Pressure Injuries (Pressure Ulcers) and Wound Care Guidelines

Updated: Jan 31, 2024
Author: Christian N Kirman, MD; Chief Editor: John Geibel, MD, MSc, DSc, AGAF more...

GUIDELINES

WOCN Guidelines

In 2016, the Wound, Ostomy and Continence Nurses Society (WOCN) issued guidelines on the prevention and management of pressure ulcers (injuries). [81] Recommendations for prevention included the following:

- Implement measures to reduce the risk of developing pressure ulcers: minimize/eliminate pressure, friction, and shear.
- Minimize/eliminate pressure from medical devices such as oxygen tubing, catheters, cervical collars, casts, and restraints.
- Maintain the head-of-bed elevation at/or below 30°, or at the lowest degree of elevation consistent with the patient's medical condition to prevent shear-related injury, and use a 30° side-lying position.
- Schedule regular repositioning and turning for bedbound and chairbound individuals, taking into consideration the condition of the patient and the pressure redistribution support surface in determining the repositioning strategy.
- Position sitting patients with special attention to the individual's anatomy, postural alignment, distribution of weight, and support of the feet.
- Consider prophylactic dressings to prevent sacral and heel ulcers in at-risk patients.
- Use heel suspension devices for patients who are at risk for pressure ulcers that elevate (float) and offload the heel completely, and redistribute the weight of the leg along the calf without putting pressure on the Achilles tendon.
- Utilize support surfaces (on beds and chairs) to redistribute pressure. Pressure redistribution devices should serve as adjuncts and not replacements for repositioning protocols.
- Place individuals who are at risk for pressure ulcers on a pressure redistribution surface.
- Consider using the WOCN Evidence- and Consensus-Based Support Surface Algorithm (http://algorithm.wocn.org) to identify the appropriate support surface (overlay, mattress, or integrated bed system) for adults (≥16 years) and bariatric patients in care settings where the length of stay is 24 hours or more.

Log in or register for free to unlock more Medscape

Log in or register for free to unlock more Medscape content

Unlimited access to our entire network of sites and services

Log in or Register

- Educate the patient/caregiver(s) about the causes and risk factors for developing pressure ulcers and ways to minimize the risk.

Recommendations for management included the following:

- Float/elevate the heel(s) completely off the surface with a pillow or heel suspension device for stage 1 and 2 pressure ulcers or a heel suspension device for stage 3 and 4 heel pressure ulcers.
- Turn and reposition the patient regularly and frequently.
- Utilize support surfaces for patients with pressure ulcers (i.e., mattresses, mattress overlays, integrated bed systems, seat cushions or seat cushion overlays) that meet the individual's needs, and are compatible with the care setting.
- Consider using the WOCN Society's Evidence-and Consensus-Based Support Surface Algorithm (http://algorithm.wocn.org) to identify the appropriate support surface for adults (≥16 years) and bariatric patients in care settings where the length of stay is 24 hours or more.
- Utilize seating redistribution support surfaces that meet the needs of sitting individuals who have a pressure ulcer.
- Establish an individualized bowel/bladder management program for the patient with incontinence.
- Screen for nutritional deficiencies at the patient's admission to the care setting, when their condition changes, and/or if the pressure ulcer is not healing.
- Provide daily calorie and protein intake for adult patients with pressure ulcers: 30-35 kcal/kg and protein 1.25-1.5 g/kg.
- Consider evaluation of laboratory tests such as albumin and prealbumin as only one part of the ongoing assessment of nutritional status.
- Cleanse the wound and periwound at each dressing change, minimizing trauma to the wound.
- Choose appropriate solutions for cleaning pressure ulcers, which may include potable tap water, distilled water, cooled boiled water, or saline/salt water.
- Determine the bacterial bioburden by tissue biopsy or Levine quantitative swab technique.
- Consider a 2-week course of topical antibiotics for nonhealing, clean pressure ulcers.
- Consider use of antiseptics for "maintenance wounds," which are defined as wounds that are not expected to heal, or for wounds that are critically colonized.
- Use systemic antibiotics in the presence of bacteremia, sepsis, advancing cellulitis, or osteomyelitis.
- Debride the pressure ulcer of devitalized tissue, or when there is a high index of suspicion that biofilm is present (i.e., wound fails to heal despite proper wound care and antimicrobial therapy), and when consistent with the patient's condition and goals of therapy.
- Modify the type of dressing as appropriate due to changes in the wound during healing or if the pressure ulcer deteriorates. Monitor and assess the wound on a regular basis and at every dressing change to determine if the type of dressing is appropriate or should be modified.
- Consider adjunctive therapies as indicated: platelet-derived growth factor (PDGF); electrical stimulation; negative-pressure wound therapy (NPWT).
- Evaluate the need for operative repair for patients with stage 3 and 4 ulcers that do not respond to conservative medical therapy.

- Implement measures to eliminate or control the source of pressure ulcer pain.
- Implement appropriate treatment of pressure ulcers to optimize healing, recognizing that complete healing may be unrealistic in some patients.
- Educate the patient/caregiver(s) about strategies to prevent pressure ulcers, promote healing, and prevent recurrences of ulcers; and emphasize these are lifelong interventions.

emedicine

ACP Clinical Practice Guidelines

The 2015 American College of Physicians (ACP) clinical practice guidelines for risk assessment, prevention, and treatment of pressure ulcers included the following recommendations and statements [55, 56] :

- Perform a risk assessment to identify patients who are at risk of developing pressure ulcers
- Choose advanced static mattresses (made of foam or gel that stays put when a person lies down) or advanced static overlays (a material attached to the top of a mattress such as sheepskin or a pad filled with air, water, gel, or foam) in patients who are at an increased risk of developing pressure ulcers
- ACP recommends against using alternating-air mattresses or alternating-air (also called dynamic) overlays in patients who are at an increased risk of developing pressure ulcers
- Use protein or amino acid supplementation in patients with pressure ulcers to reduce wound size
- Use hydrocolloid or foam dressings in patients with pressure ulcers to reduce wound size; the evidence also showed that hydrocolloid dressings are better than gauze for reducing wound size and resulted in similar complete wound healing as foam dressings
- Although radiant heat dressings accelerated wound healing, there was no evidence they were better than other dressings for improving complete wound healing
- Use electrical stimulation as adjunctive therapy in patients with pressure ulcers to accelerate wound healing; the most common adverse effect for this stimulation was skin irritation, and frail elderly patients were more susceptible to harms from electrical stimulation
- Those at higher risk for pressure ulcers include blacks or Hispanics and those with lower body weight, cognitive or physical impairments, and other comorbid conditions that affect soft tissue(eg, incontinence, edema, malnutrition, and diabetes)

emedicine

AHCPR Pressure Ulcer Panel Guidelines

Guidelines developed by the Agency for Healthcare Policy and Research (AHCPR) Pressure Ulcer Panel for managing existing pressure ulcers include the following:

- Use positioning devices to raise a pressure ulcer off the support surface; if the patient is no longer at risk for pressure ulcers, these devices may reduce the need for pressure-reducing overlays, mattresses, and beds; avoid using donut-type devices [88]
- Assess all patients with existing pressure ulcers to determine their risk for developing additional pressure ulcers; if the patient remains at risk, use a pressure-reducing surface [18, 89, 90, 91]
- If patients can assume a variety of positions without bearing weight on the lesion and without “bottoming out,” a static support surface should be used [92, 93, 94, 95]
- If the patient cannot assume a variety of positions without bearing weight on the ulcer, if the patient fully compresses the static support surface, or if the pressure ulcer does not show evidence of healing, a dynamic surface should be used [92]
- Finally, if the patient has large stage III or stage IV pressure ulcers on multiple turning surfaces, a pressure-relieving product is warranted [7, 41, 92, 94, 95, 96]

emedicine
Medication
Close

What would you like to print?

What would you like to print?

- Print this section: WOCN Guidelines
- Print the entire contents of Guidelines
- Print the entire contents of article

TOP PICKS FOR YOU