Pressure ulcers are defined as “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 also are associated with pressure ulcers; the significance of these factors is yet to be elucidated.

Why the change? The original definition indicated that pressure ulcers were areas of localized necrosis. This definition did not fit stage I, stage II or deep tissue injury; therefore it was refined to simply say “injury”. Further, the role of shear and friction in pressure ulcer development is coming into focus and these etiologies needed to be included.

Suspected deep tissue injury (DTI) now has been defined as a stage of pressure ulcers. DTI is a “purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.”

Deep tissue injury, of course, was not in the original staging system and was not being captured. So we had no consistent means to describe the burden of these ulcers or establish a program of prevention and treatment. Blood blisters were included in the definition as deep tissue injuries because they represent damage below the epidermis. Blood blisters were not labeled as “unstageable” because debridement is not always done, such as on the heels.

Stage I pressure ulcers are now defined as “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.”

Why the change? The original definition of stage I ulcers included terms that were easily confused with deep tissue injury and we believe that DTI and stage I’s are different ulcers with potentially different outcomes.

Stage II pressure ulcers are now defined as “Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.”

Why the change? The stage II ulcer definition contained language that could be confused with perineal dermatitis, skin tears, tape burns and other nonpressure ulcer skin injuries. NPUAP also believes that the bed of a stage II pressure ulcer should be pink, not purple or dark and not covered with slough.

Less changes were made to the stage III and stage IV pressure ulcers. Stage III pressure ulcers are defined as “full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.” Stage III pressure ulcers may be one of the most difficult to identify due to their varied depth. Text was added to the description of stage III ulcers to help the clinician become aware that depth alone is not the only indicator. For example, stage IIIs on the bridge of the nose can be shallow and stage III pressure ulcers on the buttocks can be extremely deep stage III pressure ulcers.

Stage IV pressure ulcers remain “full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.” Again, the depth of stage IV ulcers varies by their location.

continued on page 3
Courtney Lyder and Elizabeth Ayello Honored with NPUAP Awards

The National Pressure Ulcer Advisory Panel honors two professionals with the Kosiak Award and the Thomas Stewart Founder’s Award at its national biennial conference. This year, Dr. Elizabeth Ayello was presented the Kosiak Award and Dr. Courtney Lyder was presented the Stewart Award.

Dr. Ayello, PhD, RN served as President of NPUAP in 1999. She is active in local projects, having been instrumental in New Jersey’s effort to reduce the number of pressure ulcers statewide through combined efforts with nurses in all settings. Dr. Ayello edits the International Journal for ET Nurses and Wound Care Essentials, a textbook for wound care professionals. She is Clinical Associate Editor for Advances in Skin and Wound Care and is a faculty member of Excelsior College School of Nursing. She also serves as a co-chair of the June 2008 World Union of Wound Healing Societies Conference in Toronto. Dr. Ayello is President of Ayello, Harris & Associates, Inc.

The Kosiak Award is the oldest award given by NPUAP and was designed to honor individuals who have made significant contributions to the prevention and/or management of pressure ulcers through their leadership in the areas of research, education and/or patient care. The award is named in honor of Dr. Michael Kosiak for his classic, original contributions on the etiology of pressure ulcers. Past recipients of the Kosiak award are:

- 2005: George T. Rodeheaver, PhD
- 2003: Richard M. Allman, MD
- 2001: JoAnn Maklebust, MSN, RN, CS, CNP
- 1999: Barbara Braden, PhD, RN, FAAN
- 1997: Roberta S. Abruzzese, PhD, RN, FAAN
- 1995: Martin C. Robson, MD
- 1993: Thomas Krouskop, PhD
- 1991: Nancy Bergstrom, PhD, RN, FAAN

Dr. Lyder received the Thomas Stewart Founder’s Award for his public policy work, especially with the Centers for Medicaid and Medicare in the area of pressure ulcers in Long Term Care settings. He has translated the science of pressure ulcer prevention and treatment into evidence-based public policies that have improved the quality of life for millions of Americans. Dr. Lyder, a professor at the University of Virginia (Charlottesville, VA), is extremely dedicated and uniquely gifted in his ability to articulate the concerns and needs of patients to the highest levels of our government.

The Stewart Award was created to honor an individual who has made significant contributions in the area of pressure ulcer prevention and treatment, especially in the areas of public policy. Dr. Thomas Stewart, founder of the NPUAP in 1987, presented the award to Dr. Lyder. Past recipients have been Dr. Stewart and Beverly Cullen with CMS for her work in revising the interpretive guidelines for the F 314 tag in Long Term Care.

NPUAP 2007 National Biennial Conference Honors Abstract Poster Award Winners

The NPUAP Research Committee honored two poster presenters.

Selected as winner of the Best Overall Poster Award:
Sue Nickoley, MS APRN, BC of Rochester, NY.

Selected as winner of the Best New Investigator Award
Patricia A. Rose, N., MSc(A) of Montreal, Quebec.

NPUAP congratulates the winners.

UPCOMING EVENTS

Best Practice Conferences
Minneapolis, MN - Fall, 2007
Omaha, NE - September 15, 2007
Kalamazoo, MI - October 22, 2007

S3I Conference
Salt Lake City, UT - April 19–20, 2007

11th NPUAP Biennial Conference
Washington, DC – February, 2009
The definition of unstageable pressure ulcers was revised to reduce the number of ulcers that are labeled unstageable simply because they contain some necrotic tissue. The revised definition is “full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.”

The process of revising the definition of pressure ulcer stages has taken over 5 years, beginning with the work on deep tissue injury. There have been multiple iterations of the definitions and hundreds of professionals involved in the refinements. The goal of the revision was to develop a clearer and cleaner set of terms to guide clinical assessment and care of patients. We hope you agree with us that our goal was met!

Joyce Black
NPUAP President

Healthpoint, Ltd. JOINS NPUAP’S CORPORATE ADVISORY COUNCIL

Healthpoint®, Ltd. has become the newest member of NPUAP’s Corporate Advisory Council.

Since its inception in 1992, Healthpoint has established a U.S. presence in the research, development, and marketing of branded pharmaceuticals, over the counter drugs, and medical devices for tissue management, dermatology, and surgical indications. An aggressive research and development effort has brought the Healthpoint unique technologies to the market, setting the pace for its highly trained field sales organization of direct sales representatives. Healthpoint, with over 300 employees, is a DFB Pharmaceuticals, Inc. affiliate company. Healthpoint is based in Fort Worth, Texas. Visit the Healthpoint web site at www.healthpoint.com.

Also headquartered in Fort Worth, DFB provides technology-driven products, outsourcing services, and licensing opportunities to the healthcare industry worldwide through its affiliate companies, contract partners, and branded marketing organizations.
Every two years since 1989, NPUAP has held a consensus conference to enhance the awareness of the seriousness of the pressure ulcer problem and to discuss timely issues related to pressure ulcers. The purpose of the consensus conference is to produce informed debate on pressure ulcers. The 1989 conference defined the need for documentation of pressure ulcer incidence and prevalence, identified the risk factors associated with pressure ulcer development and initiated the NPUAP pressure ulcer staging system.

At the 1991 conference, the AHCPR guideline “Pressure Ulcers in Adults: Prediction and Prevention” was reviewed and discussed. This was the only open critique of the document. In 1993, the AHCPR guideline “Treatment of Pressure Ulcers” was reviewed and discussed. For the first time the use of electronic polling allowed for specific questions to be developed with input obtained from the audience. In 1995, the conference, “Pressure Ulcer Healing: Controversy to Consensus, Assessment Methods and Outcomes” discussed topics related to the pressure ulcer staging system, indices to include in pressure ulcer reassessments as well as the frequency for these assessments. In 1997, the consensus conference was titled “Monitoring Pressure Ulcer Healing: An Alternative to Reverse Staging.” It was at this conference that a draft of the NPUAP ‘PUSH tool’ was presented. In addition, culturally neutral language for identifying Stage I pressure ulcers and reverse staging were discussed. At the 1999 conference, the definition for a Stage I pressure ulcer was finalized.


In 2007, the conference titled “Charting the Course for Pressure Ulcer Prevention and Treatment” addressed the staging system and how deep tissue injury fits or does not fit with the current staging system as well as how to make the staging system more precise. This was the most recent of the consensus conferences which had a record number of attendees (over 400) with 30 exhibitors. Joint Commission and CMS representatives spoke at the conference along with other national and international distinguished wound care experts.

As one can see, over the years, the NPUAP Consensus Conferences have presented timely and cutting edge information on pressure ulcers. You won’t want to miss the next consensus conference in Washington D.C., so mark your calendars now for February 2009!

Corporate Advisory Council Review

The members of the NPUAP Corporate Advisory Council (CAC) would like to applaud the NPUAP Board of Directors for a very successful Biennial Consensus and Best Practice Conference during February 2007. The CAC membership was pleased to provide generous support for the conference through many “in-kind” service provisions and individual conference planning expertise. CAC members were excited to envision many successful landmark projects that the NPUAP has been diligently developing and designing over the past several years.

With regret, the Council must say good-bye to co-chair Joe Rolley. His leadership will be truly missed. On the other hand, Terry Coggins, RN, MSN, CWOCN has graciously agreed to assume the post of CAC co-chair along with Rosalyn Jordan. Terry is the Medical Education Manager for Smith-Nephew, Inc. and has been a CAC representative for approximately five years. Rosalyn and Terry look forward to working with the CAC and NPUAP Board of Directors during the next year.

The CAC would like to welcome the following new CAC members: Medline Industries, Inc., Stryker Medical, Sage Products, Inc. and Healthpoint, Ltd. The Council will campaign to raise industry awareness during 2007 and promote additional industry leaders to participate as CAC members.

Meet Your NPUAP Officers

NPUAP 2007 officers (L to R): Becky Dorner, Secretary; Janet Cuddigan, Treasurer; Diane Langemo, Vice President; and Joyce Black, President.
Pressure Ulcer Definition and Stages

DEFINITION

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.

Pressure ulcers are staged using the system at right.

PRESSURE ULCER STAGES

(SUSPECTED) DEEP TISSUE INJURY

Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

Further Description: Deep tissue injury may be difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered by thin eschar. Evolution may be rapid exposing additional layers of tissue even with optimal treatment.

STAGE I

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.

Further Description: The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I may be difficult to detect in individuals with dark skin tones. May indicate “at risk” persons (a heralding sign of risk).

STAGE II

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.

Further Description: Presents as a shiny or dry shallow ulcer without slough or bruising.* This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.

*Bruising indicated suspected deep tissue injury.

STAGE III

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.

Further Description: 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 tissue and stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep stage III pressure ulcers. Bone/tendon is not visible or directly palpable.

STAGE IV

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.

Further Description: The depth of a stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Stage IV ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.

UNSTAGEABLE

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

Further Description: Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore stage, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as “the body’s natural (biological) cover” and should not be removed.

This staging system should be used only to describe pressure ulcers. Wounds from other causes, such as arterial, venous, diabetic foot, skin tears, tape burns, perineal dermatitis, maceration or excoriation should not be staged using this system. Other staging systems exist for some of these conditions and should be used instead.

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