including undermined areas maintaining as sterile a procedure as possible
- Secondary dressing as needed eg. Foam, abdominal pads
- Protect periwound skin from exudate and shearing forces- skin barriers, hydrocolloid
- Consider negative pressure assisted closure device for wounds with depth

Unstageable Pressure Ulcer:
- Wound covered with black, yellow, whitish eschar
- Unable to determine stage of ulcer until dead tissue is removed
- Various debridement options available depending on patient history and wound location

Unstageable Pressure Ulcer Treatment:
- Need to remove eschar if appropriate, before depth of wound can be determined
- Treatment depends on size and desire of outcome
- Possible considerations: surgical, sharp or autolytic debridement
- Dressing type dependent on amount of exudate present
- Dry eschar: paint with betadine to reduce bacterial burden
- Yellow eschar/slough: Maintain moist wound environment to assist with autolytic debridement
- As wound evolves, treatment options will change
- Large involved wounds will require wound specialist or plastics consult
Skin Tears

Is your patient at Risk?

- Agitation/use of restraints
- Steroid treatment
- Edema, purpura, ecchymosis
- Pitting edema of extremities
- Tape sensitivities
- Dry scaly skin
- Chlorhexidine baths
- Poor nutrition

Category I. Without tissue loss either linear, or with a flap that closes the tear to within an approximation of 1mm of the wound edges.

Category II. Partial tissue loss, considered scant when the loss is 25% or less and moderate or large when the tissue loss is more than 25%.

Category III. Complete tissue loss or no epidermal flap covering the injury.

Figure 3. Payne-Martlin Method of Skin Tear Classification. Images provided courtesy of Fran Meuleneire, RN, and the Journal of Wound Care. Reproduced with permission.
Skin Tear Treatment:
- Remove the source of injury
- Proper treatment by maintaining moist wound environment can assist with healing by primary intention
- Use paper tape or nonadherent dressings to prevent further injury
- Dressings chosen should be to ensure minimal interruption of skin
  - Acrylic Dressings
  - Contact Layer and secondary dressing
  - Hydrocolloid
  - Foam Dressings
- Control bleeding when necessary (alginate)
- Attempt to approximate edges where possible
- Thorough irrigation of wound
- Silicone contact layer and secondary dressing if large amount of drainage
- Acrylic dressing and leave for 21 days or if signs of infection
- Never use transparent film dressings on skin tears, do not have any absorptive properties

Dressings Available on the Market and Descriptions:

Hydrocolloid Dressings:
- Minimal to moderate exuding wounds, abrasions, skin tears, lacerations, pressure ulcers, granular or necrotic wounds under compression wraps
- Promotes autolytic debridement
- Wear time 3-7 days
- Not recommended for undermining, tunneling, sinus tracts

Absorbent (Acrylic):
- Recommended for skin tears
- Also can be used for pressure ulcers as long as you can achieve the extended wear time
- Extended wear time, clear dressing, weeks vs days
- Moisture vapour released through the top
- Barrier to outside contaminants (fluid, bacteria, virus)
- If changing every few days or more frequently, not the right product

Foam Dressings:
- For moderately exuding wounds
- Not for cushioning
- If not able to leave on for at least 2 days due to excessive drainage, then not the right dressing
- Many can stay on up to 1 week
- Good for skin tears on fragile skin
- Come with or without a border depending on the patient’s need
Hydrogels:
- Simply adds moisture to a wound
- Hydrates dry wounds
- Assist to soften and loosen slough and necrotic debris
- When using this product protect periwound area
- Too much moisture in the wound can cause maceration

Hydrofibre Ribbon or Sheet:
- Interacts with wound fluid and exudate to form a gel
- Used to maintain moist wound environment
- Doesn’t need to be changed until complete gel form and no longer able to absorb drainage
- Not effective on dry wounds

Hypertonic Saline Ribbon or Sheet:
- Hypertonic Saline dressing
- Minimal absorptive properties
- Change when saturated
- Can be used in wounds that have depth such as tunneling and undermining
- Change when saturated
- Secondary dressing required
- Patient may experience more stinging

Calcium Alginate:
- Derived from seaweed
- Some have hemostatic properties (eg. Kaltostat)
- Appropriate for venous bleeding, need to apply pressure to site
- For moderate to heavily draining wounds
- Available in different sizes and shapes
- Change when saturated
- Requires a secondary dressing

Non-Contact Layers:
- Put next to wound base to prevent dressing from sticking to wound
- Allows exudate from wound to pass through to secondary dressing while allowing wound to granulate eg. Draining venous wounds
- Some provide antimicrobial effects
- Secondary dressing is required to absorb exudate
- Change when saturated
- Some can be left on for up to 7 days

Wounds with a lot of drainage:
- If puncture site, try ostomy flange and drainage bag (location dependent)
- If conventional dressings not able to contain drainage use non contact layer with a secondary dressing such as gauze, double fluffs, abdominal pads, baby diapers and wrap
- Pampers baby diaper effective for draining leg or scrotal wounds. Wrap around venous leg wounds, use when edematous scrotum is draining (cannot dress this area!)-Be sure to explain use to patient and family
**Treating Intertrigo** (moisture associated skin damage):

Interdry Ag:
- Textile impregnated with Silver-natural antimicrobial
- Wear time 5 days (put date right on textile)
- Cleanse skin as usual
- Do not clean textile, after 5 days, discard
- Great for skin folds, normal for it to feel damp
- Not for patients that have serous/sanguinous drainage
- Fill out sheet when using

**Websites to Refer to for Further Information on Wound Care:**

Canadian Association of Wound Care: [www.cawc.net](http://www.cawc.net)
Registered Nurses Association of Ontario: [www.rnão.ca](http://www.rnão.ca)
South West Regional Wound Care Initiative: [www.thehealthline.ca](http://www.thehealthline.ca)
Canadian Association of Enterostomal Therapy: [www.caet.ca](http://www.caet.ca)
Ostomy Wound Management: [www.o-wm.com](http://www.o-wm.com)

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