Pressure Ulcer Classification

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Introduction

Pressure ulcers are defined as localized injuries to the skin and/or underlying tissue, usually over a bony prominence, as a result of pressure alone or in combination with shear. They commonly occur in patients with limited mobility, such as those in hospitals or long term care settings. It is estimated that up to 3 million adults in the United States are affected by pressure ulcers. The prevalence in the United States ranges from 0.4% to 38% in acute care hospitals. The estimated cost of treating each case of pressure ulcers ranges from $37,000 to $70,000 with up to $11 billion spent annually in the United States. Risk factors for pressure ulcers include older age, black race or Hispanic ethnicity, lower body weight, obesity, cognitive impairment, physical impairments and other comorbid conditions that affect soft tissue integrity and healing, such as urinary or fecal incontinence, lines and drains, diabetes, edema, impaired microcirculation, hypoalbuminemia, and malnutrition. Treatment of pressure ulcers involves multiple methods intended to alleviate the conditions contributing to ulcer development, including support surfaces, repositioning, nutritional support, protection of the wound from contamination and creation of a clean wound environment, promotion of tissue healing, debridement, wound cleansing, adjunctive therapies, and consideration for surgical repair.

This update provides a description of pressure ulcer stages and a brief summary of treatment.

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DOI: 10.12746/swrccc2015.0310.129

Blanchable Redness

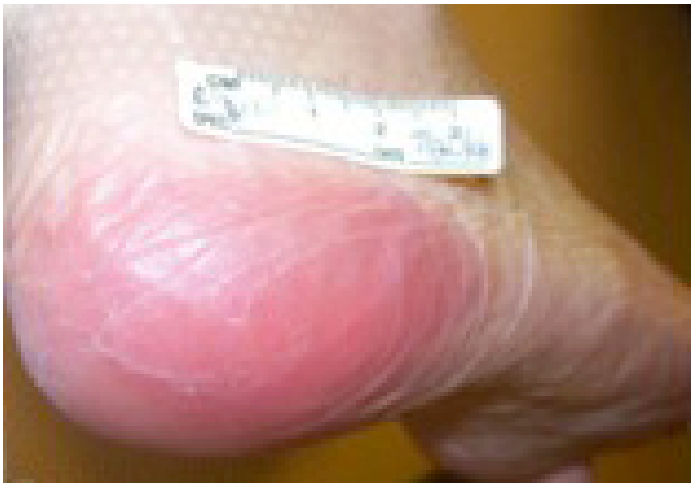
This is a reddened area on the skin with a whitish appearance when blood flow to the region is prevented. Pushing on the reddened area of the skin with finger impedes the circulation. When the finger is removed, the area is whitish and returns to red quickly.

Treatment: Protect and relieve pressure, shear, and friction. Monitor closely.

Stage I: Non-blanchable redness

This stage has intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area. For these patients we should look at temperature differences between the suspected skin lesion and normal skin. The area may be painful, firm, soft, warmer, or cooler as compared to adjacent tissue. Stage I may identify an “at risk” person.

Treatment: Protect and relieve pressure, shear, and friction. Reposition every 2 hours.
Monitor closely.



Stage II

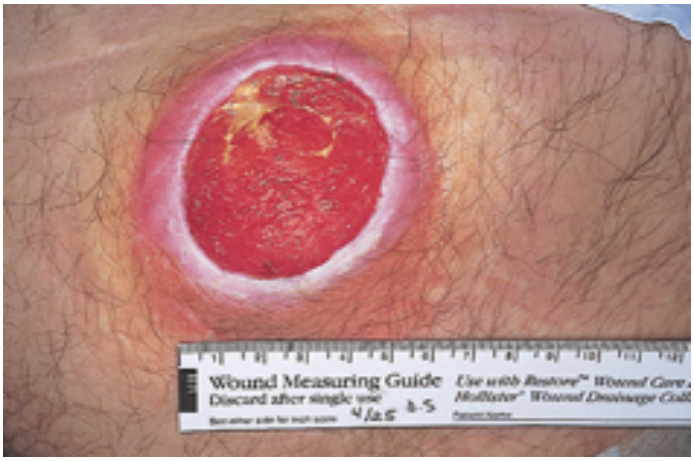
This stage has partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed without slough. This stage presents as a shiny or dry shallow ulcer without slough or bruising. This may also present as an intact or open/ruptured serum-filled blister. This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration, or excoriation.

Treatment: Protect and relieve pressure, shear, and friction. If the ulcer is open with no to minimal drainage, keep it moist by applying an ALLEVYN dressing (Smith & Nephew Global Products, Andover, MA). Reposition every 2 hours.
Monitor closely.

Stage III

This stage has full thickness loss of dermis. Subcutaneous fat may be visible but bone, tendon, or muscle is not exposed. The depth of a stage III pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous fat, and stage III ulcers can be shallow. Areas with significant adiposity can develop deep stage III pressure ulcers.

Treatment: Protect and relieve pressure, shear, and friction and manage drainage. Reposition every 2 hours. If wound bed has minimal drainage, keep it moist by applying an ALLEVYN dressing.
Monitor closely.



Stage IV

This stage has full thickness loss of dermis with exposed bone, tendon or muscle. Slough or eschar may be present in some parts of the wound bed. This stage often includes undermining and tunneling. The depth of a stage IV pressure ulcer varies by anatomical location. Stage IV ulcers can extend into muscle and/or supporting structures, such as fascia, tendon, or joint capsule. Exposed bone/tendon is visible or directly palpable. Rule out osteomyelitis in stage III and stage IV ulcers with MRI or biopsy.

Treatment: Protect and relieve pressure, shear, and friction and manage drainage. Reposition every 2 hours. If wound bed has minimal drainage, keep it moist by applying an ALLEVYN dressing.
Monitor closely.

Suspected Deep Tissue Injury

This injury is a purple or maroon localized area of intact skin or blood-filled blister due to damage of underlying soft tissue from and/or due to shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer, or cooler as compared to adjacent tissue. Treatment: Protect and treat by applying an ALLEVYN dressing. Relieve pressure, shear, and friction. Reposition every 2 hours.
Monitor closely.

Unstageable Ulcer

This stage has full thickness tissue loss in which the base of the ulcer is covered by slough (yel low, tan, gray, green and or brown) and/or eschar (tan , brown or black) in the wound bed. The eschar or slough has to be removed for appropriate staging when feasible, except in heel type pressure ulcers. When eschar is removed, it will be either a stage III or IV ulcer.

Treatment: Protect and relieve pressure, shear, and friction, manage drainage, and promote healing. Reposition every 2 hours. If wound bed has minimal drainage, keep it moist by applying an ALLEVYN dressing.

Conclusion

Prevention strategies for pressure ulcers begin with identification of high risk persons. Many interventions designed to prevent pressure ulcers and reduce friction and shear are available, and categories include various support surfaces such as mattresses, repositioning, nutritional support, skin care (e.g., dressing and management of incontinence), and topical creams. Although pressure ulcer prevention focuses on reduction of pressure on body sites of at risk patients, pressure ulcer management is based on three principles: removing the offending agent (pressure), protecting the wound from contamination, and promoting healing through nutrition and supplementation by the adding of nutrients, such as protein, vitamins, and/or minerals to improve wound healing. The key components of successful prevention, treatment, and management of pressure ulcers include simplification and standardization of the interventions, documentation, involvement of multidisciplinary teams and leadership, including ostomy and skin care nurses, designated skin “champions” who educate staff about skin care and ulcer prevention, and the use of evidence-based guidelines.

Acknowledgements

The photographs in this presentation were pro vided by Skin Care Services at University Medical Center in Lubbock, TX.

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Received: 02/06/2015
Accepted: 04/02/2015
Reviewers: Hawa Edriss MD
Published electronically: 4/15/2015
Conflict of Interest Disclosures: None

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