



The Healer



A peer reviewed publication of Advance Healing

VOLUME 1 ISSUE 1 AUGUST 2012

PREMIER ISSUE

LET'S TAKE THE PRESSURE OUT OF WOUNDS

From the Editor

Teresa Matthews, Family Nurse Practitioner

Welcome to the premier edition of The Healer, a peer reviewed publication from Advanced Healing, Inc. The theme of this quarter is **Let's Take the Pressure out of Wounds**. The efforts to reduce the incidence of facility acquired pressure ulcers are not unnoticed. This is accomplished by leading research, exploring the models of practice delivery through assessing, diagnosing correctly, planning, intervening, and evaluating.

Beginning this publication is a brave endeavor. I traditionally spend my days as a Family Nurse Practitioner orchestrating wound rounds in long term care facilities. This involves a collaboration which sets nurse practitioners on a pedestal in our current healthcare delivery system. After providing the facilities with their required documentation, I find myself seeking ways to recreate energy. In other words, I'm exhausted!

The genesis of The Healer reproduces my energy. I struggle with ways to deliver quality wound care and dermatology education in the arenas of our community. Incorporating the brilliant minds that I am surrounded with and having these creative people publish their strengths is an amazing source of empowerment. Read this publication at your leisure in a relaxed setting of your choice and open your mind to the

ever dynamic exciting world of the largest organ of your body....your skin!

Opinions are endless. However, evidence-based practice with researched literature to back a professional license is the only way I practice. Frequently, I'm asked my "opinion" on a various treatment plan. I provide my 'opinion' but I back it up with literature. This is moving Delaware forward in wound care to a world of advanced wound care procedures and dressings.

At a conference I spoke at recently, a physician boldly stated that "I have always done a wet-to-dry dressing, and I always will." Anyone who knows me knows I was mortified. A colleague took the microphone and stated "just because your preceptor from 1940 taught you that procedure, it does not imply that we cannot progress." I could have hugged that person! We are moving forward! Disseminating that information in an organized publication is a huge step in providing our patients with the cutting-edge modalities that will HEAL.

Enjoy this premier edition. Send your comments to me through Advanced_Healing@hotmail.com. Without all of you, I could not do this. It is with humble gratitude that I present to you, my friends and colleagues, *The Healer*.



Search for:
Advanced Healing, Inc.

IN THIS ISSUE

MEET THE STAFF.....	2
BACK TO BASICS.....	5
SETTING THE STAGE.....	7
PREVENTION.....	9
PRESSURE'OPOLY.....	10
SDTI.....	11
PAINFUL TRUTH.....	12
DRESSING CHOICE.....	14



Teresa Matthews is the proud owner and sole Nurse Practitioner for Advanced Healing, Inc. She proudly organizes wound rounds at Delaware's long term care facilities, and educates our providers on the honor of caring for our tender elders. Along with house calls and public speaking, this unique practice is endless in possibilities. Teresa earned her MSN from Wesley College and her Post Masters Family Nurse Practitioner from Indiana State University. She is Certified as a Family Nurse Practitioner through AANP. Teresa welcomes comments and offers individual encouragement through www.advanced-healing.net or at her office at (302) 363-5839.

MEET THE EDITORIAL STAFF



Kami Jensen Brinkerhoff

is a geriatric nurse in Lincoln, Nebraska. She is an educator who specializes in direct patient care influencing implementation of evidence-based practice protocols in her rehabilitation and long-term care facilities. Kami is passionate about educating front-line nurses and nurse aids in their role for identifying, preventing, and healing skin issues. Kami has worked in long-term care for 20 years and wants to empower the next generation of nurses as she teaches nurse aid and medication aid certification courses thru Nebraska Health Care Association. Kami obtained her bachelor's degree at the University of Nebraska Medical Center and earned her master's of nursing education at Nebraska Wesleyan University. She welcomes comments or collaboration on geriatric issues or trends through kamibrinkerhoff@hotmail.com.



Lyron Deputy, MSN, MBA

earned his ADN and MSN from Wesley College and his MBA from Wilmington University. Lyron has worked as a direct care nurse for over ten years in the areas of orthopedics, occupational health, rehabilitation and critical care. He is currently Chief Executive Officer of Delaware Sleep Disorder Centers creating the strategic visions in running sleep centers in Delaware. He also teaches part time in the nursing skills lab at Wesley College. Lyron also serves on the Delaware nursing board. Lyron can be reached by email at Lyron@delsleep.com or at his office at (302) 669-6151.



John Dressler, Jr., MS

is an aspiring Psychological researcher. Graduating in 2011 with an M.S. in Experimental Psychology, John gained experience working with individuals diagnosed with Autism while testing the efficacy of grammatical software designed for an autistic population. Currently working for a social services organization that assists both children and adults with autism and other diagnoses, he plans on pursuing a Ph.D. in the future. John received his B.A. in Psychology in 2007 from the University of Delaware. He can be reached at Jtdressler@gmail.com.



Dr. Lucille Gambardella

is a nurse leader/educator with over 40 years of experience in education and clinical practice as a certified psychiatric/mental health clinical nurse specialist. She is a nationally known speaker on topics that include executive leadership, emotional intelligence, curriculum development and evaluation, student/faculty relationships, and building effective teams. Dr. Gambardella is a fellow of the Academy of Nursing Education and the owner of Positive Transitions, a consulting firm in Lewes, DE. Lucille may be contacted at gambarlu@comcast.net and at her office at 302-270-7955.



Mark A. Lang RN, MSN, CRNA

is employed by Bel-Park Anesthesia Associates, Inc. as a Certified Registered Nurse Anesthetist (CRNA). He works as affiliate staff at the Humility of Mary Health Partners, St. Elizabeth's Main Campus in Youngstown, Ohio (a 625 bed, Level 1 Trauma Center). His responsibilities include complete and comprehensive management of anesthesia for all surgical patients including geriatric, pediatric, cardiac, neurological, trauma, and high risk obstetrical patients. He is also affiliate staff at Youngstown State University and the St. Elizabeth's School for Nurse Anesthesia, Inc. working as a didactic and clinical instructor and preceptor for students in the Masters of Nursing degree program focusing on Nurse Anesthesia. Mark has worked in the field of nursing since 1990 when he graduated Kent State University with a Baccalaureate Degree in Nursing. During his first years as a nurse, Mark worked in a comprehensive Intensive Coronary Care Unit and held many different positions on multiple different committees. He attained a Certification in Critical Care Nursing and maintained the certification from 1993 to 2004. He was also a member of the AACN for the same time period. Skin care has always been a high priority for Mark. Mark has developed and written standards for practice in relation to skin and wound care, was responsible for monthly staff education regarding advanced skin assessment and treatment, and created algorithms for patient placement on specialty support services dependent on clinical condition. In 2003, Mark attained a Masters Degree in Nursing and became a Board Certified Nurse Anesthetist after a 24 month program of didactic and clinical studies at both Youngstown State University and St. Elizabeth's Health Center School for Nurse Anesthesia, Inc. He is presently a member of the AANA and has been Certified in basic, advanced cardiac, and pediatric advanced life support. Mark can be reached for comments or enquiries at HOTAIRBUFFOONS@aol.com or on his cell at 330-719-3975.

MEET THE EDITORIAL STAFF



Sharon M. Mills-Wisneski,
PhD, RN

is an assistant professor at the University of Massachusetts-Amherst in the School of Nursing. She received an Associate degree and a Bachelor in Nursing from Wesley College. A Masters in Nursing Science (MSN) with a focus in Critical Care, a Post-graduate Certificate in Nursing Education and a Doctor in Nursing Science Degree from Widener University. Her dissertation examined “Factors that supported or restricted minority students’ academic success in nursing. As a Post-Doctoral Research Fellow in Women’s Health Disparities in the School of Nursing at the University of Michigan from 2004-2007, her research focus examined Breast Cancer in African American Women: Extended Survivorship Phase. She has held several professional staff nurse and educational positions. For many years, she had been an active member of several professional nursing organizations and community boards where she had also held numerous positions in and out of nursing. One of particular pride includes, being Editor-in-chief, of the Delaware Nurses Association’s Newspaper. She continues to be a reviewer of several nursing journals. She can be reached at millswis@nursing.umass.edu.



Kristina Smith, MSN, RN,
CCM

is an Assistant Professor of Nursing at Nebraska Wesleyan University in Omaha, Nebraska. She has been a long-term care clinical consultant for many years, and is a well-known author, speaker and presenter. Kristina earned her MSN from Nebraska Methodist College. She is a Certified Legal Nurse Consultant through the NACLNC and is a Certified Case Manager through CCMC. Holistic care is a special focus and Kristina is a Certified Lay Speaker and volunteers her time ministering to the elderly and conducting Worship Services in long-term care facilities. Kristina welcomes opportunities to share with others and can be reached at 402-944-8112 or <http://kristinamakingadifferenceeveryday.blogspot.com/>



Julie Libertini
Territory Manager
Wound Therapeutics

100 Headquarters Park Drive
Skillman, NJ 08558
www.convatec.com

Cell: 410-913-8561
Fax: 410-327-7612
julie.libertini@convatec.com
Professional Svcs 800-422-8811

Legal Matters

General

The Healer is a registered trademark of the publisher, Pre-Hospital Interventions, Inc., d/b/a Advanced Healing (the “Publisher”).
107 Russell Dr.
Milford, DE 19963
© 2012 by the Publisher.

Managing Editor

Teresa Matthews, FNP-C, MSN, RN, WOCN

Editorial and Peer Review Board

Kami Jensen Brinkerhoff
Lyron Deputy, MSN, MBA
John Dressler, Jr., MS
Dr. Lucille Gambardella
Mark A Lang, RN, MSN, CRNA
Sharon M. Mills-Wisneski, PhD, RN
Annamarie Pownell, RN
Kristina Smith, MSN, RN, CCM

Advertising

Please call the publisher at 302-363-5839 for a current rate card.

The Publisher reserves the right to reject any advertisement. Responsibility for errors in advertising is limited to corrections in the next issue, and there are no refunds of price of advertisement. Acceptance of advertising does not imply endorsement or approval by the Publisher of any products or services advertised, the advertisers, or the claims made. The Publisher shall not be liable for any consequences resulting from purchase or use of any advertiser’s products.

Submissions and Content

Articles appearing in *The Healer* express the opinions of the authors; they do not necessarily reflect views of the staff, board, or membership of the Publisher. All submitted articles must be original. Authors are responsible for obtaining permission to use any copyrighted material.

All articles will be peer-reviewed and edited as necessary for content, style, clarity, grammar and spelling. While student submissions are greatly sought and appreciated, no article will be accepted for the sole purpose of fulfilling any course requirements. It is the policy of the Publisher not to provide monetary compensation for articles appearing in *The Healer*.

THE PUBLISHER IS NOT RESPONSIBLE FOR THE RETURN OR LOSS OF, OR FOR DAMAGE OR ANY OTHER INJURY TO, UNSOLICITED MANUSCRIPTS, UNSOLICITED ART WORK (INCLUDING, BUT NOT LIMITED TO, DRAWINGS, PHOTOGRAPHS, AND TRANSPARENCIES), OR ANY OTHER UNSOLICITED MATERIALS. PLEASE DO NOT SUBMIT ORIGINALS, UNLESS SPECIFICALLY REQUESTED TO DO SO IN WRITING.

Subscriptions

For subscriptions, address changes, adjustments, reprints, or back issue inquiries, please contact William Matthews at 302-363-5839, or e-mail advanced_healing@hotmail.com. Please give both new and old addresses as printed on most recent label.

If the Post Office alerts us that your newsletter is undeliverable, we have no further obligation unless we receive a corrected address within one year.

No part of this newsletter may be reproduced without the consent of the Publisher.

Disclaimer

The information in this newsletter is for general information and educational purposes only, and should not be construed as medical advice or diagnosis, nor as advice as to treatment of any specific medical condition. The information, opinions and recommendations presented in these pages are not intended to replace the care of your own healthcare providers. Before you make any changes in the management of your health, you should consult your health care provider or other qualified medical professionals.

AND THE SURVEY SAYS....

The presence of pain and how it is managed is a surveyor's responsibility to determine through the facility's documentation. See The Painful Truth on page 12 to better understand your assessment of pain. Remember to fully document regularly on pain, your intervention, and your evaluation of your intervention. If the dressing change is painful, it is likely the wrong dressing choice!

The surveyor experience is unavoidable. You will go through this. Your perception of your experience is totally in your control. Let it be educational. Welcome them, and the experience. Always do things the 'right way' and there will be no need for anxiety. View the surveyor as an extension of your team!

Pre-Hospital Interventions



Educating Today's Lifesavers

Your Source for all Emergency Response Education including

CPR, First Aid, and EMS training
Customized Continuing Education.

ON SITE education means your staff does not have to travel.

Call to schedule a class today, do not wait until you are about to expire.

Call Ryan at 302-462-1220


Advanced Healing



A Higher Level Of Health

www.advanced-healing.net

Diamond Luxury Limos
Anytime. Anywhere



Carmen Straccione
443.523.0530
Ocean Pines, Maryland



Chucks Flying

Learn To Fly Here!
Site See and Aerial Photography

CFI-CFII-MEI-ATP

Po Box 498
Greenwood, DE 19950
Located At Georgetown Airport

KGED
302-542-2669
motul1@comcast.net

Make your Dream of flying a Reality

Private Pilot to ATP Training
Flight Reviews and Instrument Proficiency Check's
Aerial Photography
Site See Trips

Back to Basics: Reduce the Pressure, Reduce the Ulcers

Nicole Lachman, RN, BSN

Pressure ulcers have long been a concern for long term care facilities. They are painful for the patient, costly for the facility, and now, with the QIS survey, a facility may receive up to sixteen separate tags from CMS for failure to provide appropriate interventions for the prevention and treatment of pressure related injuries. Though some ulcers can be considered unavoidable, it is true that most are not. However, with a multi-disciplinary team and a thorough care plan in place, preventing pressure ulcers can be a simple process.

Immediately upon admission, a full body skin assessment should be completed. It is imperative to note any open areas, as well as any areas that are red or dusky, either warmer or cooler than surrounding skin, as well as any areas of bogginess. If any of these changes are noted, measurements of the area should be included on the assessment. These areas need to be documented as community acquired, or present at the time of admission to the facility, "as documented on the admission assessment" (National Database of Nursing Quality Indicators, 2012). F-314 is the CMS tag related to the prevention and management of pressure ulcers. This tag can be cited not only for avoidable nosocomial pressure areas, but also for any community acquired areas that were incorrectly assessed upon admission.

All open areas, whether nosocomial or community acquired, should be measured at the time of assessment with a description of the wound, including color of wound bed, odor, and the amount and color of drainage if present. The area should not be staged. Staging should be done consistently throughout the facility by a single nurse who is knowledgeable about wounds and is able to differentiate between venous, arterial, neuropathic and pressure related ulcers.

The Braden Scale should be part of the admission assessment. The scale is a clinically validated tool used to predict a patient's risk for developing pressure ulcers. (Lyder and Ayella, 2008). A score less than sixteen presents

a patient at greater risk and requires further investigation and intervention beyond routine to prevent skin breakdown (Braden, 2001). The Braden Scale should be completed weekly for four weeks post admission, as a more complete picture of the patient develops.

Prevention of pressure ulcers also begins at time of admission. Every patient's plan of care should include basic interventions such as "Turn and reposition every two hours." Though this is a standard intervention, the plan should be individualized based on the risk of the patient. More frequent turning, or specified turning, such as side-to-side only to prevent pressure on a compromised area should be considered. Limiting time in wheelchair, or time out of bed may be necessary. For those at higher risk of breakdown, or with areas of redness or stageable wounds present, an air-mattress overlay should be provided (National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel, 2009). If a stage III or greater wound, or full thickness skin loss, is present, a low air-loss mattress is indicated (Lyder and Ayello, 2008).

Many patients are admitted with red or boggy heels, caused by decreased mobility and direct pressure against the mattress. Patient's heels should be off-loaded with a pillow. The heels should not be directly on the pillow; rather they should be floating in the air. The pillow must be placed high enough under the legs to allow the heels to float as well as support the lower legs, without hyper-extending the knees (NPUAP and EPUAP, 2009). For those who are unable to maintain positioning on a pillow, whether due to contracture, surgery, or dementia, soft heel boots may be used. Do not use hard sided boots, as these may cause pressure or trauma to areas on the leg. For those with vascular insufficiency, a foot cradle to prevent the blankets rubbing on the toes may be considered. Use of film-forming protective wipes is indicated to prevent shearing, and helps maintain skin integrity for boggy heels.

Incontinence is an essential factor to consider in prevention of pressure related

injuries. Incontinence care should be provided at least every two hours, and more often for those who may be on diuretics or having episodes of loose stools. A moisture barrier protective cream should be used with each brief change. There are many different brands, and different levels of protection. A zinc based product is helpful for those with excoriation.

Physical therapy should be involved with pressure reduction. The therapist should evaluate for and provide appropriate seating cushions for the wheelchair. A pressure reducing cushion should be provided for all patients. Therapy also should be involved with wound healing, as there are many modalities available to promote tissue repair.

Oxygen tubing is often overlooked where pressure is concerned. The skin behind the ears is very thin and subject to trauma. All oxygen tubing should be padded either with gauze or foam. Pay attention to any other types of tubing a patient may have. Patients often lay on their tubes causing pressure to the site and may develop an ulcer. Foley catheters should always be secured with a leg strap.

Some factors, such as immobility, vascular insufficiencies, and malnutrition, may be unavoidable. However, pressure is not. By using simple basic interventions related to offloading, pressure and the risk it presents to the patient can be avoided.

References

- Braden, B. (2001). Protocols by level of risk. Retrieved from: http://www.bradenscale.com/images/protocols_by_level_of_risk.pdf
- European Pressure Ulcer Advisory Panel & National Pressure Ulcer Advisory Panel (2009). Prevention and treatment of pressure ulcers: quick reference guide. Washington DC: National Pressure Advisory Panel.
- Lyder, C.H., & Ayello, E.A. (2008). Pressure ulcers: A patient safety issue. In R.G. Hughes (Ed.),

Continued on Page 6



Nicole Lachman, RN, BSN

Nicole lives with her family in Middletown, Delaware. She is the Assistant Director of Nursing at Parkview Nursing and Rehab in Wilmington, Delaware; a facility rated five stars by the Centers for Medicare and Medicaid Services for providing excellence in care. Nicole has worked in all roles in long-term care, beginning as a C.N.A. She is passionate about the elderly and strives to provide personal, outstanding care. She obtained her BSN from Wilmington University and is currently enrolled in the Adult and Geriatric Nurse Practitioner program. She heads the wound care program at her facility, and enjoys working hand-in-hand with Teresa Matthews of Advanced Healing. She can be reached nlachman@parkviewnursing.com.

Back to Basics: Continued from Page 5

Patient Safety and Quality: an Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US). Retrieved from: <http://www.ncbi.nlm.gov/books/NBK2650/>

National Database of Nursing Quality Indicators (2012). NDNQI Pressure Ulcer Training Module IV: Community vs. hospital/unit acquired pressure ulcers. Retrieved from: <https://www.nursingquality.org/NDNQIPRESSUREULCERTRAINING/Module4/Default.aspx>

CAREER CORNER

To Advertise Your Open Positions or Desired Position please Contact William Matthews at 302-363-5839 for Rates

ADVANCED HEALING
is currently seeking a DE Licensed
Nurse Practitioner.
Wound Care Experience a plus.
Competative Salary.
Call 302-363-5839 for Information.

Health Issues

Circle the various health issues in this puzzle.

L D M E C U J C A R D I O V A S C U L A R O
P S P Y O K M A T K E P Z P E P I L E P S Y
U E O I G A U U E V M J I N V I S I B L E B
L I L G N T Z C R X O H Q O P N L I M B S L
M T I Q I S T R M C R U P I H A N D I C A P
O I O S T N H U I S D L Y T P B I X F U A U
N L M Y I O N T N E N P T A N I F A Q M M E
A I L Y V I O C O T Y A I N Q F E E H P H C
R B A T E T N H L T S R S I U I P T R A E E
Y A I I R A V E O E S A R D A D S O F R M C
A S C L A Z I S G R T P E R D A D V E A O N
I I I I L I S D Y U T L V O R I A B V L B A
L D F B U N I E C O E E I O I M R H I Y I R
U L I I C U B A I T H G D C P A W E S M L U
C A T S S M L F N S R I O U L X X A U P I D
L C R S U M E N O O X A T P E W G L A I T N
A I A E M I W E R M J A A Z G K U T L C Y E
C S B C O F V S H Q T L Z U I P E H K S X Z
S Y J C R M L S C I S I M P A I R M E N T S
Y H F A U O E Q O Y L T A D E X T E R I T Y
D P T A E C B N W G N D E F I N I T I O N S
S Y F U N C T I O N N E U R O L O G I C A L

- ACCESSIBILITY
AMPUTATION
ARTIFICIAL
ASTHMA
AUTISM
CARDIOVASCULAR
CEREBRAL PALSY
CHRONIC
COGNITIVE
COORDINATION
CRUTCHES
DEAFNESS
DEFINITIONS
DEXTERITY
- DISABILITIES
DIVERSITY
DYSCALCULIA
ENDURANCE
EPILEPSY
EQUAL
FUNCTION
HANDICAP
HEALTH
IMMUNIZATIONS
IMPAIRMENTS
INVISIBLE
LIMBS
MOBILITY
- NEUROLOGICAL
NEUROMUSCULAR
NONVISIBLE
PARALYMPICS
PARAPLEGIA
PHYSICAL
POLIO
PULMONARY
QUADRIPLEGIA
RHETTS SYNDROME
SPINA BIFIDA
TERMINOLOGY
TOURETTES
VISUAL

Puzzle Courtesy of Norma Waltman

Setting The Stage

Teresa Matthews, FNP-C

Introduction

“What stage is this wound?” Few words set fear and uncertainty into the minds of an admission nurse than sentences that includes the words “what stage did you say the wound is?” However, with a few simple anatomy reminders, you will be able to stage these areas with ease and confidence.

In February, 2007, the National Pressure Ulcer Advisory Panel (NPUAP) has literally set the stage for our practicing guidelines. This Panel redefined the definition of a pressure ulcer and the stages of pressure ulcers, including the original 4 stages and adding 2 stages on deep tissue injury and those pressure ulcers determined to unstageable. This work is the culmination of over 5 years of work beginning with the identification of deep tissue injury in 2001. (National Pressure Ulcer Advisory Panel website, 2007).

The staging system provides a name to the amount of anatomical tissue loss. The original definitions were confusing to many clinicians and lead to inaccurate staging of ulcers associated or due to perineal dermatitis and those due to deep tissue injury. This writer has experienced the daunting task of correctly staging during my weekly wound rounds in long term care facilities. However, the preciseness of admission staging is the valuable component necessary for Centers for Medicare and Medicaid Services (CMS). The accuracy also provides the necessary structure for interventions and treatments.

The proposed definitions was refined by the NPUAP with input from an on-line evaluation of their face validity, accuracy clarity, succinctness, utility, and discrimination. This process was completed online and provided input to the Panel for continued work. The proposed final definitions were reviewed by a consensus conference and their comments were used to create the final definitions. “NPUAP is pleased to have completed this important task and look forward to the inclusion of these definitions into practice, education and research”, said Joyce Black, NPUAP President and Chairperson of the Staging Task Force. (<http://www.npuap.org/pr2.htm>). Therefore, staging is not a loose thought process based on subjectivity. However, it is structured and objective, so that any Registered Nurse completing the admission assessment is able to accurately assess, diagnose, plan, intervene, and evaluate appropriately.

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 maybe preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.



(Wound Educator website, n.d.)

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.



(Teasdale, 2001)

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. This wound may also present as an intact or open/ruptured serum-filled blister.



(Image source: <http://www.ouhsc.edu/geriatricmedicine/Education/pu/staging.htm>)

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 indicates 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 and may include undermining and tunneling.



(Spinal Injury Network Website, n.d.)

Continued on Page 8

Setting the State: Continued from Page 7

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.



(Burn Surgery Website, n.d.)

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.

Un-stageable:

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.



(Visual Diagnoses Website, n.d.)

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 it is recommended that this eschar should not be removed.

A few pearls to remember during the staging process:

- a. If there is slough, it is indeed a stage 3.
- b. If there is bruising with the non-blanching erythema, it is a suspected deep tissue injury
- c. Only stage pressure wounds!

Conclusion

All admission nurses in all arenas of healthcare can familiarize themselves with proper staging. This dictates the course of interventions to follow, including nutritional consults, mattress selection, and offloading schedules. It also is paramount in wound care dressing selection and advanced debridement needs. Following the objective standards set forth by the National Pressure Ulcer Advisory Committee will assure uniform assessments with anticipated interventions and subsequent evaluations. Donot be intimidated by the task of staging. Just keep it objective, document thoroughly everything you see (including periwound) formulate your diagnosis based on your assessment.

References

Burn Surgery Website. (n.d.). http://www.burnsurgery.com/Modules/BurnWound/rationale/healing_wounds/pressure_treatment_local.htm

National Pressure Ulcer Advisory Panel website. (2007). <http://www.npuap.org/pr2.htm>

pinal Injury Network Website. (n.d.). <http://www.spinal-injury.net/spinal-injury-network/images/pressure-sore-stage-3.jpg>

Teasdale, T. (2001). Pressure Ulcers. Retrieved from <http://www.Ogec.org>

Visual Diagnoses Website. (n.d.). http://see.visualdx.com/diagnosis/pressure_ulcer_unstageable

Wound Educator website. (n.d.). <http://www.woundeducator.com>

ADVANCED HEALING
is currently seeking a DE Licensed
Nurse Practitioner.
Wound Care Experience a plus.
Competative Salary.
Call 302-363-5839 for Information.

Collagenase[®]
Santyl
Ointment 250 units/g

Enzymatically Active • Biologically Selective

Todd Fellenbaum
Territory Manager

HEALTHPOINT[®]
BIOTHERAPEUTICS

3609 Hulen Street
Fort Worth TX 76107

302 259 8068 Cell
Todd.Fellenbaum@healthpoint.com

**Convatec**

Julie Libertini
Territory Manager
Wound Therapeutics

100 Headquarters Park Drive
Skillman, NJ 08558
www.convatec.com

Cell: 410-913-8561
Fax: 410-327-7612
julie.libertini@convatec.com
Professional Svcs 800-422-8811

PREVENTION THROUGH UNDERSTANDING

Barbara Gijanto, BSN, WOCN

“Pressure Ulcers”, “Decubs”, “Bed Sores”..... no matter what word is used, it makes wound care and staff nurses shudder and midnight advertising law firms drool. An estimated 2.5 million patients are treated for pressure ulcers annually in the US, costing Medicare an average of \$43,000 per patient. An estimated 60,000 patients die each year from complications secondary to a pressure ulcer. It is the second most common reason for healthcare lawsuits.(DeMarco, 2007).

It is often thought that pressure ulcers were the result of poor care, but this is not usually the cause. Some very ill patients can develop pressure ulcers even when the best care is given. Most, however, can be prevented.

To better help prevent pressure ulcers, we must understand what they are and what causes lead to them. The main cause is in the name; pressure. A pressure ulcer is a localized wound that develops over a bony prominence (usually) and is the result of pressure, leading to ischemia and tissue destruction. It can also be caused by pressure from a hard object, like a telemetry box.

The first step to prevent pressure ulcers from occurring is to offload the patient’s bony prominences. Ensure that they are turning at least every two hours while in bed or the chair. If they cannot do these things themselves, staff must turn them. This includes the time the patient is sleeping. Make sure that any medical devices are not lodged under them and that their heels are suspended off the bed surface with pillows or a soft offloading device.

Although pressure is the defining cause of the ulcer, many other factors contribute to their development, putting the patient at high risk for skin breakdown. These factors must be eliminated or reduced as much as possible:

- Activity Level: Those who spend extended periods of time in the bed, chair, or wheelchair are more prone to develop pressure ulcers.
- Nutritional and hydration Status: Decreased protein intake resulting in a low albumin place the patient at a higher risk as does dehydration.
- Alertness: With a decrease in alertness, a patient may not know that it is time to turn or be aware that they are sitting on something for a prolonged period.
- Incontinence: The enzymes in stool and

urine as well as the excess moisture from incontinence dramatically increases risk by changing the pH of the skin.

- Advanced age: As skin and subcutaneous tissues age, changes occur that makes pressure ulcers a more common problem.
- Other medical issues: Cancer, anemia, obesity, vascular insufficiencies, and diabetes all are risk factors. (National Pressure Ulcer Advisory Panel website, 2007)

Most facilities use a risk tool to assess for increased risk, the most common being the Braden Score. When the score falls within a specific range, preventative measures must be taken to prevent pressure ulcers from forming. These scores should be reassessed on a regular basis.

Preventative measures include routine repositioning, use of moisture barrier creams, offloading devices, low air loss mattresses and seating cushions. Labs should be monitored for dehydration, low album, low hemoglobin, and glucose levels and any abnormalities treated.

If these contributing factors have been eliminated and a turning schedule is in use, a WOCN (Wound Ostomy Continence Nurse) can be contacted for an assessment. WOCNs are specialists in wounds and utilize evidence based practices along with state of the art dressings to help prevent and heal wounds. For a list of WOCN nurses in your area, you can contact the organization through the <http://www.ncwocn.org> website.

Families should be educated on how to prevent pressure ulcers and how the facility is working to minimize patient’s risk. They can remind patients to turn and help ensure that heels are offloaded. Families who are educated in this process can help assure that repositioning occurs.

Pressure ulcers are a problem for everyone. They are painful, embarrassing, and can even be fatal for patient. They are also expensive and resource consuming for facilities. The incidence of pressure ulcers is an area of attention for Center for Medicare/Medicaid Services. With attentive care (turn, turn, turn!) and an evidence based prevention program, most pressure ulcers can be prevented.

References

DeMarco, S. (2007). http://www.hopkinsmedicine.org/gec/series/wound_care.html

National Pressure Ulcer Advisory Panel Website (2007). <http://www.npuap.org>

Wound, Ostomy, Continence Nursing Website (2010). <http://www.nbwocn.org>



Barbara Gijanto is a Delaware native and has been in Health Care for the greater part of 31 years. The latter 5 years she has been a Certified Wound Ostomy Continence Nurse concentrating on the inpatient population .Her undergraduate degree is from Saint Leo University and she holds many specialty certifications. As the proud owner of Innate Wound Ostomy Consultations services, she provides home wound and ostomy care, educational lectures, and assistance to facilities for their patient needs. She is also a wife, the mother of two tween children, and a local cheerleading coach. For any questions or assistance, she can be reached at 302-846-0927 or emailed at yellowcats@comcast.net.

Initiating a Pressure Ulcer Program for Your Facility:

A Personal Success Story

Linda B. Pope, RN

Nursing Care Facilities face multiple challenges on a daily basis. Pressure ulcers can be the top of the list. Not only are they painful to the residents and take months to heal, they are expensive to your facility, time consuming to your staff and avoidable. (Lyder & Ayello, 2005). Taking the time to chart a course for pressure ulcer prevention in your facility is a win/win situation.

Where Do We Start?

As a new Staff Developer in a facility with 160 beds, I was told there were 32 wounds. After I recovered from the initial shock of hearing this, I sat down and started taking notes. The first and most important strategy was finding, “a few good men and women”. Certified Nursing Assistants are your front line staff. After three days of observing the units and staff, I chose a unit with potential leaders. The next step was to make a giant thermometer with a red ribbon that would move up each day they were pressure ulcer free. The thermometer was taped to the wall on that unit. They were told if they went a week without a new pressure ulcer they would all get ice cream and sodas. Each day, the Certified Nursing Assistants would raise the ribbon on the thermometer and in a week everyone received their promised reward. I was then approached by the two other units asking for thermometers so they could join in on the fun. I was making thermometers, ribbons were rising and pressure ulcers were on the decline and they were rewarded. Then, after forming a Wound Care Committee, one of the Certified Nursing Assistants suggested “turning teams”. The receptionist would announce the time, every two hours for the 7-3 and 3-11 shifts, creating a heads up for the turning team to reposition the residents at risk. The nurses would give them an updated list every other day of our at risk residents. Wheelchair residents were stood and their positions were changed. Our facility was pressure ulcer free in three months and by the end of the year reached 100 days without a single new pressure ulcer.

Staff Changes

As I reflect back on this special time, the changes in the staff were incredible. Certified Nursing Assistants began to exhibit a sense of pride in their work; pressure ulcer prevention was a major focus. Our residents were clean, comfortable and satisfied with their daily care. Our staff developed a team spirit and worked together for their residents.

Keeping the Fire Burning

As we entered a new year, I was concerned that the enthusiasm witnessed in the past seven months would start to decline. My units would still be pressure ulcer free but the thermometer was not touched so I knew it was time for a change. We started a new program for the Certified Nursing Assistants. They would

apply and interview for a new position, Team Leader. This gave them additional duties in teaching new Certified Nursing Assistants about our expectations, especially with pressure ulcer prevention. We hired a Team Leader on each unit, each shift. We would meet weekly to discuss the successes and problems that they were facing. Heel cushions were implemented, foam booties were used and as Staff Developer, we started monthly in-services on pressure ulcer prevention. I developed a new game, Pressure’Oply that looks like a Monopoly board but each square represented pressure ulcer material. If they developed a new pressure wound, they were in jail for ten days. They moved on the board if they were pressure ulcer free for the day. We were back in business. This was a huge success.

Evaluating the program

The success of a program centers on the cooperation of the Certified Nursing Assistant staff. Motivation includes spending time with them and listening to their concerns. Rewards are always a plus. The simple words, “good job” go a long way.

Frequently, I have heard Administration say, “they get paid for the duties they perform”. These same Administrators are rewarded in their positions as well, just on a different level. When confronted with these statements, I find it wise to smile and thank them for their input.

Whether it is a game, a kind word or giving them a Tootsie Roll and telling them they are on a roll you will see amazing results. Start a contest and encourage your Certified Nursing Assistants to come up with an idea to help prevent pressure ulcers. Reward ideas include gift cards, meals, special parking spots, etc. Implement the idea and you have encouraged your staff to start a pressure ulcer program. Pressure ulcer prevention is improved in facilities who utilize a pressure ulcer prevention program. (Horn & Sharkey, 2010).

References

Horn, S., & Sharkey, S. S. (2010, March). []. *Advances in Skin and Wound Care*, 23(3), 120-31. Retrieved from <http://www.pubmed.gov>

Lyder, C., & Ayello, E. (2005). Pressure ulcers a patient safety issue. *Patient Safety and Quality*. Retrieved from http://www.ahrq.gov/qual/nursesbdbk/docs/LyderC_PUPSI.pdf



Linda B. Pope, RN is currently the ADON at a long term care facility in Delaware. Her duties include completing incident reports, being a liaison with the state survey and inspection team during complaints and investigations, managing the facilities wound care program, assessing and making rounds on residents, assisting the Director of Nursing with assuring the residents receive optimal care. She has worked at Visiting Nursing Association where she received IV certification, diabetic Management and Wound Care Management certificates. She has also worked as a Registered Nurse Assessment Coordinator for several years and published “MDS Tips Newsletter” on a monthly basis. She developed and taught the Quality Indicator and Quality Measures Program while working for a state nursing home. Linda has also held positions in long term care facilities to include Staff Developer. While in that position she participated in the National Collaborative for Pressure Ulcer Prevention and was invited to present at the convention in Dallas, TX for two years. She has also served on several committees at Delaware Technical and Community College that included LPN Nursing Program and CNA of the Year Committee. Linda can be reached by email at popebl@comcast.net.

Suspected Deep Tissue Injury

Teresa Matthews, FNP-C

Suspected Deep Tissue Injury has become an official stage in accordance with the National Pressure Ulcer Advisory Panel. The following is a direct statement update from the NPUAP in February, 2007.

Pressure Ulcer Stages Revised by NPUAP

February 2007 - The National Pressure Ulcer Advisory Panel has redefined the definition of a pressure ulcer and the stages of pressure ulcers, including the original 4 stages and adding 2 stages on deep tissue injury and unstageable pressure ulcers. This work is the culmination of over 5 years of work beginning with the identification of deep tissue injury in 2001.

The staging system was defined by Shea in 1975 and provides a name to the amount of anatomical tissue loss. The original definitions were confusing to many clinicians and lead to inaccurate staging of ulcers associated or due to perineal dermatitis and those due to deep tissue injury.

The proposed definitions were refined by the NPUAP with input from an on-line evaluation of their face validity, accuracy clarity, succinctness, utility, and discrimination. This process was completed online and provided input to the Panel for continued work. The proposed final definitions were reviewed by a consensus conference and their comments were used to create the final definitions. "NPUAP is pleased to have completed this important task and look forward to the inclusion of these definitions into practice, education and research", said Joyce Black, NPUAP President and Chairperson of the Staging Task Force. (National Pressure Ulcer Advisory Panel website, 2007)

Pressure Ulcer 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 Ulcer Stages

Suspected Deep Tissue Injury:

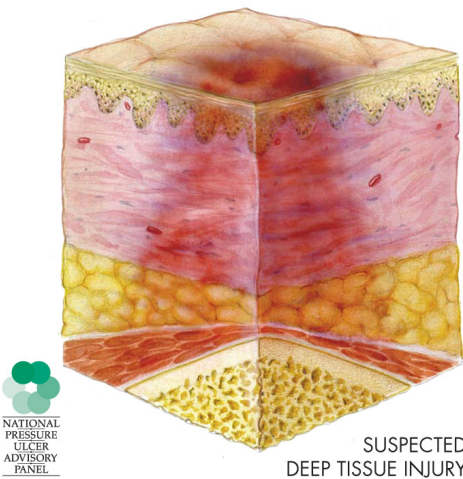
Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

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. (<http://www.npuap.org/pr2.htm>).

An anatomical visual aid of Suspected Deep Tissue Injury:



([National Pressure Ulcer Advisory Panel Website, 2007](http://www.npuap.org/pr2.htm))

This becomes a valuable assessment upon admission. Long term care facilities are particularly concerned with facility acquired pressure ulcers. On admission, an assessment described as above would warrant a community acquired pressure ulcer of Suspected Deep Tissue Injury. Pearls to remember during assessment include:

- Damage to deeper structures has already occurred
- Skin may still be intact because of its higher resistance to hypoxia
- Herald sign of an impending stage III or IV

Tissue injury that appears dark discoloration, deep bruising, or hematoma is Suspected Deep Tissue Injury. Borders are generally irregular. Hemorrhage and clotting occur as a consequence of an acute injury, such as trauma from pressure or shearing. Clotting cuts off oxygen to the tissues, with hypoxia and ischemia following. It is not known exactly how long clotted blood can remain in the tissue before cellular death occurs. Typically, stage I pressure ulcers are considered minor wounds that are likely to heal with pressure redistribution. A suspected DTI potentially caused by reperfusion injury may not respond to offloading. If the blood is not reabsorbed into the tissue in a timely manner, necrosis will occur. (Touch Briefings Website, n.d.)



(Wound Educator website, n.d.)



(Touch Briefings Website, n.d.)

Heels present an especially common area for deep tissue injuries to develop. The skin of these ulcers tends to present with a purple or 'bruised' look to them.

In summary, accurate assessment of Suspected Deep Tissue Injury on admission can initiate necessary interventions. These wounds are likely to deteriorate, and prompt identification can prevent the occurrence of a facility acquired pressure ulcer. Of highest importance, however, is the immediate treatment protocols that are set in place for a serious wound issue. Implementing offloading and evaluating the efficacy of the interventions will promote the healing of suspected deep tissue injury.

References

National Pressure Ulcer Advisory Panel website. (2007). <http://www.npuap.org/pr2.htm>

Touch Briefings Website. www.touchbriefings.com

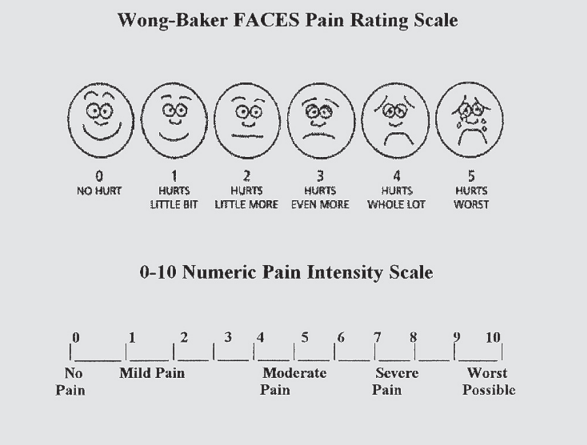
Wound Educator Website. www.woundeducator.com

THE PAINFUL TRUTH

Teresa Matthews, FNP-C

Pain is what the patient says it is. Pressure ulcers are certainly painful. It becomes a challenge when a patient is admitted for rehabilitative services with a painful pressure ulcer. If an oral pain reliever narcotic is ordered, safety becomes an issue, and rehab can be delayed. There is a logical process in assessing, diagnosing, planning, intervening, and evaluating pain in the patient with a pressure ulcer.

Begin with a thorough pain assessment. The verbal and non-verbal patient can give a pain scale based on the Wong faces.



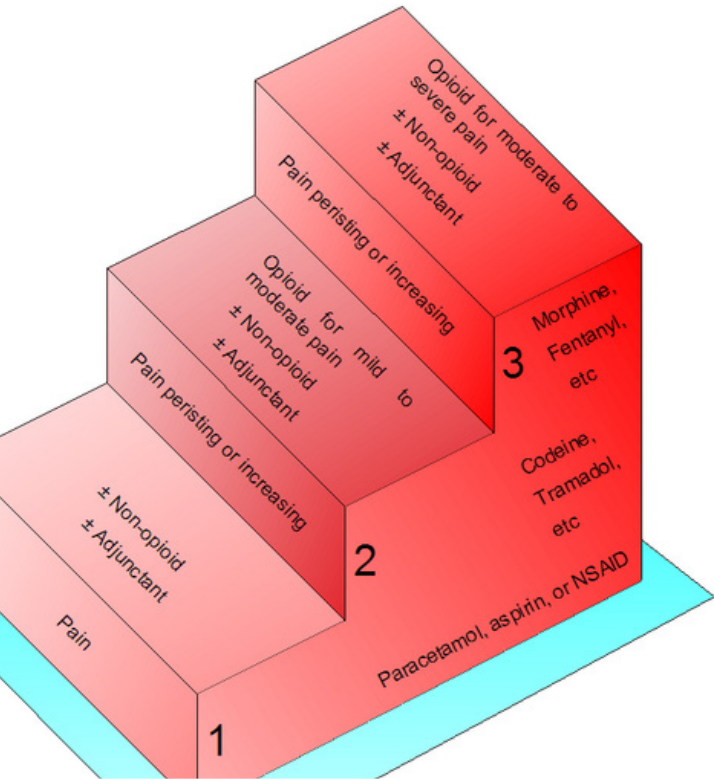
(Wong, Hockenberry-Eaton, & Schwartz, 2001)

As simplistic and accurate as the Wong faces are, evidence supports that pain is poorly assessed. Seventy-six percent of physicians with patient care responsibilities rated poor pain assessment as the number one barrier to adequate pain management. ("Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain," 1999) It was found that of the 58% of hospitalized patients reporting excruciating pain, fewer than half had anyone ask them about their pain or document the pain in their records. (Donovan, 1987). The use of pain assessment measures has been shown to improve pain management. ((Baronoski & Ayello, 2008). However, problems using the pain assessment scales persist. One problem includes lack of clinicians knowledge and familiarity with pain scales. This is why it has become an important survey readiness topic. Training is required for clinicians to deliver the pain scale with adequate patient instructions on the possible answers to the pain scale questions.

After pain has been identified, its cause must be determined. "The goal of pain management in the pressure ulcer patient is to eliminate the cause of pain, to provide analgesia, or both." (Van Rijiswijk & Braden, 1999). Dressing changes, debridement, wound edema, infection, turning and positioning are some of the factors that can cause wound-associated pain. An appropriate plan can be formulated after the specific cause has been identified. For example, if the patient experiences pain during a dressing change, it is this writer's experience that it is the wrong dressing choice. Besides medications, pain may be treated with physical and occupational

therapy modalities to decrease muscle spasms, decrease contractures, and increase circulation. Proper cushions, positioning, and adaptive equipment may also help to decrease pain.

The World Health Organization (WHO) developed a three-step analgesic ladder. The WHO approach advises clinicians to match the patient's pain intensity of 0 to 10 with the potency of the analgesic to be prescribed, starting with non-opioid analgesics and progressing to stronger medications if the pain is not relieved. For example, a pain score of 1 to 3 (mild pain) should receive a non-opioid. A score of 4 to 6 (moderate pain), a weak opioid. A score of 7 to 10 (severe pain) should be given a strong opioid. Adding an adjuvant medication, such as an anti-convulsant or tricyclic antidepressant is most useful in addressing the burning, stinging, shooting, or stabbing symptoms of neuropathic pain. Using a combination of an opioid and a non-opioid can enhance pain relief because of the synergistically enhancement of the combination. The opioid works on the CNS to alter the perception of pain while the non-opioid works on the periphery to block impulses. Using a combination method may decrease the need for higher doses of opioids. (Baronoski & Ayello, 2008).



(World Health Organization Website, 2003)

There are many natural pain control methods and therapies. These methods can improve one's outlook, attitude, and quality of life. Alternative therapies, when used in conjunction with pain medications, may enhance the beneficial effects of the medication. It is this writer's experience that the following modalities can reduce pain.

- Laughter may help you breathe deeper, lower your blood pressure, and change your mood.

- Acupuncture may decrease or eliminate pain and has been used for more than 2,500 years.
- Environment, such as having the room at a comfortable temperature, avoiding bright lights (bring your flashlight!) and keeping the room relatively quiet during assessment may help to decrease pain.
- Distraction, such as watching television or looking at family pictures can help the patient focus his attention on something other than the pain. Most residents have several family pictures in their rooms. I have debrided sacral wounds while my team member holds a nearby photo within the patients field of vision and asks about the picture's details to distract from my task. Even if your patient is non-verbal, this is an excellent technique.
- Music may blood flow to the brain and increases energy which, in turn, causes an increase in the production of endorphins. However, many times I enter a resident's room to find the television or radio on a channel that the patient would never enjoy. Perhaps the caregivers enjoy the choice? Choose a calming station that plays soothing, relaxing music that the patient will enjoy.

In summary, pain is an important assessment on all wound patients. Patient completed pain scores from the Wong assessment scale can be useful as the basis for treating wound related pain. Pain is detrimental for patients because it can exhaust them, increase catecholamine release, affect their ability to perform ADLs, and add to feelings of decreased worth as a person. As clinicians, we are obligated to provide adequate pain relief using an appropriate selection of the treatment modalities available. (Donovan,

1987)

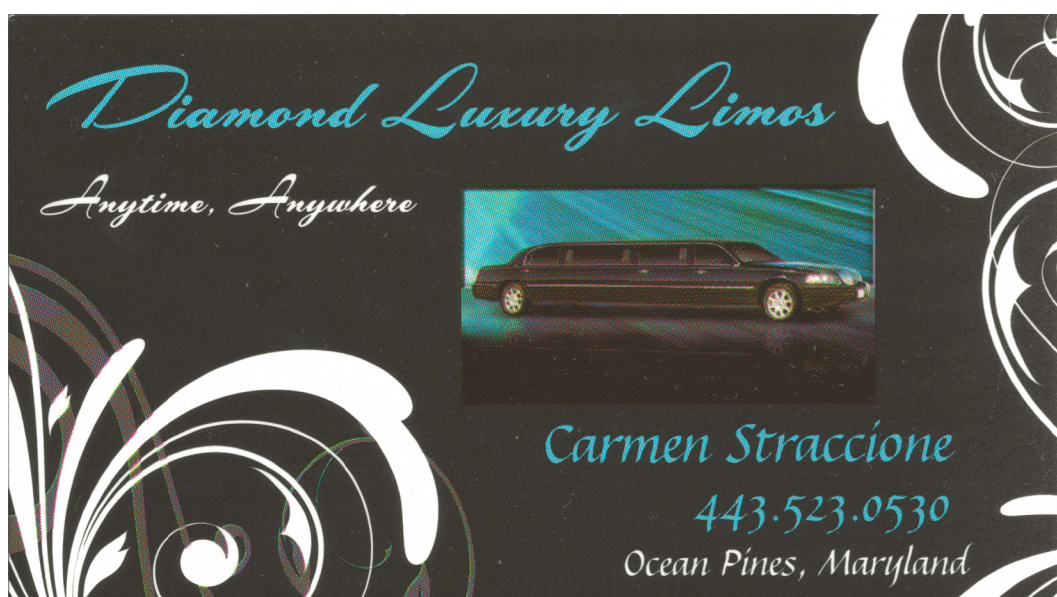
The absolute best way to treat pressure ulcer pain is to avoid the pressure ulcer altogether!

Continued on Page 13

THE PAINFUL TRUTH Continued from Page 14

References

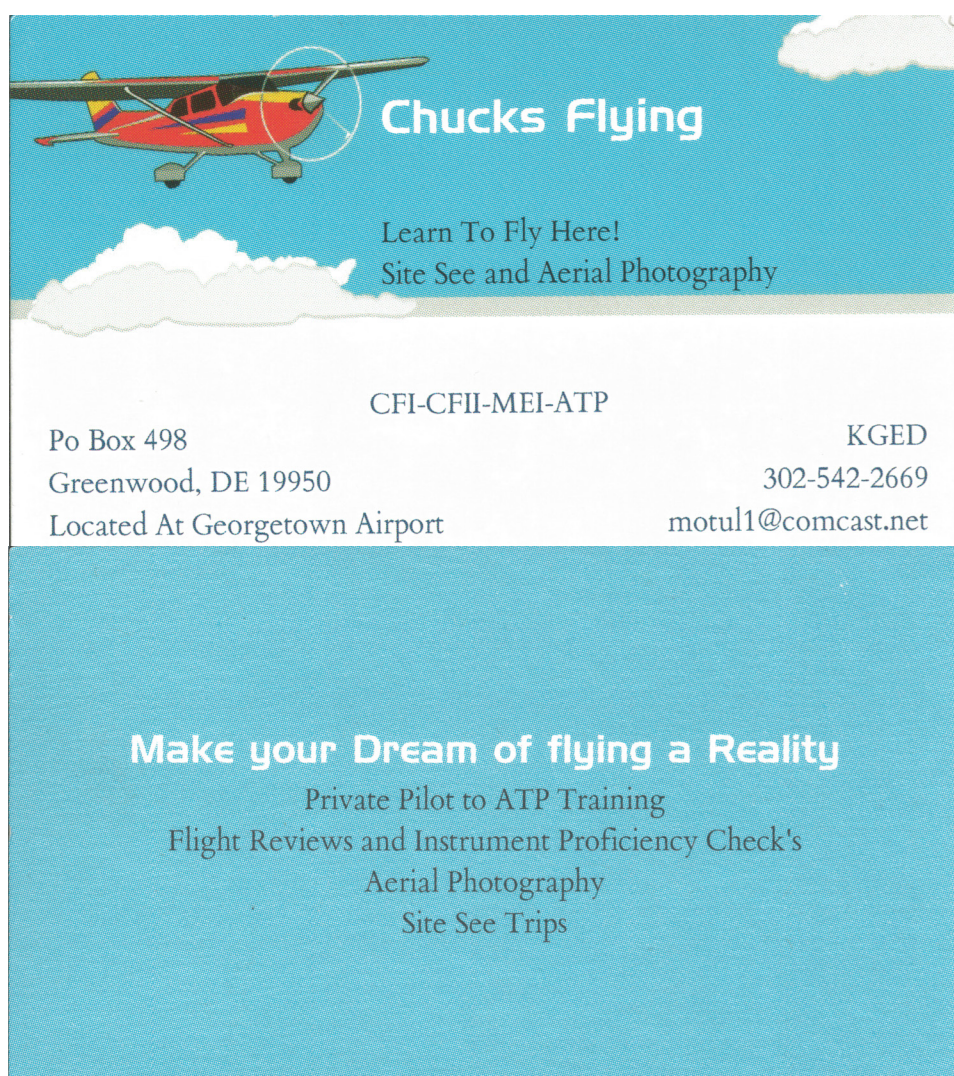
- Baronoski, S., & Ayello, E. (2008). Wound care essentials. In *Practice principles* (2nd ed.,). : Lippincott Williams & Wilkins.
- Donovan, M. (1987, July). []. Incidents and characteristics of pain in a sample of medical surgical patients. *Pain*, 301(1), 69-78.
- Principles of analgesic use in the treatment of acute pain and cancer pain. (1999). (4th,). Glenview, Illinois: American Pain Society.
- Van Rijswijk, L., & Braden, B. J. (1999). 45. In *Pressure ulcer patient and wound assessment: An AHCPR clinical practice guideline update* (pp. 56S-67S). : .
- Wong, D. L., Hockenberry-Eaton, M., & Schwartz, P. (2001). Wong's essentials of pediatric nursing.
- World Health Organization Website. (2003). <http://www.who.int>



Diamond Luxury Limos
Anytime, Anywhere

Carmen Straccione
443.523.0530
Ocean Pines, Maryland

ADVANCED HEALING
is currently seeking a DE Licensed
Nurse Practitioner.
Wound Care Experience a plus.
Competative Salary.
Call 302-363-5839 for Information.



Chucks Flying

Learn To Fly Here!
Site See and Aerial Photography

CFI-CFII-MEI-ATP

Po Box 498
Greenwood, DE 19950
Located At Georgetown Airport

KGED
302-542-2669
motul1@comcast.net

Make your Dream of flying a Reality
Private Pilot to ATP Training
Flight Reviews and Instrument Proficiency Check's
Aerial Photography
Site See Trips

**CONTACT 302-363-5839 TO ADVERTISE WITH THE
NEWEST WOUND CARE PUBLICATION AVAILABLE**

YOUR AD COULD BE HERE!!

**CUTTING EDGE INFORMATION PROVIDED FREE OF
CHARGE TO LONG TERM CARE FACILITIES, ACUTE CARE
HOSPITALS, AND WOUND CARE CENTERS IN
DELAWARE**

Collagenase[®]
Santyl[®]
Ointment 250 units/g

Enzymatically Active • Biologically Selective

Todd Fellenbaum
Territory Manager

HEALTHPOINT[®]
BIOTHERAPEUTICS

3609 Hulen Street
Fort Worth TX 76107

302 259 8068 Cell
Todd.Fellenbaum@healthpoint.com

NOW WHICH DRESSING DO I CHOOSE?

Teresa Matthews, FNP-C

Eeeny, Meeeny, Miney, Mo,...

As clinicians seek to develop a “one size fits all” protocol for wound management, it becomes increasingly apparent that no two wounds are alike. Therefore, carefully assessing designs an algorithym of critical thinking to choose the best dressing possible. Long gone are the days of accepting a “wet to dry” order. It is this writer’s mission to completely remove this treatment from all standards of practice. In contrast, the dynamic advanced wound care dressing selections that are available decrease wound healing time, reduce pain, and increase financial feasibility.

When choosing a dressing, look for a good moisture vapor transfer rate (MVTR). MVTR is the passage of water products through a barrier. Different dressing types have different MVTRs. The more occlusive the dressing, the lower the MVTR. Advanced, active products have “good” MVTRs, or “low” MVTRs. If a dressing transmits LESS MVTR than the wound loses, a moist wound bed will follow. This is our goal.

Pearls for managing wound fluid:

- Exudate contains blood and proteins
- Fluid is necessary for healing
- Chronic and acute wound fluid is very different
- Chronic wound fluid can delay healing
- Chronic wound fluid contains 3-500x higher levels of enzymes than acute wound fluid
- Goal: A dressing that wicks away fluid but maintains a moist environment.

A study (Lawrence, 1994), showed the alarming infection control issue with the use of gauze dressings. There are implications given the lack of private rooms, roomates with decreased immunity, and the potential for cross infection with healthcare workers.

- Gauze dressing changes released the greatest amounts of bacteria in colonized wounds
- During a gauze dressing change, the decline of airborne bacteria took almost 30 minutes. This means it took almost 30 minutes for there to be no bacteria left in the air. (Lawrence, 1994)

Frequently, my wound care teams hear me speak of a wound “being too cold.” The concept of thermoregulation is not new. Optimal wound bed temperature for cellular function-

ing is 37 degrees Celsius. Hypothermia causes vasoconstriction, decreases cellular activity, decreases collagen deposition, and weakens host resistance to infection. Most chronic wounds are hypothermic. (Ovington, 2002). After a wet to dry dressing change, it can take 4-6 hours for a wound bed to become normotensive. With the typical BID or TID change, the wound is staying cold much longer than normothermic. This will turn an acute wound into a chronic wound. It also creates a painful dressing change, which begins a cascade of multiple other issues to include quality of life.

We must not confuse the cost of the dressing with the cost of care. The simple act of the labor associated with a dressing change can make advanced dressings less costly. Several studies have been done to establish how advanced dressings can be cost effective simply by taking into account the cost of labor. A more expensive dressing that requires less frequent changes and results in shorter healing times has been found to be much less expensive to use. It has been demonstrated that even when the cost of the sem-occlusive dressing and ancillary supplies was \$6.15 per dressing change versus the \$0.47 for wet to dry gauze, the daily cost of care for the semi-occlusive dressing was only \$3.55 versus the \$12.26 for the gauze because the former healed the wound in a timely manner and kept the wound from turning chronic. (Colwell & Trotter, 1993)

Why is gauze still being used?

The following answers may apply:

- One size fits all
- Perceived as inexpensive
- In-stock
- Lack of knowledge of advanced/active products

What should be used?

- Dressings with “Good” MVTRs
- Dressings that maintain the optimal moisture level
- Dressings that are appropriate for the wound given the clinical presentation.

Hydrogels are excellent for dry wounds. They come in various forms, and provide a warm, moist environment.



By adding Hydrogel to the above wound, autolytic debridement of devitalized tissue and maintaining a moist wound bed becomes possible.

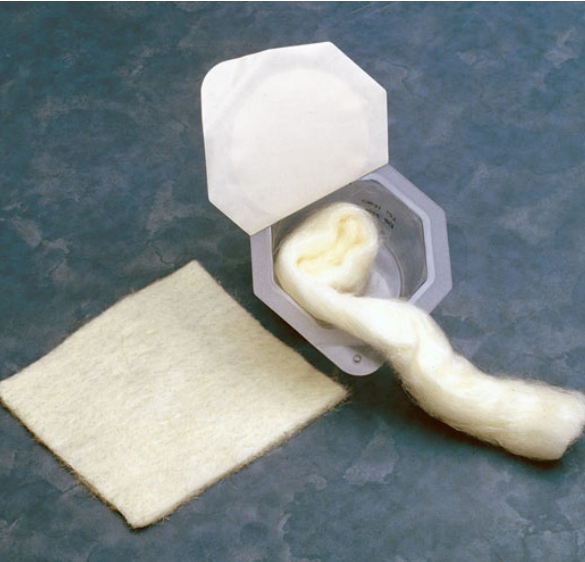
Collagens are effective for a “stalled” wound. They work best when granulation has begun, and when there is mild to moderate exudate.





This wound would likely respond well to a Collagen dressing.

Calcium Alginates are excellent for moderate to heavily exudating wounds. They autolytically debride, and for a gel chemical reaction to the drainage. They are perfect for packing undermining and tunnels. They are a seaweed derivative that absorb up to 20 times their weight in drainage.



Packing this wound with Calcium Alginate will absorb the heavy exudate, decreasing the peri-wound maceration, and fill dead space.

Foam dressings are absorbant, provide cushioning over bony prominences, prevent airborne bacteria release due to excellent MVTR, and won't stick to the wound bed.



A foam dressing over this wound will help maintain MVTR and offer protection. This wound is infected, and has a high potential for heavy bacterial load.

Choosing a dressing based on amount of drainage is an excellent start in the overall treatment plan. The grid below gives multiple dressing choices based on the exudate presented. Keep in mind that a moist wound today may be a dry wound tomorrow! A good rule to follow is to ask yourself the following questions.

- Is the wound dry? Choose a hydro-

- gel
- Is the wound moderately draining with good granulation? Choose a collagen.
- Is the wound heavily exudating? Choose a calcium alginate.
- Whenever possible, cover with a foam! This will help insure a thermoregulated wound bed and maintenance of optimal MVTR.

In summary, dressing selection is vital in the planning and implementation stages of wound assessment. Cost of a wound is not always just the cost of the dressing. We have moved past wet to dry dressings in healthcare, and the current research and evidence based practice rests on advanced/active wound care.

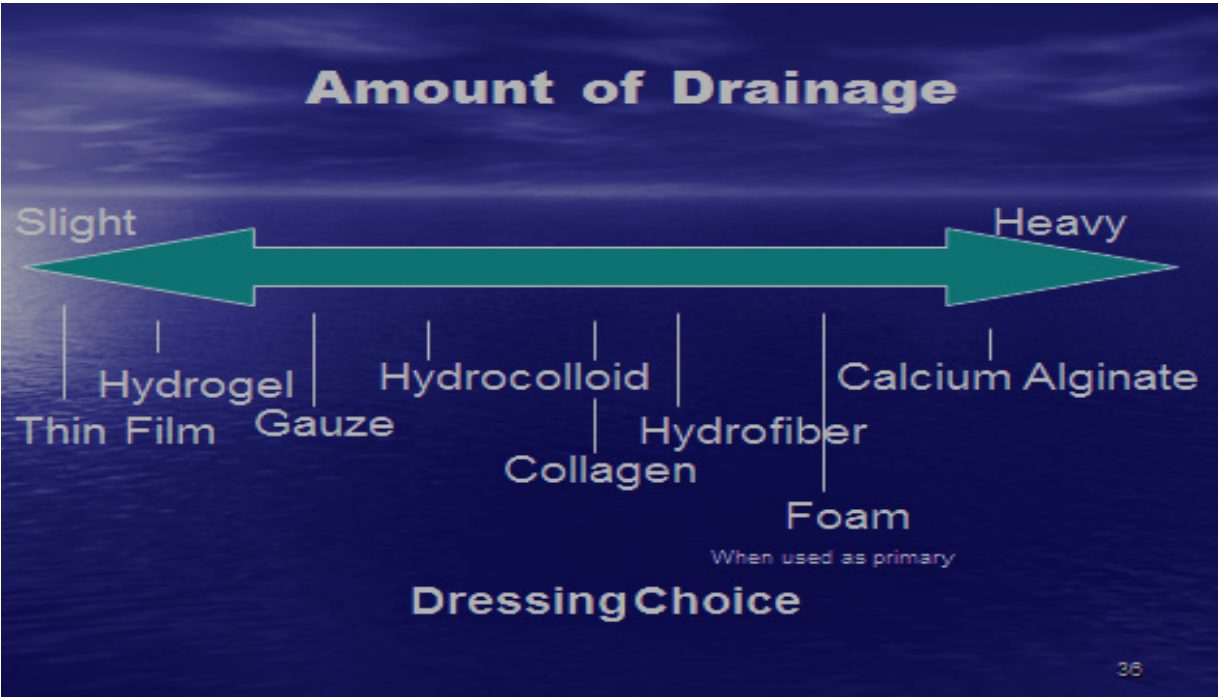
This article does not promote one wound care dressing brand over another, nor does it endorse any wound care dressing company.

References

Colwell JC, Foreman MD, Trotter JP. A comparison of the efficacy and cost effectiveness of two methods of managing pressure ulcers. *Decubitus* 1993;6(4):28-36.

Lawrence, J. C. (1994). 1A [J]. *American Journal of Surgery*, 167, 21S-24S.

Ovington, L. 2002. Hanging wet to dry dressings out to dry. *Advances in Skin and Wound Care: The Journal for Prevention and Healing*. March/April 2002. 15/2



Long Term Care

Are You Concerned About:

- Risk
- Profitability
- Patient Care
- Pain Control
- Infection Control

Advanced Healing
is your SOLUTION!

Specializing in: Pain Management and Wound Care.



Advanced Healing takes the patient's pain very seriously. All wound care and dressing changes will coincide with a comprehensive pain control policy.

Advanced Healing can provide education to your staff on wound topics such as documentation, F314, assessment and measuring, and wound identification. These sessions are personally tailored to the specific educational needs of the facility and are complementary to the weekly services provided.

Advanced Healing

A Higher Level Of Health

Advanced Healing, makes regular, scheduled weekly visits to each participating nursing home for treating new and established wound patients. The weekly visit is meant to supplement, not replace, the daily wound care provided by the nursing home.

Following each visit, Advanced Healing will provide the nursing home with written follow-up care recommendations for each wound for the coming week. Whenever possible, these recommendations will take into consideration the dressings and supplies available in the nursing home's formulary.



Advanced Healing can become an integral part of a healing program. Through thorough clinical documentation that complies with Medicare and state regulations, Advanced Healing will provide a complete weekly evaluation. This includes suggested treatment plans, Medicare approved product protocols, pain management, and bedside debridement, if indicated. This will save costly transportation fees to local wound care centers. Collaboration with physicians, dietitians, physical therapists, and other holistic practices will complete the treatment plan. By billing Medicare and insurances directly, there is no cost to your facility.

Teresa Matthews,
FNP-C, MSN, CWCN, RN
107 Russell Drive
Milford, DE 19963
Phone: 302-363-5839
Fax: 302-424-7755
www.advanced-healing.net