

Pressure Ulcer Prevention

Pressure Ulcer Prevention Source: National Pressure Ulcer Advisory Panel and P&P 30308.99

Pressure Ulcer-

A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated.

Where are common Pressure Ulcer Sites?

Upper back
Hips
Elbows
Back of head
Coccyx
Heals
Shoulders
Top of ears

Risk Factors for Development of Pressure Ulcers:

Decreased ability to respond to meaningfully to pressure related comfort
Decreased Physical Activity
Decreased Mobility
Malnourishment
Friction and Shear
Exposure of skin to moisture

Prevention

No diapers
Use lifting devices
HOB < 30 degrees
Get patient OOB
Encourage hydration and nutrition if allowed
Keep skin clean and dry
Use Heel relief on bed
Reposition at least every 2 hours
Do not massage over bony prominences

Stage 1 pressure ulcer: a reddened that does not go away within 30 minutes nonblanchable after turning patient off that area. The skin remains intact.

Treatment:

- keep patient off the affective area
- keep area clean, dry. If skin is dry- apply moisturizer

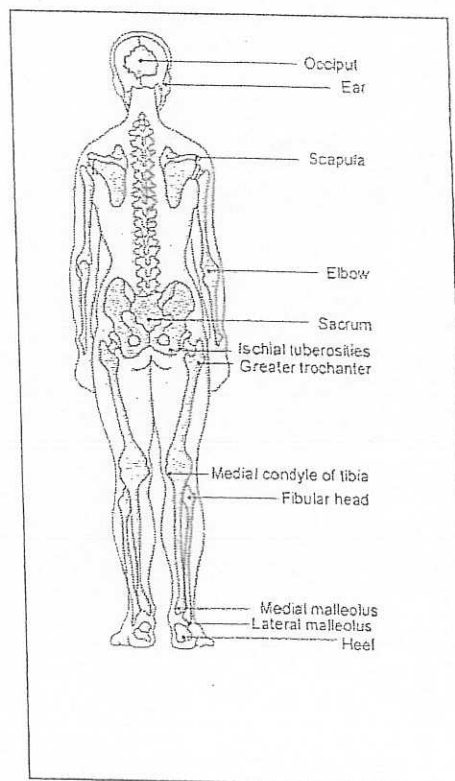
Stage 2 pressure ulcer: part of the skin is lost. This means the skin is no longer a protective. The ulcer is superficial and can present as an abrasion, blister or shallow crater. The goal of treatment is to keep wound clean and moist and the surrounding intact skin dry.

Treatment:

- keep patient off the affective area
- keep area clean

ADOLESCENT PATIENTS

Fifteen to 18 year olds are in this category. They are very concerned with privacy and body image. Provide privacy and allow the person to talk about the changes in their body, if appropriate. If person is using drugs, watch for improper hygiene and sores that may develop with drug use, especially crystal use.





PRESSURE ULCER PREVENTION AND TREATMENT

Pressure Ulcer Definition: Any lesion caused by *unrelieved pressure* that results in damage to underlying tissue.

- Usually occur over bony prominences and are graded or staged to classify degree of tissue damage.
- **Stage I:** *nonblanchable erythema* of intact skin; the heralding lesion of skin ulceration.
- **Stage II:** *partial thickness* skin loss involving epidermis and/or dermis. Ulcer is superficial and presents clinically as an *abrasion, blister, or shallow crater*.
- **Stage III:** *full thickness* skin loss involving damage or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia. Ulcer presents clinically as a *deep crater* with or without undermining of adjacent tissue.
- **Stage IV:** *full thickness* skin loss with extensive destruction, tissue necrosis or *damage to muscle, bone, or supporting structures* (e.g. tendon, joint capsule).
- **Unable to Stage:** When *eschar* or *slough obscures wound bed*, ulcer *cannot be accurately staged until removed*. Document “*unable to stage*” or “*undetermined due to slough or eschar.*”

PRESSURE ULCER PREVENTION

Risk Assessment

Goal: Identify at-risk individuals needing prevention and the specific factors placing them at risk.

Assess on admission or transfer, and with any status change using the Braden Scale and reassess risk according to PUPTP policy and procedure #30308.99 attached.

Skin Care and Early Treatment

Goal: Maintain and improve tissue tolerance to pressure in order to prevent injury.

1. ALL PATIENTS should have a systematic skin inspection at least once a day, paying particular *attention to the bony prominences*.
2. Clean skin at time of soiling and individualize according to need.
 - Avoid hot water
 - Use a mild cleansing agent
3. Dry skin should be treated with moisturizers.
4. Avoid massage over bony prominences (may be harmful).
5. Minimize skin exposure to moisture due to incontinence, perspiration, or wound drainage. Topical agents that act as barriers to moisture can be used.
6. Minimize skin injury due to friction and shear forces through proper positioning (HOB \leq 30° when possible), transferring, and turning techniques. Reduce friction injuries by using lubricants, protective dressings, and protective padding.
7. Evaluate nutritional status and offer/consider support (e.g. dietician consult, supplementation, enteral or parenteral feedings).
8. Improve mobility and activity status.

Pressure Ulcer Prevention and Support Surfaces

Goal: Protect against the adverse effects of external mechanical forces: pressure, friction, and shear.

1. Reposition at-risk individual in bed at least every 2 hours.
2. Use positioning devices such as pillows or foam wedges to keep bony prominences (such as knees or ankles) from direct contact with one another.
3. If completely immobile or at high risk, use devices that totally relieve pressure on the heels, most commonly by raising the heels off the bed. Also, refer to "Guidelines for use of Demi Boot" included in this packet.
4. Do not use donut-type devices (They restrict blood flow and increase pressure).
5. In side-lying position, avoid positioning directly on trochanter.
6. Maintain head of bed at lowest degree of elevation (GOAL: ≤ 30 degrees) consistent with medical conditions and other restrictions. Limit amount of time head of bed is elevated.
7. Use lifting devices such as a trapeze or bed linen to move (rather than drag) during transfers and position changes.
8. Place at-risk individual on a pressure-reducing device, such as foam (Comfortex, Baxter, Dynamic Sleep Surface), static air (Waffle), fluid (RIK), or dynamic air (Flexicair) mattress.
9. Avoid uninterrupted sitting in any chair or wheelchair. Reposition, shifting the points under pressure at least every hour or put back to bed. Teach those who are able to shift weight every 15 minutes.
10. For chair-bound individuals, use a pressure-reducing device such as those made of foam, gel, air, (waffle wheelchair cushion) or a combination. Do not use donut-type devices.
11. Positioning of chair-bound individuals should include consideration of postural alignment, distribution of weight, balance and stability, and pressure relief.

Pressure Reduction

Goal: Create an environment that enhances soft tissue viability and promotes healing of the pressure ulcer(s).

Patient in Bed

1. Avoid positioning on pressure ulcer.
2. Use positioning devices to raise pressure ulcer off support surface. Avoid donut-type devices.
3. Use pressure-reducing surface if patient remains at risk for additional ulcers. (See attached guidelines)
4. Reposition frequently even when patients are on pressure-reducing support surface.
5. Continuous lateral rotation mattresses/beds (Efica/Pulmonex/Q₂) are not recommended for pressure ulcer prevention or treatment.

PRESSURE ULCER TREATMENT

Pressure Ulcer Assessment

1. Assess pressure ulcer(s) initially for:
 - location
 - stage
 - size (length, width, depth)
 - presence of sinus tracts, undermining, tunneling, exudate, necrotic tissue
 - presence of granulation tissue and epithelialization
2. Reassess at least weekly and with change in patient's condition.
3. Monitor progress - an ulcer that is clean with adequate blood supply should show some healing within 2-4 weeks. Assess factors that may influence progress:
 - Screen for nutritional deficiencies ($< 80\%$ diet, albumin < 3.5 , TLC < 1800).
 - Ensure diet contains nutrients that support healing (adequate dietary intake, supplementation if malnourished, or nutritional support via enteral/parenteral routes).
 - Ensure vitamin and mineral supplementation if deficiencies suspected/confirmed.
 - Assess pain related to pressure ulcer, eliminate or control source of pain, and provide analgesia as needed/appropriate.

ULCER CARE

Wound Cleansing

1. Healing is optimized and potential for infection is decreased when necrotic tissue, exudate, and metabolic wastes are removed from wound.
2. Routine wound cleansing should be accomplished with a minimum of chemical and mechanical trauma.
 - a. Cleanse wounds initially at each dressing change.
 - b. Use minimal mechanical force when cleansing with gauze, cloth, or sponges.
 - c. Limit use of antiseptic agents (e.g. povidone iodine, iodophor, sodium hypochlorite solution - 'Dakin's', hydrogen peroxide, acetic acid) because they are cytotoxic.
 - d. Use normal saline for cleansing most pressure ulcers.
 - e. Use enough irrigation pressure to enhance wound cleansing without causing trauma to wound bed. Wound cleanser on stream setting (e.g. Saf Clens/Biolex Wound Cleanser) delivers the correct level pressure.
 - f. Consider whirlpool treatment for cleansing pressure ulcers that contain thick exudate, slough, or necrotic tissue. It is recommended to discontinue when ulcer is 75% clean.

Dressings

1. An ideal dressing protects the wound and provides ideal hydration. The condition of ulcer bed and desired dressing function determines type of dressing needed.
2. *Cardinal rule is to keep ulcer tissue moist and surrounding intact skin dry.*
3. Dressing selection:
 - a. Use dressing that will keep the ulcer bed continuously moist. Use clinical judgement to select moist dressing suitable for ulcer depending on amount of drainage. (See attached Wound Order Sheet)
 - b. Choose dressing that keeps surrounding intact skin dry while keeping ulcer bed moist.
 - c. Control exudate. Choose dressing that controls exudate but does not desiccate ulcer bed. Excessive exudate may delay healing and macerate surrounding tissue.
 - d. Prevent abscess formation. Eliminate dead space by loosely filling all cavities with dressing material. Avoid overpacking wound as this may increase pressure and cause additional tissue damage.
 - e. Keep dressings intact. Monitor dressings applied near anus. Taping edges ('picture-framing') may assist in keeping dressing intact.
 - f. Prevent rupture of blisters with protective dressings.