

Wound Care

VOL.6 NO.2 2008
CAN \$9.95



CANADA

THE OFFICIAL PUBLICATION OF THE CANADIAN ASSOCIATION OF WOUND CARE

Special Issue

Key Information from the Third Congress of the World Union of Wound Healing Societies



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Canada Shines at International Congress



BY Cathy Burrows,
RN, BScN, MScCH,
Co-captain
Canadian Stream



AND David Keast,
BSc, MSc, Dip. Ed,
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Co-captain
Canadian Stream

The Third Congress of the World Union of Wound Healing Societies (WUWHS) held in Toronto, June 4-8, 2008, is now but a fond memory. On all counts it was a resounding success.

Thirty-five hundred attendees from 71 countries were afforded the opportunity to attend educational sessions that shared the most current, evidence-based information on wound care.

As one of the hosting societies, the Canadian Association of Wound Care (CAWC) demonstrated to the international community it is a world-leading multidisciplinary

association committed to promoting quality wound care in Canada and abroad. Many of the delegates expressed their gratitude for the warm hospitality and friendliness of the Canadian contingent. This was due to the diligent efforts of CAWC members, staff and the board of directors who prepared and delivered the sessions within the Canadian stream and who acted as ambassadors for Canada.

This issue of *Wound Care Canada* presents a synopsis of the key information relevant to everyday clinical practice from each of the streams presented at

the WUWHS meeting. CAWC reporting teams attended every session of the congress to glean this information. We would like to acknowledge the CAWC board, who led the reporting teams, and the many volunteers who gave their time to bring you this information. A very big "thank you" to everyone who made the WUWHS meeting a success. ☺

*Cathy Burrows, RN, BScN, MScCH
Co-captain Canadian Stream*

*David Keast, BSc, MSc, Dip Ed,
MD, CCFP, FCFP
Co-Captain Canadian Stream*

Le Canada brille au congrès international

Nous gardons de bons souvenirs du troisième congrès du World Union of Wound Healing Societies (WUWHS) qui a eu lieu à Toronto du 4 au 8 juin dernier. Tous sont d'avis que le congrès a connu un succès phénoménal. Trente-cinq mille personnes de 71 pays étaient présentes. Elles ont eu l'occasion de participer à des séances de formation contenant les informations les plus récentes et étant basées sur des données probantes au sujet du soin des plaies. En tant qu'une des sociétés hôtes, l'Association canadienne du soin des plaies (ACSP) a su démontré au monde entier qu'elle est un chef de file multidisciplinaire qui s'engage à

promouvoir le soin des plaies de qualité au Canada et à l'étranger. Plusieurs délégués ont exprimé leur gratitude au contingent canadien pour son chaleureux accueil et sa gentillesse. Ces éloges sont attribuables aux efforts des membres, du personnel et du conseil d'administration de l'ACSP. Ensemble, ils ont préparé et présenté les séances canadiennes et ont agité à titre d'ambassadeurs canadiens.

Ce numéro de *Wound Care Canada* fait un synopsis des renseignements clés pertinents de la pratique quotidienne en clinique pour chacun des angles présentés au congrès du WUWHS. L'équipe de journalistes de l'ACSP a assisté

à toutes les séances du congrès pour recueillir cette information. Nous souhaitons remercier les membres du conseil d'administration de l'ACSP pour avoir dirigé l'équipe de journalistes et les nombreux bénévoles qui ont donné de leur temps afin de vous présenter cette information. Un gros merci à tous pour avoir fait du congrès du WUWHS un franc succès. ☺

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Co-captaine de la
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*David Keast, BSc, MSc, Dip Ed,
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The Canadian Association of Wound Care is a non-profit organization of health-care professionals, industry participants, patients and caregivers dedicated to the advancement of wound care in Canada.

The CAWC was formed in 1995, and its official meeting is the CAWC annual conference held in Canada each year. The association's efforts are focused on five key areas: public policy, clinical practice, education, research and connecting with the international wound-care community. The CAWC works to significantly improve patient care, clinical outcomes and the professional satisfaction of wound-care clinicians.

L'Association canadienne du soin des plaies est un organisme sans but lucratif regroupant des professionnels de la santé, des gens de l'industrie, des patients et des membres du personnel soignant fortement intéressés à l'avancement des connaissances pour le soin des plaies au Canada.

Fondée en 1995, l'ACSP organise, chaque année, au Canada, un congrès qui lui tient lieu de réunion officielle, le Congrès annuel de l'ACSP. L'association consacre ses efforts dans cinq domaines particuliers : les politiques gouvernementales, la pratique clinique, la formation, la recherche et la création de liens avec la communauté internationale directement impliquée dans le soin des plaies. L'Association canadienne du soin des plaies vise une amélioration significative du soin donné au patient, des résultats cliniques et de la satisfaction professionnelle des spécialistes en soin des plaies.

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Publisher/Éditeur

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Toronto, ON M3B 3H9

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Wound Care Canada is published by BCS Communications Ltd., on behalf of the Canadian Association of Wound Care. Canada's first publication devoted entirely to wound care, *Wound Care Canada* addresses the needs of clinicians, patients, caregivers and industry.

All editorial material published in *Wound Care Canada* represents the opinions of the authors and not necessarily those of the Canadian Association of Wound Care.

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Special thanks to Smith & Nephew for augmenting the *Wound Care Canada* mailing list.

Canadian Publication Mail

Sales Product Agreement No. 40065546

Return mail to

CAWC, 2171 Avenue Road, Suite 102,
Toronto, ON M5M 4B4



Wound Care Canada is printed on acid-free paper that contains a minimum of 20 per cent post-consumer fibre.

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The CAWC Gets a New Home

Earlier this year, the CAWC moved into new offices to accommodate our recent expansion of activities. As a result, the CAWC has a new mailing address and new phone numbers. Please update your contact list so you can stay in touch!

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CAWC Events

Special Theme Meetings

"Are You Ready for Change?"

Victoria, British Columbia: October 24-26, 2008

Halifax, Nova Scotia: November 7-9, 2008

(see www.cawc.net and page 56 for details)

CAWC S-Series

In spring 2009 the CAWC's renowned S-Series will be held in Vancouver: February 13-14, Toronto: March 6-7 and Montreal: April 17-18 (in French)

Visit the CAWC Web site at www.cawc.net for details!

CAWC Annual Conference

Quebec City, Quebec: October 29 to November 1, 2009

www.cawc.net

Other Events

Atlantic Foot Care Conference: "The Feet We Greet"

September 28-29, 2008

Holiday Inn Select

Halifax, Nova Scotia

Registration:

www.eSourceEvent.com/FCN

Symposium on Advanced Wound Care and Wound Healing Society Meeting

April 26-29, 2009

Grapevine, Texas

www.sawc.net

28th Annual CAET Conference: "Learn in the Land of Living Skies"

May 27-30, 2009

Delta Regina

Regina, Saskatchewan

www.caet.ca

Wound, Ostomy and Continence Nurses Society Conference

June 6-10, 2009

St. Louis, Missouri

www.wocn.org

Industry News

New Best Practice Document on Pain from WUWHS and Mölnlycke Health Care

The World Union of Wound Healing Societies (WUWHS) together with Mölnlycke Health Care have released a second *Best Practice Guideline:*

Minimising Pain at Dressing Related Procedures. It contains expert knowledge from world-renowned wound-care specialists and provides an update on the latest scientific findings, as well as 10 easy-to-overview pain-relieving strategies, including not using dressings with aggressive adhesives that can cause pain to the patient and trauma to the wound or peri-wound skin. According to the document, dressings with soft silicone adhesive technology, such as Safetac technology, have proven in several studies to be less painful during dressing changes compared with

other advanced dressings with traditional adhesives.

The document can be found at: www.molnlycke.com/item.asp?id=47121&lang=2&si=3.

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DM Systems, Inc., Adds Two New Products to Its Growing Family of Heelift® Suspension Boots

DM Systems, manufacturer of the Heelift® Standard Suspension Boot has added two new products: Heelift® Bariatric and Heelift® Petite. The new Heelift® Bariatric Suspension Boot is sized specifically for bariatric patients. It is available in smooth foam only, and is designed for patients who weigh up to 600 pounds and who have a calf circumference of between 12 and 23 inches. Heelift® Petite helps meet pressure ulcer prevention needs for pediatric patients or patients who are shorter than average. It is available in either smooth or convoluted foam and offers customizable heel pressure redistribution for patients who range in height from 3 feet, 10 inches to 5 feet, 4 inches and who have calf circumferences of 6 to 10 inches.

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Bringing the World's Best to You



Sue Rosenthal

In the Guest Editorial, Cathy Burrows and David Keast did a great job of laying out the background of the Canadian involvement in the World Union of Wound Healing Societies (WUWHS) Congress held in Toronto in June 2008, and of thanking the many CAWC members who were involved in gathering information for this issue of *Wound Care Canada*. I, too, would like to thank everyone on the reporting teams (listed below, with team leaders' names first). They worked hard, worked well together, and—I hope—enjoyed the experience (some liked it so much they attended sessions outside their designated streams and contributed materials to more than one article!).

Pre- and post-session meetings generated lively discussion among the teams and between members of different teams. As a professional

communicator, I enjoyed listening to the debates—and learned a lot. I wasn't the only one. Many of the reporters indicated they, too, had enjoyed the exchanges with their colleagues at the debriefing meetings. A number of them said they'd also benefited from having a different point of view when attending the sessions. Seeing the presentations through the eyes of a critical reporter rather than as a clinician allowed them to process the material in new, and newly meaningful, ways.

The summary articles the teams produced vary somewhat in length and approach. In some cases the information will confirm what you already do. In others, you'll read about controversies, the latest information or areas that need further research. You'll get a glimpse of how wound care is practised in other areas of the world. But in

all cases, you'll find many kernels of valuable information regardless of your type of practice, level of expertise or specific area of interest. Remember, though, that these summaries report on what was presented at the WUWHS meeting only and represent a broad range of opinion, research and experience. We therefore strongly encourage you to consult other literature before implementing practice based on this brief information.

These articles reflect an unprecedented gathering of the latest information on wound prevention and care from around the world, and since no single individual could possibly have been at every session, this issue of *Wound Care Canada* is most certainly more than the "next best thing"! ☺

Sue Rosenthal,
Editor

Sue Rosenthal, BA, MA,

specializes in health and wellness communications and has been associated with the CAWC since 2000.

Pressure Ulcers: Kimberly Stevenson, Linda Norton
Diabetic Foot Ulcers: Christine Pearson, Mariam Botros, Kyle Goettl
Ostomy/Continence/Skin Care: Connie Harris, Janet Kuhnke, Kimberly LeBlanc
Leg Ulcers: Cathy Burrows, Lise Goettl
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Canadian Perspectives: Martine Albert, Karen Bruton, Sunita Coelho
Research: Gail Woodbury, Afsaneh Alavi, Marjorie Fierheller, Pamela Houghton, David Keast
Standby/Roving Reporter: Rob Miller



Pressure Ulcers

BY Kimberly Stevenson,
RN, BN

Linda Norton,
MSCH, BSc OT Reg (ON)

At the recent Third Congress of the World Union of Wound Healing Societies held in Toronto in June, one of the 10 available streams focused solely on the problematic issue of pressure ulcers. The presenters confirmed that pressure ulcers remain one of our biggest challenges in wound care. Despite increased awareness, greater educational opportunities, wide dissemination of best practice guidelines and a better appreciation of quality improvement practices, there remains little evidence across the Americas and Europe to demonstrate an overall trend in the decrease of pressure ulcer prevalence.¹ And, unfortunately, pressure ulcers continue to be “one of the most expensive wounds we have to manage.”²

Extent of the Problem

Discussions focused on the differences, strengths and weakness of collecting and analyzing prevalence and incidence data for pressure ulcers. Prevalence studies can be misleading depending on how the data were collected, and it is advised to review this information cautiously. When considering prevalence, it is important to reflect on how the particular study was conducted (skin inspection vs. chart review: chart reviews usually identify lower prevalence), what type of pressure ulcer classification was used and whether Stage I pressure ulcers were included. The collecting of incidence data has an advantage in that it provides a method of monitoring preventative actions, but it can be difficult when collecting the data to determine when the skin damage actually occurred. Incidence studies are a more appropriate measure of causation and evaluation than prevalence studies.³

When looking at prevalence and incidence rates throughout the Americas, one would expect that trends would be changing due to better education, readily available best practice guidelines and an overall

increase in the awareness of the issue and appreciation of the problem. Unfortunately, at this point, there are limited data available to support a significant decrease in pressure ulcer prevalence. Local studies show changes in prevalence when prevention becomes a focus, but indicate that when the attention decreases, prevalence increases again. This would suggest that methods or programs for pressure ulcer prevention must focus on long-term sustainability to be successful.¹ Unfortunately, Europe has been unable to demonstrate a significant improvement despite their efforts, due to a lack of data.

Risk Assessment

The presenters in this session confirmed that risk assessment alone is not enough to prevent pressure ulcers. The Braden, Norton and Waterlow tools remain the strongest pressure ulcer risk assessment (PURA) tools for predicting level of risk, but the Braden Scale for Predicting Pressure Ulcers remains the most validated and encompassing. Strong emphasis was placed on the importance of looking at factors beyond the PURA. Combining the PURA tool with patient/individual factors and clinical judgement is important for better prevention and prediction.

(RISK ASSESSMENT + CONSIDERATION OF INDIVIDUAL FACTORS + CLINICAL JUDGEMENT = BETTER PREDICTION AND BETTER PREVENTION)⁴

Diane Langemo reviewed the importance of assessing pain in patients with pressure ulcers and to remember that pressure ulcers greatly affect the patient's quality of life. A message worth noting is that often, because patients are experiencing so much pain, they may be afraid to move—which may lead to more skin breakdown.⁵

Risk-Based Prevention

Presentations in this session stressed the importance of focusing on the care related to the risk score and not the number in isolation. Utilize the subscales (for example, in the Braden Scale) to identify treatment interventions and then use the scores to drive the intensity of the interventions. Recommendations were made that prevention programs should focus on developing the plan related to the risk and then regularly assessing patient outcomes.

Eric DeLaat presented a study that concluded that pressure ulcer programs should have active management, a local champion, educational interventions, social interaction and leadership, and useful feedback (beyond prevalence rates) to demonstrate to staff that work is making a difference, and should also include financial incentives for areas focusing on prevention.⁶ Nutrition, as a risk factor, was also analyzed and recommendations were made to assess nutritional risk weekly for the first four weeks after admission, as patients' eating habits may change in a new environment.

Skin Care

An Australian study by Graves in 2005 suggested that \$285 million bed days are lost related to the treatment of pressure ulcers and that pressure ulcers remain the most expensive wound we have to manage.² Mikel Gray suggested that as clinicians, we need also to look more closely at differentiating pressure ulcers from incontinence-associated dermatitis (IAD) and that misdiagnosis is an issue.⁷ In order to diagnose IAD, clinicians should consider skin folds (especially in obese patients), red, bright, glistening skin, inflammation, lack of necrosis in the wound, skin erosion and secondary cutaneous infections (for more details refer to Gray, *Journal of WOCN*, 2007;34(2):134-142). It was suggested that clinicians often rely too heavily on visual inspection alone and that physiologic parameters were needed to further augment a differential diagnosis. Clinicians should consider looking beyond patient history and other related factors as well, and pay more attention to peri-wound skin in clinical assessments.

Staging and Grading

This session confirmed that many differences exist between the NPUAP and EPUAP staging systems and that work is needed to come to a consensus. These two systems are not the same and therefore do not measure the same things. Clinicians need to be mindful that recent changes to the NPUAP staging system will cause a change in the distribution of prevalence data available, and so we need to interpret with caution. Staging/grading systems can be difficult to understand and use, and recommendations were made to focus on providing better education on their definitions and how to use them in practice. Even short, targeted sessions can make a big difference. Less experienced nurses often have difficulty discerning between stage II and III and staff without training do not stage ulcers correctly. It was also emphasized that deep tissue injury represents an intense amount of pressure and may take 24 to 48 hours to develop, so it is important to re-evaluate frequently. Deep tissue injury (a recently added category) is often the start of a stage III or IV ulcer.

Pressure, Friction, Shear

The importance of managing pressure, friction and shear together was emphasized. If shear is not managed, repositioning patients may actually make pressure ulcers worse. Pressure causes microstructural changes in the skin and leads to a build-up of cytokines. The addition of shear increases its effects 2.4 times that of static pressure. It was suggested that asymmetrical undermining is an indicator of shear forces and should be evaluated.

Managing Mechanical Forces

Although repositioning can be labour intensive, reducing the number of people identified at risk can make turning schedules for staff feasible. Repositioning devices (like sliding sheets) help to manage mechanical forces that place patients at risk for developing pressure ulcers. A review of the evidence on pressure mapping—looking at various positioning—suggests that lowest pressure is in the semi-Fowler, 30-degree position. It was also emphasized that measuring pressure is not enough, and clinicians need to

continued on page 12

also consider skin inspection, tcpO₂ (transcutaneous oxygen pressure), aligned posture, how a client propels in a wheelchair, attitudes and expectations. Recommendations for teaching repositioning to “healthy” patients were to reposition every nine minutes laterally and six minutes frontally. Very frequent positioning is recommended as almost two minutes is needed before normal oxygenation is restored to the affected area.

Treatment Strategies

In reviewing wound bed preparation and the role of debridement in treating pressure ulcers, discussion in this session confirmed that there remains little to no evidence that one method of debridement is more effective than another, as there are no randomized controlled trials (RCTs) in humans. More research is also needed to determine whether or not debridement results in faster healing and whether or not debridement removes biofilms. When cleansing and dressing pressure ulcers, a Cochrane Review, 2008, on the use of water in cleansing confirmed that drinkable, safe tap water is acceptable for use on acute wounds, lacerations, surgical wounds and chronic wounds in healthy adults. When it comes to dressings, however, controversy remains about which silver product to use where. To date, there is largely commercially generated evidence, and the evidence is often conflicting. More research is needed in this area, as well as on the long-term outcomes on the development of resistance with silver dressings. Suggestions were made to use silver dressings for treatment of pressure ulcer infection and inflammation appropriately and with careful consideration. Confirmation around the use of antiseptics was also provided, suggesting they are appropriate in superficial infection and may be effective in breaking down biofilms

(chlorhexidine, povidone iodine). Verifying bacterial balance requires vigilant assessment and clinical judgement, accurate documentation and microbiological assessment.

Closing Prevention Guideline Gaps: EPUAP/NPUAP Collaboration

The body of evidence is currently being reviewed in a collaborative effort between EPUAP and NPUAP to develop an international pressure ulcer prevention guideline. Results of this collaboration are expected to be released in February 2009. The two organizations have agreed to produce joint guidelines for prevention and treatment of pressure ulcers. Challenges to date include language and terminology (e.g., alternating air systems/mattresses), technology, knowledge and skills, and distance. However, the biggest challenge is the gaps in evidence. EPUAP is currently leading the guidelines for prevention, while the NPUAP has taken the lead on developing the guidelines for treatment. Draft guidelines are posted at www.pressureulcerguidelines.org, and stakeholders (anyone that represents an organization) are encouraged to make comments and provide feedback.

Stream Conclusion

It is evident that much work remains to be done in the area of pressure ulcer prevention and reduction and more evidence is needed, in certain areas, relating to pressure ulcer treatment. Most pressure ulcers are preventable, and future strategies need to focus on pressure ulcer prevention programs. As clinicians, we have the tools to create change; the time is now to make change happen. ☺


References

1. Berlowitz D. Trends in the Americas (North, Central & South). WUWHS Congress 2008.
2. Carville K. Skin health: Evidence for assessment. WUWHS Congress 2008.
3. Lindholm C. Definitions and methods: Are we measuring the same thing? WUWHS Congress 2008.
4. Braden B. Risk assessment: Tools, individual factors and clinical judgment. WUWHS Congress 2008.
5. Langemo D. How do pressure ulcers impact quality of life? WUWHS Congress 2008.
6. De Laat E. Challenges and strategies in implementing ongoing pressure ulcer prevention programs. WUWHS Congress 2008.
7. Gray M. Differential diagnosis: Pressure ulcer or incontinence dermatitis. WUWHS Congress 2008.

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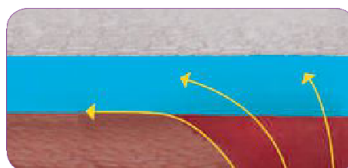
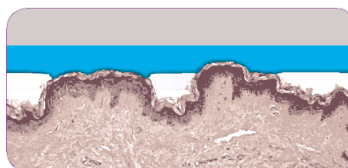
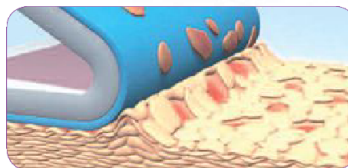
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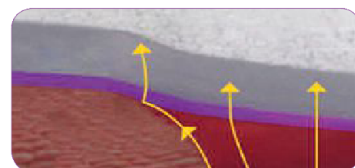
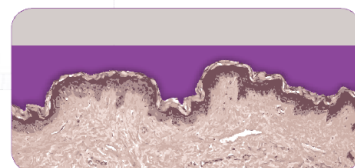
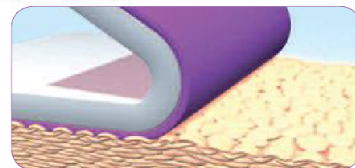
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- 3 Seals the wound margins, ensuring exudate does not spread to the surrounding skin.³

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Diabetic Foot Ulcers

BY Kyle Goettl,
RN, BScN

Christine Pearson,
RN

Mariam Botros,
DCh

The Diabetic Foot Ulcer stream contained sessions on different aspects of manifestations of diabetes on the feet from the North American and European perspectives. The diabetic stream highlighted areas such as the extent of the problem, chronic wounds in diabetes, wound and risk assessments, peripheral arterial disease and infection. The presenters focused on key areas of treatment of foot ulcers, such as infection, pressure distribution and surgical intervention. The program also discussed amputation prevention strategies.

There were oral posters presented from Australia, North America, Europe, the Middle East and Japan.

This article provides highlights of some of the key areas discussed:

- Assessment and classification
- Infection
- Pressure
- Offloading
- Foot surgeries
- Amputation
- Prevention

Assessment and Classification

The area of assessment reinforced previous knowledge of the diabetic foot and reinforced the importance of foot examination and vascular and neuropathy testing.

David Armstrong pointed to a common-sense approach in assessing the diabetic foot for increased risk of tissue breakdown. This included:

- Loss of protective sensation (LOPS)
- Rigid deformity
- Previous ulcer or amputation

It was suggested that all people over the age of 40 living with diabetes should be screened for arterial disease with an ankle brachial pressure index (ABPI) and undergo noninvasive vascular tests.

Questions in the initial sessions arose regarding the number of test sites required for the monofilament test. Should it be three, four or 10? Perhaps the question should be "which scale makes the most sense to our target audience?"

There are currently several different classification systems used for the diabetic foot:

- Wagner
- Wagner Meggitt
- University of Texas
- SINBAD (**S**ite, **I**schemia, **N**europathy, **B**acterial infection, **A**rea, and **D**epth)

Some of these systems have been validated. Of the first three, the University of Texas is the most predictive. Recent work done on the SINBAD system indicates favorable results relating to its accuracy in predicting ulcer outcome. Regrettably, use of the most predictive tool has not translated into practice. In a questionnaire presented to the delegates in several sessions, the majority of people indicated that they use the Wagner system. The challenge is to always to find a system with sufficient simplicity that is also meaningful.

Infection

In the area of infection, strong controversy arose on the accuracy of probing to bone as an indicator for osteomyelitis. In conclusion, it was felt that probing to bone and NERDS and STONEES were good bedside approaches. Most experts agreed that to confirm a diagnosis of infection, further diagnostic tests were required.

Many of the speakers pointed out that when neuropathy is present, infection can progress rapidly. "Use your eyes and nose" to help guide your treatment decisions. Quick action is required for the effective treatment of diabetic foot infections.

Pressure

Foot pressure is not the only important risk factor to consider; we must also consider neuropathy (permissive factor for ulceration), deformity, history of previous ulceration.

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Leg Ulcers

BY Cathy Burrows,
RN, BScN, MScCH

Lise Goettl,
RN, BScN



At the June 2008 World Union of Wound Healing Societies meeting in Toronto, Ontario, the Leg Ulcer stream offered sessions that were both enlightening and informative. The most common theme throughout every session was that leg ulcers remain a financial and psychosocial burden to society. At any given moment, one to two per cent of the general population has a leg ulcer. The most prevalent is venous ulcers, which were reported by Sharon Baranoski as accounting for 70 to 90 per cent of all leg ulcers.¹ Rates increase with age.

According to Keryln Carville, "in Australia, leg ulcers comprise 50 per cent of wounds managed by community nursing services."² John Macdonald described the problem of lymphedema as a hidden epidemic around the world. He stated, "you have no idea how many physicians I've spoken to around the world who have no idea of this problem or what it is."³

Initial assessment of lower leg ulcers is critical in the diagnosis and treatment plan for patients who suffer diseases that contribute to their ulcers. Diabetes, peripheral vascular disease, venous disorders, obesity, lymphatic disorders, blood dyscrasias, autoimmune disorders and possibly genetic mutations were described throughout the Leg Ulcer stream.

There are many tools available to conduct a wound assessment. David Keast presented the MEASURE mnemonic (**M**easure, **E**xudate, **A**ppearance, **S**uffering, **U**ndermining, **R**e-evaluate, **E**dge) as an aid to a complete local wound assessment. The Leg Ulcer Measurement Tool (LUMT), is a validated tool that has been developed to quantify leg ulcer assessment and can be used to track change in wound status over time.⁴ According to Marco Romanelli, "evaluations are in general performed on the basis of clinical experience, using very basic, low-tech equipment to make objective

measurements."⁵ He went on to suggest that, "although wound parameters are clues to the definition of the cause, pathophysiology and status of the wound ... a complete and detailed history and physical examination are also fundamental."

Patients who suffer from peripheral arterial disease (PAD) are often overlooked due to the fact that, "early physical findings are subtle, and patients may not complain of symptoms until the disease is advanced."⁶ Mary Sieggreen, asserted that, "early intervention can reduce morbidity and mortality from these diseases...and the nurse is in a unique position to assess and intervene when a patient presents with peripheral vascular disease."

The team approach to management of lower limb ulcers is essential to ensure proper care for individuals with leg ulcers.⁷ Treatments plans must consider the holistic approach if successful outcomes are to be achieved. The gold standard for venous ulcers and lymphedema remains compression therapy. According to Christine Moffatt, "there are as many people with lymphedema as there are with venous leg ulcers."⁸ Her presentation discussed the role of compression therapy and, although multi-layer bandages are more successful, it is still unclear how many layers are best. "Sometimes bandaging is the appropriate system for the long-term care and management of lymphedema."

John Macdonald from the University of Miami described the approach used at his facility. Complex decongestive physiotherapy (CDP) employs manual lymphatic massage, compression bandaging, instructed exercise and self-care instruction. At the University of Texas, the lymphedema clinic uses a unique approach to managing their patients. Caroline Fife described the importance of having the patient sign a contract prior to the initiation of a treatment plan. For many patients, according to Fife, "there is a link between

obesity and lymphedema and the focus tends to be on the edematous limb rather than on the issue of obesity.⁹ But without addressing the cause—which is morbid obesity—the cycle of venous insufficiency, immobility, increased weight gain, sleep apnea, orthopnea and dependent edema continues to recur.

Venous ulcers require a multifactorial approach to management. Paolo Zamboni presented an exciting session on wound healing at the cellular and molecular levels. He shared his study on the recognition of functional gene variants, single nucleotide polymorphisms (SNPs) and their impact in wound healing and venous ulcer establishment. SNPs were used as molecular markers in hemochromatosis and coagulation factor XIII. Zamboni reported an increased incidence in HFE gene mutation that was seven times higher in patients with hemochromatosis and venous stasis than in those without. He stated that there needs to be further research on this topic.

Zbigniew Rybak from the Wrocław Medical University in Poland shared his experience with foam sclerotherapy of the superficial vein insufficiency in treating venous ulcers. He reported the results of his study showing that, “of the patients who received sclerotherapy foam (SF), 87 per cent went on to healing within three months. One injection of SF was enough to heal 73 per cent of patients, nine per cent healed in six months and eight per cent within 10 months.”¹¹ Surgical intervention, such as subfascial endoscopic perforator surgery (SEPS) for the treatment of reflux in the perforators, may well be an option when conservative compression therapy is not enough to treat venous ulcers.¹²

Arterial ulcers are the result of a lack of oxygen to the tissues. Assessment of arterial disease can be conducted through a history and physical, as well as with non-invasive vascular studies. Arterial angiography is indicated when there is inadequate blood supply for healing. Revascularization can be achieved through surgical interventions and endovascular procedures. Endovascular procedures present less risk, but may not provide the same degree of improvement in blood supply and therefore may not be as desirable.¹³ Peter Vowden outlined four

basic therapeutic strategies that can be employed singularly or in combination to enhance healing and improve outcomes when surgical intervention is not an option.¹⁴ Vowden discussed neurovascular interventions such as lumbar sympathectomy or spinal cord stimulation; systemic therapy with hyperbaric oxygen or intervenous therapy with agents such as prostaglandins; local mechanical therapy such as negative pressure wound therapy (NPWT), electromagnetic stimulation or enhanced local oxygen therapy; and, finally, topical therapy with vaso-active growth factors or tissue engineered skin products.

Inflammatory ulcers are often very difficult to diagnose and according to Siobhan Ryan, “10 per cent of people are misdiagnosed with pyoderma gangrenosum (PG).”¹⁵ Robert Kirsner indicated that 10 per cent of leg ulcers are of unusual etiology and that diagnosis is made by clinical features in combination with lab evaluations, tissue cultures and histopathology.¹⁶ All presenters in this session stressed the importance of a biopsy in making a correct diagnosis. Kirsner recommended the appropriate time to biopsy is, “when the wound has an atypical appearance, atypical location, atypical presentation and failure to respond to treatment.”

PG should be considered when a patient suddenly develops a painful leg ulcer. A clinical manifestation of PG is violaceous borders in the wound. Vasculitic ulcers are the result of an inflammatory process in the small, medium and large vessels. Clinicians must be aware of the systemic involvement of multiple organ systems. Massimo Papi said the treatment for severe cases is bedrest, compression and systemic treatments.¹⁷

Local wound management of lower limb ulcers continues to be moist wound healing with the exception of arterial ulcers, where it is recommended to maintain a clean, dry environment until blood supply is re-established to the limb. The wound bed preparation paradigm continues to be the foundation in the decision-making process for dressing selection. Sylvie Meaume addressed dressing selection and suggested that, “Dressings are classified according

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to their performance criteria. Expert opinions are determinant, mainly due to the poor level of evidence obtained with randomized controlled trials. Topical therapy moved from basic devices to bioengineered products or to dressings that may interact with the healing process. These new products still need efficacy and cost-effectiveness studies."¹⁸

Addressing both intrinsic and extrinsic factors following a thorough wound assessment can identify key elements of the wound etiology. According to Mike Stacey, "there is an association between venous ulceration and specific genetic polymorphisms—such as the promoter for the tumour necrosis factor alpha gene (TNFA-308A)—and fibroblast growth factor receptor-2."¹⁹ Stacey suggested that "certain individuals may be genetically more prone to developing wounds and may have a lesser ability to heal wounds."

Adjunctive therapies offer clinicians additional modalities for the treatment of chronic wounds. Elia Ricci outlined the benefits of negative pressure wound therapy (NPWT) in reducing edema and bacterial load, while increasing perfusion to the wound. Other topics within the session on adjunctive therapies were electrical stimulation, ultrasound therapy, ultraviolet light, hydrotherapy and pneumatic compression. Joseph McCulloch discussed the history of electrical stimulation and how it evolved to the present day.²¹ Pamela Houghton shared with the audience that a meta-analysis and clinical trials have demonstrated that, "therapeutic ultrasound can significantly reduce the size of chronic wounds."²²

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In summary, the Leg Ulcer stream was informative and offered attendees a recap of assessment, treatment and management of lower limb ulcers. The key to identifying an appropriate diagnosis is a thorough history and physical examination. Compression therapy remains the gold standard for venous ulcers and lymphedema. Adjunctive therapies such as ultrasound, electrical stimulation, ultraviolet light, hydrotherapy and pneumatic compression can improve wound healing outcomes in recalcitrant, chronic wounds. Sclerotherapy foam was discussed, and genetic markers show promising results for future research. ☺

References

1. Baranoski S. Local wound care: Topical antimicrobial dressings. WUWHS Congress 2008.
2. Carville K. Leg ulcers: Australian/Asian perspective. WUWHS Congress 2008.
3. Macdonald J. Lymphedema: Manual lymphatic drainage and other treatments. WUWHS Congress 2008.
4. Keast D. Leg ulcers: MEASURE Tool. WUWHS Congress 2008.
5. Romanelli M. Leg ulcers: Special assessment. WUWHS Congress 2008.
6. Sieggreen M. Arterial disease: Nursing perspective WUWHS Congress 2008.
7. Nelson A, Margolis D, Carville K. Leg ulcers. WUWHS Congress 2008.
8. Moffatt C. Compression bandaging for lymphedema management. WUWHS Congress 2008.
9. Fife C. Obesity and lower extremity lymphedema. WUWHS Congress 2008.
10. Zamboni P. Genetic components of venous leg ulcers. WUWHS Congress 2008.
11. Rybak Z. Foam sclerotherapy of superficial vein insufficiency in patients suffering from leg ulcers. WUWHS Congress 2008.
12. Gottrup F. Leg ulcers: Surgical approaches. WUWHS Congress 2008.
13. Steed D. Arterial disease: A surgical perspective. WUWHS Congress 2008.
14. Vowden P. Arterial disease: Medical and future perspectives. WUWHS Congress 2008.
15. Ryan S. Pyoderma gangrenosum. WUWHS Congress 2008.
16. Kirsner R. Vasculopathy and leg ulcers. WUWHS Congress 2008.
17. Papi M. Vasculitis and leg ulcers. WUWHS Congress 2008.
18. Meaume S. Leg ulcers: Optimal local wound care. WUWHS Congress 2008.
19. Stacey M. Venous disease: Local wound management. WUWHS Congress 2008.
20. Ricci E. Leg ulcers and dressings. WUWHS Congress 2008.
21. McCulloch J. Leg ulcers: electrical stimulation. WUWHS Congress 2008.
22. Houghton P. Leg ulcers: Ultrasound and other modalities. WUWHS Congress 2008.



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Acute Wounds

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Presenters in the Acute Wounds stream discussed a range of topics; particularly classification, infection control and treatment. Although acute wounds have several different etiologies, burns and surgical wounds were the main focus.

Classification

Classification for burns has existed since 1483 (Jean de Vigo) but has evolved over time. Burns are now classified as superficial and deep, or first, second or third degree. The type of burn—thermal, chemical or electrical—needs to be identified as well. As with other wounds, burns need to be assessed to ascertain their healing potential, to determine if healing will originate from the base or the edge of the injury and how long the healing process will take.

The inter-rater reliability related to the assessment of the severity of a burn is vital for a proper prognosis of that particular wound. However, this can vary significantly.

Inter-rater reliability

Clinical assessment:	50 to 70 per cent
Laser Doppler:	94 per cent
Diffuse reflectance:	74 per cent

Assessment tools have been devised to reduce discrepancies in the initial assessment phase. As a standardized method, this assessment is calculated according to the percentage of the body surface affected, including the degree of severity.

Burns are also non-homogenous in nature. Within the same patient, burns can range through different levels of severity, from first to third degree. Burns can also worsen within the first 48 to 72 hours and convert into a higher severity of burn. The planning of treatment

must sometimes be deferred until the full extent of the injury is known and the severity of the burn has stabilized.

Treatment

The initial treatment may include cooling of a portion of a burn. Ice, however, is not recommended to achieve this. Pain control is carried out through intravenous analgesia. Cleansing of a burn is normally performed with soap and water. Adherent dressings are contraindicated. Dead tissue—slough that is found to be purulent or friable—requires debridement. The expected time for a second-degree burn to heal ranges from 14 to 21 days.

Infection

Infection is the cause of death for severely burned patients in 50 to 60 per cent of all cases. This infection may manifest itself in different ways: nosocomial pneumonia, septic thrombophlebitis, urinary infection or infection at the burn sites. A progressive avascular eschar will be colonized within five days despite antibiotic therapy. This risk of infection creates elevated energy depletion for burn patients, resulting in major weight loss and classic immunocompromised status.

It is vital for clinicians to assess and monitor the burn wound's edges, as this is where the precursor infection signs develop. The monitoring of the bacterial level at the burn site is performed with a semi-quantitative culture twice a week. Biopsies or quantitative cultures are controversial and contraindicated due to the difficulty in identifying the correct site where the culture should be performed. When dealing with sepsis, an aggressive systemic antibiotic treatment should be initiated based on the prevalent bacteria existing on the burn unit.

The preferred topical antibiotic treatments for local infections are silver sulfadiazine, povidone iodine, gentamycine and other silver-derived products.

Scar Formation

Improper scarring with acute wounds can result in hypertrophic scars, keloids and/or a large scarred surface. On the human body, all wounds cause scarring to various degrees (except venopunctures, superficial injuries and tattoos). Research has demonstrated that stem cells migrate within the injured tissue to divide and differentiate themselves to produce scar tissue within an avascular area as soon as the fifth day following the trauma. Fibroblasts—important cells in the scarring process—respond to mechanical forces. When these forces are too strong, the fibroblasts will migrate in a stellate fashion, subsequently becoming misaligned and causing scar tissue. Research has also allowed clinicians to understand that wounds that are innervated create a negative reaction that promotes healing by contraction and causes a less esthetically pleasing result. To further illustrate this, on an animal model with denervated tissues, healing occurred by epithelialization rather than contraction, resulting in a more desired esthetic result.

Growth factors are also important in the scarring process. Certain molecules show promise in decreasing the risks of improper scarring tissue. Transforming growth factor $\beta 3$ (TGF $\beta 3$) is one example. Certain surgical approaches can also contribute to the reduction of hypertrophic scarring and keloids.

Surgical Site Infections

Surgical site infections (SSIs) are a significant problem. Thirty per cent of all home-care patients suffer from an infection at the surgical site, and 90 per cent of the SSIs develop within 21 days following the surgery.

Preventative measures provide the biggest impact in decreasing the risk for SSIs. Hand-washing and use of antiseptic gel before and after patient care is paramount. Frequent decontamination of the surfaces and work environment must be done diligently. Use of antibiotics prophylactically is recommended when indicated during anesthesia. Warming the patient and increasing their FIO₂ during the pre-operative period has proven to be effective in reducing the incidence of

infection. Finally, adequate control of glycemic levels during surgery and post-operatively has also been shown to reduce the incidence of infection.

The use of antiseptics to reduce the risk of infection should be reinforced. Many types are available, such as cadexomer iodine and silver products.

The unjustified use of antibiotics is an important trap that promotes the emergence of high-virulence bacteria. Antibiotics should never be prescribed to treat fever as a lone symptom without proof of local infection, and should never be administered systemically.

Many assessment tools have been created to support clinical evaluations of wounds, such as the Bates-Jensen Wound Assessment Tool, Southampton Scoring System and ASEPSIS.

Good communication within the care team—including the patient—decreases the risk of post-operative surgical wound infection. Good wound care and clear post-operative guidelines covering issues such as the authorized level of activity, expected pain, and signs and symptoms of infection, are important factors that will decrease the risk of infection.

Vascular Surgery

The infectious process of venous graft sites is a particular problem. Complications like infection, lymphatic leakage, thrombophlebitis, pulmonary embolism and a variety of vascular problems are possible. Clinicians can decrease the risk of infection of venous site grafts with a detailed initial pre-operative assessment that includes an ankle-brachial pressure index (ABPI).

Management of the risk in vascular surgery must also include relief of pressure, control of infection, perfusion status while monitoring hypothermia and hypotension, and wound evaluation.

Adequate control of lower leg edema in the post-operative period also decreases the risk of infection. Pneumatic intermittent compression can be an interesting adjunct therapy to achieve control of the lower leg edema in the post-operative period.

Traumatic Wounds

The approach to the treatment of trauma and war-zone-related wounds must be done within a multidis-

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ciplinary team while considering all individualized treatment options. Statistics have shown a high death rate of 15 to 20 per cent caused by infection with these types of wounds. An early and efficient cleansing of the wound is pivotal for successful treatment, as is doing everything possible to avoid complications through effective management of infection risk.

Pressure Ulcers

Pressure ulcers present multifactorial problems. In order to achieve surgical success when treating such ulcers, it is essential to include the patient in the decisions related to the care plan. A successful care plan must include the following: pain relief; mobility assessment in the pre- and post-operative period; management of infection; contractual understanding with the patient, assuring a reasonable time off work; and a decrease in activities to allow the wound to heal. The recidivism rate is 80 per cent if the patient does not actively participate in the care plan.

The success of treatment in plastic surgery reconstruction includes early and aggressive debridement (going down to bone if necessary), care of the wound bed in a moist environment, negative pressure therapy and simple closure of tissues with a muscle flap, musculo-cutaneous flap or skin graft.

During the pre-operative period, assessment must include:

- Preparation status of the patient for surgery

- Smoking history
- Anesthesia risks
- History of the treated wound
- Risk of osteomyelitis in the post-operative period
- Patient's management of muscular spasms
- Patient's at-risk areas of body surfaces for pressure relief
- Psychological preparation related to the surgery
- Pre-operative assessment with the rehabilitation team of the available equipment to have the patient in a sitting position to better meet the post-operative needs
- Ongoing evaluation of the wound's status during surgery

During the post-operative period, treatment must include:


- Pressure redistribution
- Pain management
- Management of spasms
- Management of wound, including drainage of dead spaces
- Reduction of shearing forces to protect the skin flap, and ensuring that staff are knowledgeable about skin flaps and the delicate blood perfusion associated with them
- A rehabilitation plan that includes returning the patient to a sitting position while monitoring the integrity of the flap
- Assessment and reduction of pressure risk and stress at the flap site

Failure of the skin flap is not the most frequent surgical failure; a poor outcome is due mostly to the patient's lack of adherence to the care plan, as well as the patient's personality and lifestyle choices.

Summary

The WUWHS's sessions in the Acute Wounds stream shone a new light on the importance of all the conditions affecting our patients and further reinforced some of the basic tenets of best practice:

- The management of infection is a key factor for most acute wounds.
- A multidisciplinary approach to treatment is essential.
- The patient must be included in the treatment plan to achieve the best possible results. ☺



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References: 1. Karim RB, et al. (2006). MMP-2 Assessment as an Indicator of Wound Healing: A Feasibility Study, *Advances in Skin & Wound Care* 19(6): 324-327; 2. Monroe S, et al. (2005). Effect of Polyhydrated Ionogens (PHI) on Viability and Matrix Metalloproteinase Levels in Cultures of Normal and Diabetic Human Dermal Fibroblast. Poster Presentation WHS. Chicago. May 2005; 3. Hoekstra M, et al. (2003). Poly Hydrated Ionogens regulate Matrix Metalloproteinases Expression and Reactive Oxygen Species in Recalcitrant Wounds. European Tissue Repair Society Congress, September 2003; 4. Körber A, et al. (2006). Erfolgreiche Behandlung therapieresistenter chronischer Wunden mit DerMax (Successful treatment of therapy-refractory chronic wounds with Tegaderm Matrix). *Zeitschrift für Wundheilung* 6: 310-314; 5. van den Berg AJJ, et al. (2003). A novel formulation of metal ions and citric acid reduces reactive oxygen species in vitro. *J Wound Care* 12(10).



Complex Wounds

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This article summarizes the major themes in the Complex Wounds stream. While this stream comprised a wide variety of topics, this article will focus on three main areas: the classification of non-healing palliative wounds, the core principles and practices of palliative wound care, and nurses' knowledge about pressure ulcer prevention and treatment in patients with cancer pathology.

Non-healing Wounds and Palliative Care

Several sessions focused on the issues, challenges and practices of wound management in patients with cancer pathology. A category of interest was those wounds that are considered to be "non-healable," with this category being further divided into "maintenance" wounds and "palliative" wounds. In contrast to healable wounds, in which the underlying cause can be corrected or treated, maintenance wounds have healing *potential*, but various patient factors are compromising wound healing. Palliative wounds are those in which there is no ability to heal due to untreatable causes, as in terminal illness such as cancer or end-stage disease. Regardless of the reasons behind a non-healing wound, the goals of care must be those of pain management and comfort. One presenter proposed different types of "touches" appropriate for each category; with a healable wound needing a "careful touch," a maintenance wound needing a "supportive touch" and a non-healable wound needing an "empathetic touch."

There was an emphasis on the need to view palliative patients holistically, moving the focus from *cure* to *care*. Kevin Woo proposed the following definition of palliative care, modified from the World Health Organization's definition: "Palliative care is an approach that improves the quality of life of patients and their families facing life-threatening illness, through the prevention, assessment and treatment of pain and other physical, psychosocial and spiritual problems."

The Wound Associated Pain Model (WAP), developed

by Woo and Sibbald in 2008, was presented (see Figure 1). This model was built on the wound bed preparation (WBP) paradigm and serves to advance the understanding of pain as a primary patient-centred concern.

Woo discussed the existing relationship between pain and anxiety, in which a patient's pain level can be exacerbated by heightened anxiety levels. In a study of 96 patients, he also demonstrated that patients with a positive view of self and others reported less pain and anxiety; therefore, the development of a therapeutic relationship with patients has significant implications for pain management.

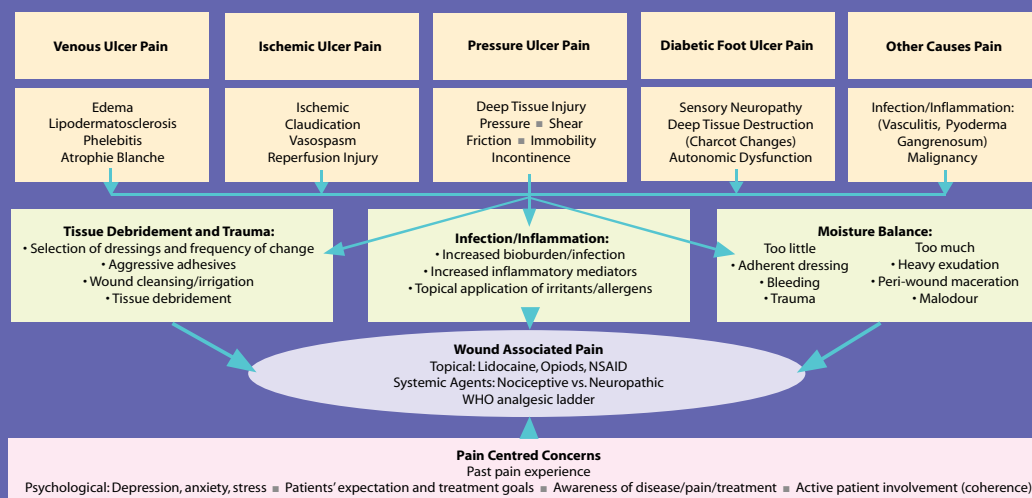
In a retrospective trial of 20 patients and prospective trial of 10 patients, Marc Despatis validated the value of the Charring Cross Quality of Life Questionnaire for venous leg ulcers (VLUs). This questionnaire was specifically developed for VLUs, as opposed to many other quality of life questionnaires, that are not wound-type specific. Patients with VLUs reported improved quality of life with compression therapy in all domains studied ($p < 0.005$). The study showed improved social functioning, improved domestic activities, improved cosmesis, improved emotional status and a decrease in pain. Neither of the two studies were designed to demonstrate whether pain was the most significant change in quality of life.

Nurses' Knowledge about Pressure Ulcers

A study presented by Karen Zulkowski and Elizabeth Ayello compared nurses' knowledge about patient care and the prevention and management of pressure ulcers. The sample size consisted of 2,046 registered nurses from across all care settings, including both urban and rural areas, who received a pressure ulcer knowledge test. The test utilized a 47-item standardized tool (Pieper pressure ulcer knowledge test) in which answers were limited to "true/false" or "don't know." The findings showed an overall low level of knowledge about pressure ulcer prevention and management, with

FIGURE 1

Chronic Wound Associated Pain Model: The Wound, the Cause, the Patient



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no difference in knowledge levels between urban and rural settings. There was a slight increase in knowledge for nurses with higher levels of education. Higher scores were recorded for nurses with greater than 15 years of practice, and nurses certified in wound care had significantly higher knowledge scores than all other groups.

Overall, the test data showed that nurses had a limited knowledge of pressure ulcer risk and prevention strategies, with knowledge deficits in staging definitions, turning and repositioning times, use of vascular boots, prevention of heel ulcers and interpretation of Braden score results. This study suggests that knowledge levels about pressure ulcer prevention and management have not improved over time.

The authors of the study concluded that a system and cultural change is required to facilitate a change in practice regarding knowledge of pressure ulcer prevention and management. They emphasized that risk assessment was only useful if a care plan was implemented to manage the identified risk factors, and that the development of a pressure ulcer should be a reflection of the patient's natural declining health status and not due to things that were not done. The authors invited others to participate in this study to increase the size of the database (see Editor's note).

In summary, there are several prevailing messages and recommendations to be drawn from the series of excellent presentations on complex wounds at the WUWH Congress. Patients with non-healable wounds benefit significantly from a holistic approach that centres on pain relief and symptom management, as opposed

to "cure." It is widely known that pain management is the key to enhancing the quality of life for patients with palliative wounds. In addition to medical care, psychosocial, emotional, cultural and spiritual support is also central to optimizing the quality of life for patients.

To address the deficit that exists in pressure ulcer knowledge, there is an overriding need for a large system and cultural change. It is acknowledged that information on pressure ulcer prevention and management must be incorporated into formal nursing education programs in order to facilitate positive practice changes. 🙏

Further Reading

The following references and links are provided to further enhance learning in the areas presented in this stream:

- Ferris FD et al. Palliative wound care: Managing chronic wounds across life's continuum: A consensus statement from the international palliative wound care initiative. *Journal of Palliative Medicine*. 2007;10(1):37-39. Available online: www.liebertonline.com/doi/abs/10.1089/jpm.2006.9994.
- European Wound Management Association. Position document: Hard-to-heal wounds: A holistic approach. May 2008. Available online: www.ewma.org.
- Smith JJ, Guest MG, Greenhalgh RM, Davies AH. Measuring quality of life in patients with venous ulcers. *J Vasc Surg*. 2000;31:642-649.
- Launois R, Reboul-Marty J, Henry B. Construction and validation of a quality of life questionnaire for evaluation of chronic venous disease (CIVIQ). *Qual Life Res*. 1996;5:539-554.
- Woo KY, Sibbald RG. Chronic wound pain: A conceptual model. *Advances in Skin and Wound Care*. 2008;21(4): 175-188.

Editor's note:

Contact drkarenz@aol.com or karenz@montana.edu for permission to utilize the nurses' pressure ulcer knowledge test and for details on how to submit results to increase the size of the database.

BY David Haligowski, BSc, MD AND Anne LeMesurier, RN, BScN, IIWCC

Sensitivity and Specificity of NERDS and STONEES for the Diagnosis of Increased Bacterial Burden in Chronic Wounds

Speaker: Kevin Woo

The diagnosis of infection in a chronic wound is best confirmed and supported by documenting clinical signs and symptoms. Sibbald et al. developed the mnemonic NERDS and STONEES to help assess levels of bacterial damage in chronic wounds. NERDS stands for: non-healing, exudate, red friable tissue, debris (discoloration) and smell. STONEES stands for: size increasing, temperature elevation, os (probes to bone), new breakdown, erythema/edema, exudate and smell. The signs identified in NERDS are suggestive of superficial wound infection that can be treated topically. The signs associated with STONEES could be treated with antibiotics systemically. Finding three clinical signs increased the specificity of NERDS to 80.5 per cent and STONEES to 69.4 per cent. Similarly the sensitivities improved to 73.3 per cent and 90 per cent, respectively. It is the hope that if these mnemonics were used in our practices when assessing for infection, we would diagnose infection earlier and reduce the inappropriate use of systemic antibiotics.

Wound Infection: A Nursing Perspective

Presenter: Hiromi Sanada

Lack of typical clinical signs of infection may be one reason for a delay in diagnosis of infection in chronic wounds. Because of this difficulty, thermography and ultrasonography were used to improve earlier diagnosis of infection. Once infection was diagnosed, the wound was cleansed with saline, and the peri-wound skin was washed with a cleanser or normal saline. Healing of the ulcers was better with the peri-wound cleanser, with a hazard ratio of 1.79.

The wound clinic also looked at Quorum sensing to assess the biofilm in wounds inoculated with *Pseudomonas aeruginosa*. Quorum sensing is the communication between bacteria using signaling molecules that can lead to increased bacterial virulence. The investigators found that Quorum sensing could be detected in the inoculated group, but not in the control group. At the same time, wound swabs measuring bacterial counts did not correlate with critical colonization.

Wound Infection: A Medical Perspective

Presenter: Martin Robson

Health is a balance or equilibrium between the factors of host resistance and a myriad of bacteria,

which can be ever-present in a wound. When bacterial counts reach $>10^6$ CFU/g of tissue, or when there is a tissue presence of beta hemolytic *Streptococci*, the equilibrium favours bacteria, and infection can occur.

Treatment of chronic wounds attempts to restore the equilibrium, favouring health. Guidelines for the treatment of chronic wounds with evidence of infection were published in *Wound Repair and Regeneration* in December 2006. These guidelines recommend quantitative swabs or tissue biopsy if a wound is not progressing as expected. If $>10^6$ CFU/g are found on culture, the guidelines recommend topical antibacterials be applied. If deeper infection, such as cellulitis, is found, then systemic antibiotics, covering gram-positive bacteria, should be used.

Predicting Covert and Overt Infection in Leg Ulcers: A Randomized Controlled Trial

Speaker: Kerlyn Carville

This trial examined the clinical characteristics of wounds and associated wound-swab results to determine the effectiveness of topical antimicrobial dressings for the treatment of wound infection. Chronic leg ulcers are colonized by micro-organisms, which under

some conditions may reach critical levels and progress to covert or overt infection.

The study examined the healing rate associated with the use of two commonly used antimicrobial dressings (cadexomer iodine and nanocrystalline silver) in the treatment of infected leg ulcers. Delayed healing (no improvement two weeks after optimal treatment) is the most common sign seen with critical colonization. New slough or wound breakdown is the second most frequent sign seen with critically colonized infection. This study confirmed that changes in wound characteristics could be used as clinical predictors for determining the presence of covert infection in chronic leg ulcers. Statistical analysis revealed a significant association between *Staphylococcus* on swab culture and malodorous or painful wounds with increased exudate.

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References: 1. Data on file. Healthpoint, Ltd, Fort Worth, TX 76107. 2. Brown-Etris M, Cutshall WD, Hiles MC. A new biomaterial derived from small intestine submucosa and developed into a wound matrix device. *Wounds*. 2002;14:150-166.

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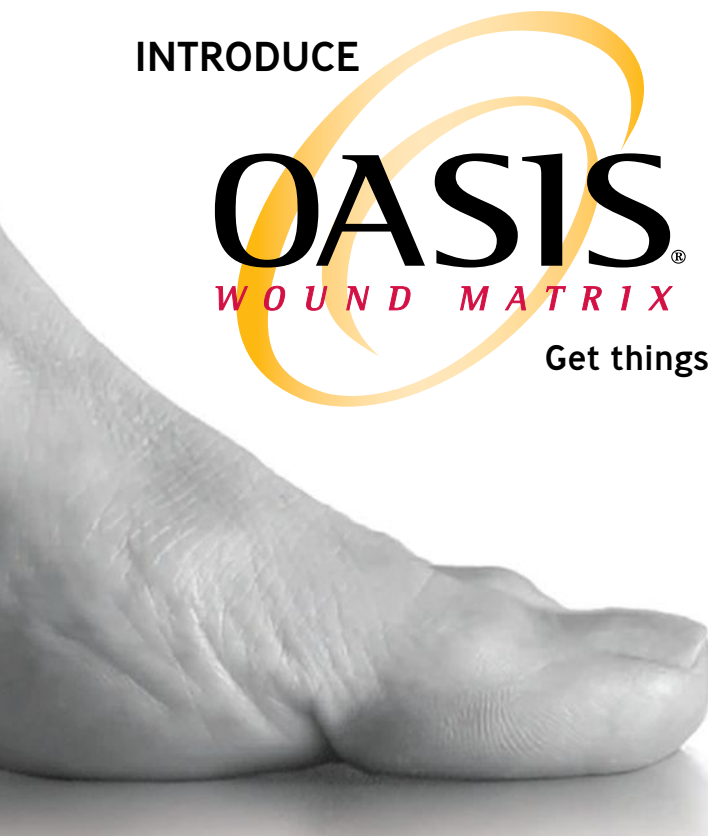
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Ostomy, Continence and Skin Care

By Kimberly LeBlanc,
BSN, RN, ET, MN

Connie Harris,
RN, MSc(c), ET

Janet Kuhnke,
BSN, MS, ET

The sessions offered in the Ostomy, Continence and Skin Care stream were well researched and supported through detailed and practical presentations. A clear message was that we, as wound-care clinicians, have a responsibility to take research findings and translate the information to our clinical practices. We should be using validated, reliable tools to perform assessments and to audit, research and benchmark our interventions and findings to support evidence-based practice.

The sessions provided attendees with an opportunity to hear the latest research and to translate to frontline practice.

Quality of life issues: The science of quality of life (QoL) is essential to our practice. Our idea of another person's perception of his/her QoL is often based on our own ideas and perceptions; the patient's may be very different. Wound care is far behind other health illness states in this assessment.

Application to practice: We need to be able to quantify the difference we are making. Some countries are moving away from QoL to patient benefit index.

More information: Calman KC. QoL in cancer patients: A hypothesis. *Journal of Medical Ethics*. 1984;10:12427. van Korlaar IM, Vossen CY, Rosendaal FR, Bovill EG, Cushman M, Naud S, Kaptein A. The impact of venous thrombosis on quality of life. *Thrombosis Research*. 2003;114(1):11-18.

Prevention of skin tears: We need to focus on "responsible bathing" of frail elderly: Minimize bathing; shower with warm water; no hot water; and hydrate skin.

Application to practice: Skin tears should be categorized as follows:

- Category 1a: linear
- Category 1b: flap
- Category 2a: < 25 per cent loss
- Category 2b: >25 per cent loss
- Category 3: complete loss

Prevention and a systematic approach are key. Consider tetanus shot if > 10 years since last tetanus shot.

More information: LeBlanc K, Christensen D, Orsted HL, Keast DH. Best practice recommendations for the treatment of skin tears. *Wound Care Canada*. 2008;6(1):14-30.

Advanced skin care strategies for patients with incontinence: Incontinent-associated dermatitis (IAD) is linked to an increase in pressure ulcers.

Application to practice: Keep skin healthy and acidic. Focus on prevention and toilet patients regularly. Pouch fecal incontinence and use catheters as part of care planning. Use of absorbent products for incontinence is to be a last resort. If used, apply a skin barrier that allows skin to breathe. Leave briefs open under patients for air to circulate.

Cost outcomes of ET nurses in chronic wound management: A Canadian Association for Enterostomal Therapy (CAET) cost-outcomes study using healing trajectories for comparative effectiveness in economic evaluations has set a new benchmark for the evaluation of ET nurse-led interventions.

Application to practice: The greater the involvement by the ET-led specialty agency, the lower the overall cost of the treatment for acute and chronic wounds, realized by a shorter time to healing and a reduction in the number of nursing visits.

More information: Harris C, Shannon R. An innovative enterostomal therapy nurse model of community

wound care delivery: A retrospective cost-effectiveness analysis. *JWOCN*. 2008;35(2):169-183.

A presentation of the French language version of the Braden Scale: The French Canadian translation of the Braden Scale underwent a rigorous validation process and was deemed to be reliable and valid.

Application to practice: A validated pressure ulcer risk assessment tool is available in French.

Peri-stomal complications: Assessment of patients with ostomies contains many facets, many of which impact the success or failure of the pouching system.

Application to practice: For decision-making about using convexity with ostomies: if the abdomen is firm use a soft faceplate; if the abdomen is soft use a firm faceplate.

More information: Colwell J, Beitz J. Stomal peri-stomal complications: Content validation and problem interventions. *JWOCN*. 2007;34(1):57-69.

CAET best practices of fistula management: CAET best practice guidelines for enterocutaneous fistula management were discussed.

Application to practice: This guideline will provide an evidence-based approach to enterocutaneous fistula management.

More information: Virginia McNaughton, team lead for the CAET best practice guidelines for enterocutaneous fistula project, invited participants to review the document and provide feedback. Contact information: virginia31@sympatico.ca.

Pediatric skin epidermolysis bullosa (EB): Management of epidermolysis bullosa takes a village of committed people.

Application to practice: Epidermolysis bullosa blisters may be broken if the blister interferes with functions of activity of daily living (ADLs). Assess if the blister is tense/full before deciding to drain or not. The blister is cleansed and broken with a sterile needle large enough to promote drainage. Blisters are broken on the side and the blister tissue is left to protect the wound bed. Gently dab the blister with gauze.

More information: For EB, use existing Web resources for professionals and families:

- www.ebnurse.org
- www.niams.nih.gov
- www.debracanada.org/home.html

Addressing challenges with bariatric patients with ostomies: The number of patients with ostomies who are also bariatric is increasing. Data from the World Health Organization (WHO) and Health Canada reflect this prevalence and the seriousness of the issue. Care of patients with multiple co-morbidities that make healing more complex, including the bariatric population, is increasing across the world.

Application to practice: Health-care professionals need to be educated about the super-obese: BMI of 50 to 60 and the super-super size BMI 60+ and be knowledgeable of the multi-factorial issues surrounding bariatrics (WHO has 6 BMI risk levels).

More information: WHO statistics Adult Obesity/ bariatric: www.who.org

Maklebust J, Magnan MA. Preventing incontinence-associated dermatitis (IAD). *Adv Wound Care*. 1994;7(6):25,27D8,31D4. ☺



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BY David Haligowski, BSc, MD AND Anne LeMesurier, RN, BScN, IIWCC

Multi-center Observational Study on Peri-stomal Skin Disorders: A Proposal of Classification—Italy

Presenter: Stephano Gasperini
The literature shows no evidence of a tool to classify peristomal skin disorders. A prospective, observational study was conducted among eight ostomy centres across Italy. A total of 339 patients were divided into two groups according to onset of complications (less or greater than one year). Eight hundred digital photographs were taken to enhance observation, and blood samples were drawn for additional data. From data obtained, a classification scheme was created and subsequently tested using four non-study group experts. The resulting instrument facilitated lesion interpretation and detection, including topography. This is the first validated classification attempt not based on assessments of lesions attributable to entirely different etiopathogenetic factors. Further research to refine the tool and to correlate the additional data obtained from blood samples with the classification system is underway.

This classification describes the lesion appearance as well as describing the location of the wound in relation to the stoma. The lesion would be defined at L and could range from 1 to 5,

depending on the description of the lesion. T stands for topography and attempts to describe the location of the lesion in proximity to the stoma. This is done by imagining four quadrants 7.5 cm in diameter divided around the stoma and called quadrants I-IV. The upper left quadrant is T1 and continues going clockwise around the stoma.

This study was published in *Ostomy/Wound Management*, 2007;53(9):38-43. The article contains the tool.

Take-home message: Having a way to classify peristomal skin disorders provides a tool for an objective assessment that, in turn, offers a new guideline for the correct interpretation and diagnosis of skin disorders. An objective classification system is fundamental to proper diagnosis and characterization of peristomal skin disorders, standardization of terminology, and incidence or prevalence studies.

Reducing Incontinence-related Skin Injury in Acute Care Patients

Presenter: Joan Junken

Facts:

- Skin injury associated with incontinence was 42.5 per cent
- Incontinence dermatitis increases the risk of pressure ulcers by 22 times
- Starting in October 2008 in the

U.S., facilities will not be paid for cost of pressure ulcers

Purpose: Nurses need an accurate assessment and interventions as first steps in reducing incontinence-associated dermatitis (IAD).
Method: Used survey method to determine incidence of in-patients
Results: 2005 pilot: 56 per cent of patients were skin injured.

Joan Junken introduced CWOCN and a skin-care team and established a plan to decrease the incidence of IAD. This included: staff education and product improvement (better incontinence briefs), and placement of these briefs closer to the bedside for better accessibility. The results were 42.5 per cent of patients who had incontinence dermatitis, which was a small improvement. It is important that we work smarter, not harder. There is no list of interventions for IAD.

This led to the creation of the Incontinence-Associated Dermatitis Tool (IADT), which shows photographs of different stages, definitions of each stage, and its accompanying interventions.

Take-home message: The IADT is not a validated tool. Junken wants us to take this to our facilities and give feedback so the tool can be revised and tested. Junken will do validity and reliability testing after feedback from users.

A Proactive Team Approach to Patient Hygiene Leads to Improved Outcomes

Presenter: Ann Wolfman

A nursing unit trialed the use of a bath product that requires no rinsing or drying of the skin. There is no need for a basin at the bedside. The results showed that the staff did like the product (easy-to-use, fewer steps to washing, no rinsing or drying). The trial lasted for one month and the cost was \$4,000 for the product.

Results:

- After six months, the incidence of incontinence-associated dermatitis reduced by 21.4 per cent and after 11 months decreased to 13 per cent. There was also a great decrease in laundry costs, as they were not using washcloths or towels as much.
- Their unit budget was \$33,000 prior to initiating this product and reduced to \$26,500 after one year of implementing this new bathing product.
- The total decrease in dermatitis was 77 per cent; there were fewer occurrences of isolated patients and no *C. difficile* outbreaks that year.

Take-home message: The team approach improves patient outcomes and is a great example of working on a project with staff. ☺



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Canadian Perspectives

BY Martine Albert,
RN, BScN, ET

Karen Bruton,
RN, ET, BScN(c)

Sunita Coelho,
RN

In June 2008, at the World Union of Wound Healing Societies (WUWHS) meeting, Canadian clinicians demonstrated that they are at the forefront of countries supporting best practices in wound care.

Canada is a vast nation that consists of both a large land mass and a diverse population that is culturally unique to each province, territory and region. Canadian wound-care clinicians are faced with challenges related to the implementation of standardized wound-care delivery systems within their respective establishments, complicated by the cultural needs specific to each province/territory/region, differing financial reimbursement structures and climate variances that affect the function of dressings and modalities.

Administration of Health Care in Canada

Health care in Canada is delivered through a publicly funded system that is guided by the *Canada Health Act*. The *Canada Health Act* ensures that health care is accessible, portable, comprehensive, universal and publicly administered to all Canadian citizens. Health-care delivery is under the jurisdiction of the provincial and territorial governments and is financed, in part, through the Canadian Health Transfer program. The Canadian government is still responsible for delivery of health care to First Nations populations, as well as military and Royal Canadian Mounted Police (RCMP) personnel. While clinicians across the country strive to deliver wound care that meets evidence-based standards, the variances provincially, or even regionally, can be barriers or assets.

A Model for Health-care Delivery

First Nations populations in Canada have culturally specific needs. In one community—Eskasoni, Cape Breton, Nova Scotia—the Tui'kn Initiative has shifted health-care delivery from a model of episodic acute

care to one of health promotion, disease prevention and chronic disease management. Although it has taken over 10 years to develop, the results have been successful and could serve as a model for others.

A National Wound-care Association

In 1995, the Canadian Association of Wound Care (CAWC) was created with an idea that originated with a few like-minded visionaries who wanted to improve wound care in Canada.¹ Over the years, this organization has worked to identify gaps in the clinician knowledge base, and in the delivery of wound care throughout the country. The CAWC recognized the need for an integrated and systematic wound-care approach for health-care professionals across the country to practice within an evidence-based framework. "The CAWC has developed a layered learning approach based in adult education principles integrating other wound-care education programs."²

Since its inception, the CAWC has produced an annual educational conference and a seminar series to move wound-care clinicians from a novice to advanced level. These educational events are designed to make research evidence readily available to all clinicians to reduce the distance between the evidence/research and bedside practice and decrease practice variations. The CAWC also works to increase awareness of wound-care issues among health-care clinicians, administrators and politicians.

Best Practice Recommendations

Best Practice Guidelines have been developed in Canada by the Registered Nurses' Association of Ontario (RNAO). Although this was a nursing initiative, it was supported by many disciplines and is very comprehensive. The CAWC has taken these guidelines and condensed the information into recommendations that are enablers to practice.

continued on page 36

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The CAWC “published in 2000 best practice recommendations relating to wound bed preparation and the prevention and management of pressure ulcers, diabetic foot ulcers and venous leg ulcers.”³ The quick reference guides, which are a further condensation of the information, have been instrumental in enabling the development of wound-care teams and programs addressing the needs of a patient with a wound.

Pressure Ulcers: A National Problem

A research project was funded by the CAWC to demonstrate the extent of the problem of pressure ulcers in the nation’s health-care facilities. The results, generated through a pressure ulcer prevalence study conducted by M. Gail Woodbury and Pamela E. Houghton, led the CAWC to develop the Pressure Ulcer Awareness and Prevention (PUAP) program.

The PUAP program demonstrated the impact of bringing the evidence to the bedside. The program has a multi-layered approach to education and knowledge translation for clinicians and patients and their families (see page 58 for more on the program). The success of the program has encouraged the CAWC to place research as a priority in developing future initiatives.

Certification in Wound Care

Certification includes many considerations: clinician preparedness, educational preparedness, certification integrity and certification recognition. Wound-care certification is defined as a voluntary process whose purpose is to provide recognition that a licensed professional has attained knowledge, skill and clinical or practical experiences in a defined specialty. In Canada, certification for nurses is sanctioned by the national nursing body, the Canadian Nurses Association (CNA). The Canadian Association for Enterostomal Therapy (CAET) has a national training program for enterostomal therapy and through the CNA will soon be offering a certification program for their members (enterostomal nurses who have been given a discipline-specific designation).

The CAWC membership is multidisciplinary, which presents a challenge in providing first a baseline requirement for certification and then a program to deliver the certification for all of its members. The CAWC is developing an online education program that will begin to meet the needs of its membership.

According to presenter Jackie Fletcher, in the United Kingdom, nurses with wound-care training are referred to as “tissue viability nurses.” There are more than eight levels of competency for nurses—from novice to expert.

A Redesigned Board of Directors

The CAWC board of directors is also in transition, moving from its original governance format as a conference planning committee in 1999 to a policy-oriented board in 2007. This shift was made in an effort to meet the growth of membership, as well as the increased demands of the association in other areas. Currently, the CAWC has evolved into an organization that offers educational programs, wound-care initiatives such as the PUAP and a Foundation that will support scholarships, research and future initiatives. ☺

References

1. Burrows C, Sibbald G, Steinman C. Evolution of the Canadian Association of Wound Care (CAWC). WUWHS Congress 2008.
2. Keast D. Delivering wound care education in Canada. WUWHS Congress 2008.
3. Keast DH, Orsted HL. The pathway to best practice. Guest Editorial. *Wound Care Canada*. 2006;4(1):10.

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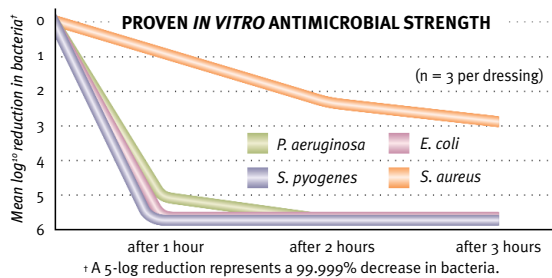


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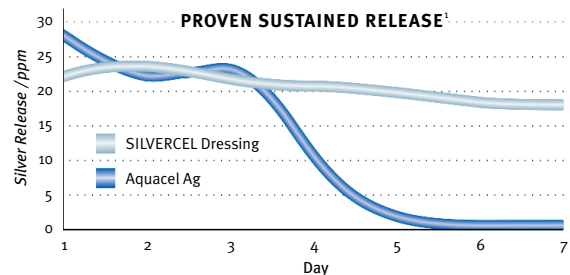


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Wound Care Beyond Canada: A Global Perspective

BY Patricia Coutts, RN

John D. Ivory,
MSc

Judy Ryan, RN

Wilma Sterling,
RN, CRRN

As wound-care professionals in Canada, there is no doubt that we are very busy people. Our appointment books are full months in advance; we spend our days keeping our clinics up and running; oftentimes evenings are spent catching up on paperwork or updating our knowledge, and our weekends can be written off with conferences and meetings.

We can be so taken up with trying to stay on top of things here at home that it's hard to make the time and find the energy to have a peek over the fence and see what our neighbours in other parts of the world are doing.

In a perfect world this is something we should be doing on a regular basis, so that we can learn from others, share ideas with them or even just recognize that sometimes we are all confronted with the same difficulties and challenges, no matter where we are.

The Global Perspectives stream of the Third Congress of the World Union of Wound Healing Societies was an ideal time and setting to do just that. Some of us who were there would like to share a few of the highlights of this stream with you—and give you that glimpse into our neighbours' yards.

Professional Education

One of the fundamental and most important elements of any field within health care is education.

The first speaker, Leah Shapera, talked about the Canadian experience in a hospital setting. Different methods of teaching were used that included off-unit, on-unit, policy and procedure open-book reading and video. Shapera concluded that the most effective method of teaching was off-unit and the least effective method was policy and procedure open-book reading.

In the U.S., treatment for pressure ulcers is not funded unless there is a prevention program in place.

Speaker Catherine D'Amico noted that many health-care professionals disagreed among themselves regarding prevention and treatment modalities. They were frustrated with the lack of value placed on prevention programs by their institutions.

In Iran, the focus is on diabetes. Diabetes is expected to affect 75 per cent of the population by 2025, according to speaker Mahvash Salsali, who emphasized the need for diabetic education and foot care.

In summary, we see that there is still a lack of knowledge regarding chronic wound-care within health-care professions, and it was felt that chronic wound care should be integrated into the basic levels of education for all health-care disciplines.

Setting up Wound-care Clinics

José Contreras-Ruiz took us along with him on his journey toward setting up a wound-care clinic in a public hospital environment in Mexico, where resources and knowledge were limited. He took us from the earliest days when the only equipment his clinic had was a bucket, and patients had to bring their own clean water and dressings to today, where the same clinic now sees 120 patients per week, treating leg, diabetic foot and pressure ulcers.

The clinic also works with the doctors and nurses, teaching them the necessary skills of wound care and engaging them in research projects. Contreras-Ruiz emphasized that institutional support was a key element of success in this undertaking.

The take-home message here is that regardless of obstacles that present themselves, winners never quit.

Setting up Wound-care Societies

Wound-care clinics cannot function without considerable support in the form of a strong wound-care community. George W. Cherry, who has been involved in the

formation of three European wound-healing societies and is currently chairman of the Oxford International Wound Healing Federation; Michael Woodward, president of the Australian Wound Management Association (AWMA); and Evonne Fowler, who has been personally involved in the formation of the Association for the Advancement of Wound Care (AAWCC) and the Symposium on Advanced Wound Care (SAWC) gave us European, Australian and U.S. perspectives on the requirements for setting up a wound-care society.

According to these speakers the following elements are essential for setting up strong and successful wound-care communities: A need for knowledge, motivated and enthusiastic individuals with a shared objective, strong leadership, focus on good communication, problem identification and industry support.

Tools that were found to be useful in the process were community-specific journals, use of surveys to learn about the needs of community membership, career centres and Web sites. One interesting opinion expressed was that communities are made stronger by coming together, and this is how the AWMA models itself. It is a core group that provides a voice to organizations both regional and territorial, all of which maintain their autonomy.

Barriers to success were mainly time constraints and logistics—predominantly distance. All speakers made reference to the importance of support from industry. No modern community can function without material resources, and a wound-care community is no different. Willi Jung spoke about the role of industry in helping to set up a wound-care community. His opinion was that industry helps in several areas: identifying a problem and its extent, bringing the right people together, defining the goals (such as specific improved patient outcomes) and providing financial support.

Lymphedema

From speakers Christine Moffatt, Terence Ryan, Phillip Morgan and John Macdonald, we learned that our lymph system usually carries away 2 to 6 litres of fluid in a 24-hour period, and if this system is damaged in any way, high-protein edema will result. Edema is best managed with short-stretch compression and not diuretics.

The speakers further emphasized a multidisciplinary team approach, as this condition is not only taxing to patients and their families, but to their caregivers as well. Christine Moffatt suggested that we “spread the misery among the team” as our “need to heal” frustration can bring us down.

Treatment Adherence and Culture

In this series of talks, Patricia Price discussed an international survey that collected the views of over 900 patients with venous leg ulcers, arterial ulcers and ulcers of mixed etiology. Almost 50 per cent of the patients in each group reported pain most or all of the time, one third of patients in each group reported pain at dressing change most or all of the time and 40 to 45 per cent in each group reported pain at dressing change that took more than three hours to resolve.

Each group related that of six issues associated with having an ulcer, pain was the most problematic, followed by not being able to have a bath. Leg ulcer patients had the most problem with odour, while mixed ulcer patients said leakage was a major problem.¹

Zulifiqarali G. Abbas from Dar es Salaam, Tanzania, talked about a study aimed at characterizing risk factors for foot ulcers in that country. A total of 1,451 patients were enrolled over nine years. Recorded clinical data and epidemiological data included ulcer site and area, tissue loss grade, infection grade, presence of septicemia, Wagner scale, degree of neuropathy and limb perfusion. Recorded outcomes included septicemia, healing and mortality.

Study results indicated that parameters such as tissue-loss grading of ulcers, limb perfusion and ulcer size were significant predictors of healing, septicemia and mortality. Wagner scale and ulcer size, however, did not correlate with outcomes.²

Paul Philcox from Australia looked at the impact of chronic wounds on people who do not actually suffer from them. His team looked at 300 unsolicited comments returned along with questionnaires originally sent out into the community to determine the prevalence of chronic wounds in a community setting. They found that people wanted to share their experiences, and supported valuable research. They

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also related fears about wound development/recurrence, the difficulties that arose when caring for someone with an ulcer and lack of concern by health professionals as people got older.³

The take-home messages are that ulcers affect people other than the direct sufferers and that these people are anxious to share experiences, anxieties and information and, finally, that health professionals need to listen more.

Richard Salcido spoke about the importance of smoking cessation and gave us a long list of smoking-related health complications, especially wound-related. For example, smoking can cause delayed healing in post-operative patients, wounds can rupture and incisional hernias can develop. Incidence of pressure ulcers is higher in patients with spinal cord injury who smoke. Smoking interferes with fibroblast migration and with various other cell types involved in wound healing. It increases blood viscosity and vasoconstriction. It lowers levels of oxygen circulating in the blood. If smokers needed any more motivation to quit, these facts surely provide it!

Making a Difference

It was noted that skin tears are the third most common wound of the elderly after trauma and pressure ulcers. Australia has developed the skin tear audit research (STAR) skin tear classification system that provides another tool to help in a comprehensive patient assessment.

Pain is an important factor to be considered when assessing a patient. The pain a person with diabetes experiences is often underestimated and may not always relate to the gravity of diabetes or its complications. Perception of pain may be related to past experiences that have been either positive or negative. When considering pain, clinicians should look at the dynamic nature of the pain, the interpersonal and social context of the pain, therapeutic relations and the possibility of the use of psychotherapy for help in dealing with the pain.

Pain, as we know, can be most bothersome at dressing change. Hilde Fagervik-Morton suggested that we need to identify and incorporate patient concerns into goals of treatment. Patients want us to,

"Listen to me when assessing my pain," and encourage the discussion of the use and change of analgesia with them on a regular basis.

In the U.S., a pressure ulcer collaborative was established across care settings. The goal of the initiative was to reduce the incidence of pressure ulcers by 25 per cent. With improved communication and education of both staff and patients the incidence of pressure ulcers was reduced by 70 per cent in two years. This initiative reinforces and supports the CAWC Pressure Ulcer Awareness and Prevention program.

Cost versus Cost-effectiveness

The difference between cost and cost-effectiveness was defined by Patricia Price. Cost effectiveness is defined as not necessarily cutting costs (e.g., "Why aren't we using dressing A when it is 50 per cent less expensive than dressing B?"), but being able to look at the big picture and demonstrate the most effective use of available resources (e.g., "Patients who use dressing B have been shown to develop 30 per cent fewer infections and their time to healing is 25 per cent faster than with dressing A, thereby saving us money in the long run").

A study from Germany on patients with venous leg ulcers presented by Matthias Augustin showed that average costs (direct and indirect) per patient per year range from €9,900 to €10,800* (approximately \$15,900 to \$17,400 CDN). This is without doubt evidence to motivate us to be conscious of how we are spending our money on wound care, no matter where we are in the world.

Geoff Sussman presented an Australian study that evaluated the cost-effectiveness of a multidisciplinary wound-care team compared with usual care in a nursing home setting. It was shown that more wounds healed in the treatment arm than in the usual care arm and there was faster healing and significantly less pain in the intervention group. The mean treatment cost was \$616 AUD for the intervention group and \$978 AUD for the control group⁵ (approximately \$603 and \$956 CDN, respectively).

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When asked what the next step in the various countries should be, presenters responded that practitioners need to be educated in cost-effectiveness. It was felt that more high-quality research needs to be done to demonstrate cost-effectiveness of products and interventions, and that bureaucracy needs to learn to move its focus away from cutting costs and look more toward the bigger picture—i.e., cost-effectiveness.

Special Consideration for Leg and Foot Ulcers

This series of presentations was opened by Michael Golinko from New York, who, using a mouse model, demonstrated that while age alone or diabetes alone does not necessarily impair wound healing, both age and diabetes combined do impede the process. The next step is to look at a human model and see if the same holds true. The investigators hope to help clinicians realize that just because a patient is old or diabetic does not mean that their wounds cannot heal.

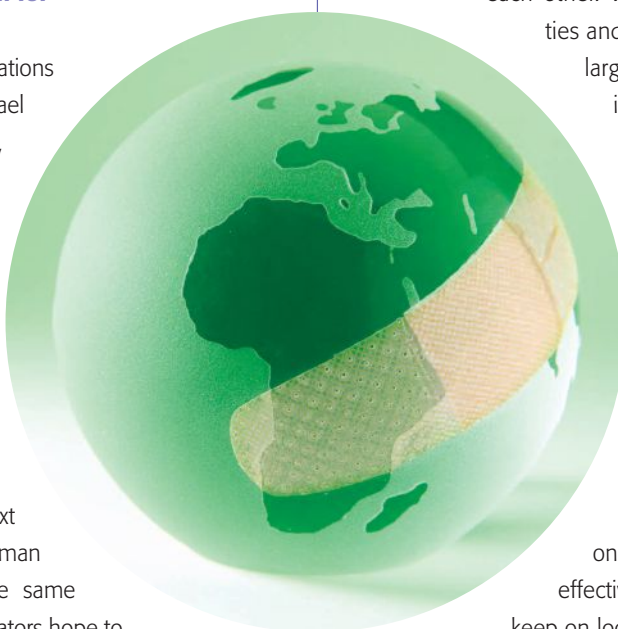
Magnus Agren from Denmark presented some of his work looking at wound fluid as a gauge for healing. He compared wound fluid from acute wounds with that of chronic venous leg ulcers with duration of greater than three months and recorded the protein alterations that were unique to the chronic wounds. He found that fibronectin, Von Willebrand factor and C-reactive protein levels were significantly increased in the chronic wound fluid.

Marco Romanelli provided us with the results of a randomized controlled clinical trial carried out in Italy. Amelogenin extracellular matrix therapy, which provides a temporary matrix for cell growth in the wound bed in combination with compression therapy was

compared to compression alone. His group found significant reductions in ulcer size and reduction in both pain and exudate levels. Follow-up at 12 weeks post-treatment showed that the beneficial effects were maintained.

Conclusion

From this very brief overview it can be seen that when we look out there, it's a little like looking into a mirror—we are not all that different from each other. We all have our difficulties and challenges, some quite large and initially intimidating, some less so. We all have areas where we excel and are leaders and teachers. Conversely, we all have our weak areas where we need to let someone else show us the way forward. We can see that ultimately we depend on each other to function effectively, so it is vital that we keep on looking out there and keep on letting others look at what we are doing because that is how we learn, teach and progress as a single global community. ☺



References

1. Price P, Fagervik-Morton H, Mudge E, et al. Relative impact of wound-related symptoms associated with leg ulcers: An international patient perspective. WUWHS Congress 2008.
2. Abbas Z, Lutale JK, Archibald LK, Multivariate analysis of outcome correlates among diabetes patients with lower limb ulceration, Dar es Salaam, Tanzania. WUWHS Congress 2008.
3. Philcox P, Duncan G, Darzins P, et al. The impact of chronic wounds on people without wounds. WUWHS Congress 2008.
4. Augustin M, Herberger K, Purwins S, et al. Costs-of-illness of venous leg ulcers in Germany. WUWHS Congress 2008.
5. Vu T, Harris A, Duncan G, et al. Cost-effectiveness of multidisciplinary wound care in nursing homes: A pseudo-randomized pragmatic cluster trial. *Fam Pract.* 2007; 24(4): 293-294.

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Research

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BSc, MSc, Dip Ed,
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Afsanah Alavi, MD

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A wide variety of topics were presented in the Research Stream, providing Congress attendees with an opportunity to hear about the latest research. In many cases, it will be a long time before the results of this research can be translated into bedside practice. In other cases, the results should enhance thinking about our current practice and whether it is based on the latest evidence. Here are the highlights of the Research stream.

Gene Therapy and Related Genetic Approaches

There were several oral presentations about gene, cellular or animal studies that, while having results that had no immediate relevance to clinical practice, may be previews of future therapies.

Farshad Forouzandeh

Laboratory research in development of non-rejectable cultured skin substitute.

In vitro and *in vivo* results demonstrate a decreased chance of rejection, improved angiogenesis and healing in immune-compromised rats. This is preliminary work, and the presenter is aiming to find a local immune-suppressive agent in a slow-releasing system, i.e., graft.

José Bonilla

Human papilloma virus E6/E7 oncogenes promote mouse ear regeneration in the transgenic model Tg (K6b-E6/E7).

This may be a model for hair growth and wound healing; wounded mouse ears showed increased healing without scarring compared with controls.

Feung-Kyu Han

This presentation outlined the use of uncultured lipoaspirate cell autograft for the treatment of diabetic ulcers. *In vitro*, fibroblast production and collagen synthesis were identified. Aspirate from liposuction

was applied to diabetic foot ulcers and demonstrated healing within four to six weeks. These were case studies with no controls.

Marjana Tomic-Canic

Gene transcription patterns may be able to guide the extent of excisional debridement of chronic wounds. In the study cited, biopsies were taken before and after debridement of chronic wounds such as diabetic foot ulcers and venous leg ulcers. The samples were analyzed at the cellular and gene level and compared with normal skin. Fibroblasts in the pre-debridement biopsy were enlarged and demonstrated a slower growth rate. They did not migrate. Fibroblasts in the post-debridement biopsy were closer to those in normal skin. Using the results so far, the researchers want to determine which genes may be predictors of wound healing. They are currently using this technology to investigate squamous cell carcinoma (SCC), psoriasis and chronic wounds.

Rachel Clarke

In a study on infection in chronic wounds and the correlation to wound cytokine levels, diagnosis by clinician, and bioburden, the researchers found only 50 per cent concordance between clinical diagnosis and swabs. Correlation between cytokine levels and infection depended on wound type.

Liping Jiang

Results from an experimental animal model for pressure ulcer by persistent stress in local ischemia-reperfusion suggest that at least six hours of pressure relief is required.

C. Yhan Yeong Hoo

Vitamin C may increase flap survival rates (in rat studies), perhaps because of reactive oxygen species.

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David Bates

In a discussion on the current advances of vascular endothelial growth factor (VEGF)/angiogenesis, David Bates suggested that while all VEGF has the same molecular weight and composition, molecular structure may vary.

VEGF can both stimulate or inhibit angiogenesis depending on the molecular structure, which may explain poor results to date with the application of isolated VEGF.

Aging, Scars and Wound Healing

Madhuri Reddy

The aim of this session was to review the skills, knowledge and attitude required for providing the highest level of care for the elderly. Healing in the elderly is slower due to two major factors: normal aging and photo aging. Normal aging causes increased dryness and subsequently increased wrinkling and decreased immunologic and sensory responses. Photo aging enhances wrinkling and increases elasticity and matrix metalloproteinase (MMP) levels. Nutrition and aging were also discussed. More than 10 per cent of body loss in the elderly is unintentional. The goals of care should be discussed with patients and their families. Decrease of dressing changes, pain and odour should be emphasized in elderly patients.

Mark Ferguson

This session focused on the role of an exogenous substance derived from human recombinant transforming growth factor- β 3 (TGF- β 3) in the treatment of scars. Studies indicate it reduces fibronectin and collagen type I and III deposition in the early stages of cutaneous wound healing and overall wound scarring.

Scars not only have aesthetic effect. Over joints, scars may cause functional problems, growth retardation and have a negative psychological impact.

This new medication has shown promise in a phase 1 trial and two phase 2 trials completed in the United Kingdom. In three clinical trials, wounds treated with the substance (via intra-dermal injection) showed a statistically significant improvement in scar appearance, with a response rate of greater than 70 per cent. In more than 1,500 human subjects, it does not seem to have safety or tolerability issues for use in the prevention or reduction of scarring and it has large therapeutic index.

What's new in pharmacological agents?

Marco Romanelli

This session reviewed new biologic therapies, including anti-tumor necrosis factor (TNF)- α , infliximab, etanercept and adalimumab.

- TNF- α is a pro-inflammatory cytokine that induces interleukin 1, 6 and 8. Anti-TNF- α is effective therapy in treating acute inflammatory response, rheumatic fever and vasculitides.
- Infliximab is a humanized monoclonal antibody against CD20 and a treatment option for ulcerative pyoderma gangrenosum.
- Etanercept is an immunosuppressive agent, so the indications and safety information should be checked before starting treatment.
- A case report for the treatment of systemic pyoderma gangrenosum (PG) with adalimumab was addressed. Side effects were hypersensitivity reactions, urticaria, positive antinuclear antibody, positive anti-double-stranded DNA, clinical lupus (rare), symptoms and/or radiological evidence of demyelinating disease, histoplasmosis and an increase risk of tuberculosis. The risk of malignancy was not increased.

continued on page 48

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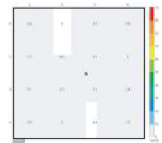
Using a 16-sensor, force sensing pad carefully affixed to the left heel of two subjects, pressure was "mapped" while the patients were lying supine and also with the knee flexed 30 degrees. Pressure mapping readings were done separately with the patient using various pressure reduction mattresses and numerous foot positioners, and heel protectors.

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Pressure Mapping of the Heel - Supine

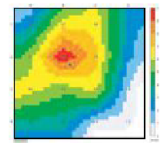
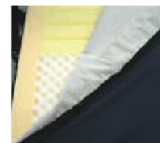
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Variation coefficient	63.7%
Standard deviation	1.47
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Maximum pressure	5.9
Center of pressure	2.7, 2.5



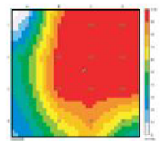
Pressure Reduction Mattress

Sensors included	16
Variation coefficient	59.7%
Standard deviation	26.8
Average pressure	44.8
Maximum pressure	100
Center of pressure	2.2, 2.2



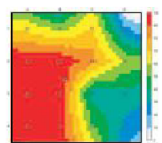
Heel Protector

Sensors included	16
Variation coefficient	36.4%
Standard deviation	28.2
Average pressure	77.5
Maximum pressure	100
Center of pressure	2.8, 2.4



Heel Pillow

Sensors included	16
Variation coefficient	40.5%
Standard deviation	28.1
Average pressure	69.4
Maximum pressure	100
Center of pressure	2.1, 2.5



The choice of treatment is based on the severity of the disease and rate of infection.

Geoff Sussman

The aim of this session was to review medications that have a negative impact on wound healing.

- Steroids decrease macrophage activity, collagen production, chemotaxis, protein synthesis and wound closure and will increase susceptibility to infection. Topical steroid application in peri-wound skin should be out of wound edges, and the edges should be separated by a barrier first.
- Cytotoxic drugs are neurotoxic, cause myelosuppression and decrease replication of wound repair cells such as fibroblasts.
- Hydroxyurea causes leg ulcers (commonly on the malleolar area). Lichenoid eruption with hydroxyurea is called hydroxyurea dermatopathy.
- Nicotine is a vasoconstrictor agent that causes platelet aggregation and decreased collagen synthesis. Each cigarette decreases blood circulation by five times for one hour.
- Colchicine decreases fibrinogen, granulocyte migration and cytokines.
- Anticoagulants are vasoconstrictors. Dapsone interferes with neutrophilic expression.
- Beta-blockers have negative effects on wound healing, but their effects vary depending on individual patients.
- Penicillin interferes with the tensile strength of the wound and decomposes in contact with tissue.

Medications have an important role in healing, but you need to know the medications that your patient is taking because this may be a factor in delayed wound healing. Consult with a pharmacist when necessary.

Tania Phillips

This session reviewed medications that have a positive impact on wound healing. Note: The numbers of randomized controlled trials (RCTs) in this subject are very limited.

- Pentoxifylline has variety of effects on red blood cells (RBCs) and tissue oxygenation, and modulates white blood cell (WBC) behaviour. It is an effective adjuvant to compression therapy in the treatment of VLU.
- Micronized purified flavonoid fraction (MPFF, Daflon)

is an antioxidant that reduces capillary re-permeability. It increases venous tone and capillary permeability. It can be used as conventional treatment for venous leg ulcers and, overall, the chance of healing is 30 per cent more with MPFF. Healing time is shorter (six to 12 months). Daflon is not FDA approved but diosmin, the most active component of Daflon is available as a dietary supplement.

- Becaplermin, platelet-derived growth factor (PDGF), is the only FDA-approved treatment for diabetic foot ulcers. It is effective in treating diabetic foot ulcers, but there are not enough data.
- Based on seven double-blind RCTs, cilostazol improved distance claudication in the management of arterial disease. In patients with ischemic ulcers who are not good candidates for revascularization, cilostazol may be a good choice, but more clinical trials are needed.
- Endothelin-1 is a potent vasoconstrictor that stimulates fibroblast and smooth-muscle proliferation.
- Bosentan is an anti endothelin receptor. Trials have shown there is evidence with good results in scleroderma.
- Hormone therapy reduces the risk for venous ulcer or pressure ulcers. Topical estrogen accelerates healing.

Zee Upton


In this session, on new topical pharmacological therapies, the presenter indicated that growth factors have variable efficacy. The necessity for high doses and corresponding high costs hampered their use. Vitronectin promotes migration of intracellular fluid (ICF) to the cell surface.

Bench to Bedside

Lars Steinstrasser

In those with damage to the epithelial barrier, infection can occur at the site of trauma. The presenter discussed a study based on an attempt to create an effective antimicrobial wound dressing against gram-negative bacteria using an occlusive silk membrane with a tiny pore size (<100 nm). Natural silk is allergenic. This bioactive silk is not. It is non-adhesive, occlusive and is loaded with slow-release colistin. The study indicated that the slow release of a topical antimicrobial is feasible and effective with silk dressings using this technology.

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Robert Diegelmann

This session focused on mechanisms and new developments in local wound care. New strategies involve neutralizing or removing proteases, as well as restoring tissue and growth factors. None of the new technologies will work without proper wound bed preparation; the bacterial bioburden must be reduced.

Gregory Schultz

In this session the presenter discussed the role of biofilms in wound healing. The main points of the presentation were:

- Biofilms may play a very important role in non-healing wounds.
- Biofilms cannot be seen with the naked eye, but their products may be seen.
- Bacteria in biofilms have changed their gene expression, and many are in a dormant stage.
- Antibiotics and antiseptics are relatively ineffective at killing bacteria in biofilms.
- Biofilms may create a chronic state of inflammation due to an off-target effect of the proteases produced by mast cells, neutrophils and lymphocytes as they attempt to kill the bacteria in the biofilms.

In the presence of biofilms, the most effective treatment appears to be debridement.

Honey

Several presenters discussed the role of honey in wound healing. Their conclusions are summarized below.

Rose Cooper

The role of honey in wound management.

How does honey work in the management of wounds? Honey produces hydrogen peroxide. It promotes anti-bacterial activity through increasing osmolality, acidity (its pH is acidic) and additional phytochemical factors. Honey inhibits more than 80 microbial species. It is effective on bacteria, dermatophytes, yeast, protozoa and viruses. But not all honeys have the same effectiveness. Manuka honey appears to stimulate rapid healing in wounds; it sanitizes the wound, and can eliminate odours. MSSA, MRSA, VSE and VRE are sensitive to Manuka honey. Honey inhibits the biofilm of *Pseudomonas*. It has immunomodulatory effect on monocytes and causes spontaneous release of TNF, IL1 and IL6. Honey has anti-inflammatory properties, decreases edema, enhances debridement and provides a moist wound healing environment. However, wound healing might be inhibited by lack of oxygen.

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CAWC 2008 Theme Meetings

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♦ Halifax, NS – November 7–9

What is happening with the annual CAWC conference this year? This year the CAWC is pleased to present two very special theme meetings in Victoria and Halifax, incorporating the best CAWC conference features and the best of the 2008 World Union Congress. Plus, all delegates receive a special workbook and free S3 CD as well as credit for the S1 portion of the S-series. These meetings also feature four special core sessions designed to enable change in the way you practice.

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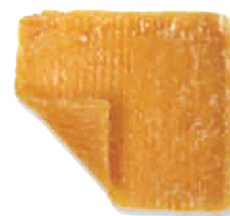
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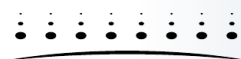
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1. The Use of MEDIHONEY™ on surgical wounds post-CABG. Bateman S, Graham T (2007) WOUNDS UK. Vol 3. 76 – 83.
2. *Leptospermum scoparium* Honey vs. Hydrogel to deslough venous ulcers: A randomised controlled trial. Gethin G. EWMA 2007.
3. Chronic lower extremity venous ulceration – Use of a *Leptospermum* honey impregnated alginate to facilitate wound closure. Regulski M. SAVC 2008.
4. Wound care with MEDIHONEY™ in paediatric haematology-oncology. Simon A, Sofka K, Wiszniewsky G, Blaser G, Bode U, Fleischhack G. (2006) Supportive Care in Cancer. 14. (1): 91-7.

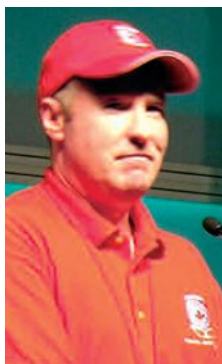
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WoundPedia:

Resources in Evidence-Based Practice



BY Douglas Queen,
BSc, MBA, PhD

The subject of evidence-based practice is not new in the area of either health or wound care, but in the latter case it has a long way to go to help caregivers in everyday practice.

Implementing best practices—those supported by evidence—is a growing requirement of global health-care systems and is an ongoing challenge for most of us in our daily lives. The World Union of Wound Healing Societies (WUWHS) continues to develop and disseminate best practice documentation through its collaboration with its industry partners. The Third Congress of the World Union of Wound Healing Societies held in Toronto in June 2008 saw the launch of many important tools to aid in the further development of this important approach to care.

All of these tools have resulted from global approaches to a common problem. Fitting with the theme of the 2008 WUWHS Congress the resulting products come as one common voice.

Congress 2008 delivered a strong global message of “Evidence, Evidence, Evidence,” but most importantly focused on its implementation into practice. And here lies a challenge: don’t just absorb the publically available knowledge, consider becoming part of its development. If you are involved in any way in clinical research or trials, publish your work to ensure that it can be considered as part of the emerging evidence for our practice.

The 2008 WUWHS Congress saw the launch of an important Web-based evidence tool—*WoundPedia*—that will help caregivers access, understand and implement the evidence base available for wound care. This new and exciting WUWHS product is freely available to all caregivers globally and is the beginning of a centralized initiative to facilitate the global development of more appropriate evidence-based medicine for wound care.



WoundPedia

The focus of *WoundPedia* is not to labour old ground regarding evidence definition and process, but rather to provide the information and tools necessary to aid its integration into practice. *WoundPedia* will also provide an opportunity to become involved in the ongoing process of evidence gathering, appraisal and presentation.

WoundPedia is a Web-based (www.woundpedia.com) free-content encyclopedia-type resource that contains collated evidence to support the clinical arena of wound care. *WoundPedia's* summaries provide easy links to guide the user to related pages.

WoundPedia is written collaboratively by experts worldwide. Created in early 2007, *WoundPedia* is expected to grow into one of the largest wound-care-evidence reference Web sites. Currently more than 50 active contributors are working on nine summaries, with topics organized by etiology or theme.

Unlike a paper reference source, *WoundPedia* is continually updated, with the creation or updating of summaries on topical events occurring within days or weeks, rather than the years usually required for printed sources.

The summaries are never complete; they are always

in transition, as the content is continually edited and improved over time. This results in an upward trend of quality, and a growing consensus of fair and balanced representation of information.

A *WoundPedia* summary contains comprehensive, verifiable, evidence-informed knowledge. The summaries reach this standard over time, and even in the short time of the existence of *WoundPedia*, many already have. The summaries are generated through teams that include many of the world's experts in each clinical area. This is done through *WoundPedia* Generator, a private content management Web site that allows this consensus process to happen. Unlike *Wikipedia*, the popular online encyclopedia, our content is peer reviewed.

The statements and recommendations are based on the best available evidence, expert knowledge and in some cases patient preferences.



Visitors do not need specialized qualifications to view the materials; people of all expertise levels and cultural and social backgrounds can find *WoundPedia* articles useful, including patients and their families.

Visit *WoundPedia* today at www.woundpedia.com. 🐾

 An advertisement for Integriderm. The top half features a photograph of a smiling healthcare professional in blue scrubs interacting with an elderly patient. The Integriderm logo is prominently displayed in the center. Below the logo, the text "Comfort, Care, Safety AND Performance" is written. The bottom half of the advertisement is divided into three sections, each with a small image and a description of a product feature. On the right side, there is a large image of the Integriderm product, showing its layered construction and the zipper mechanism.

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SUPERIOR PRODUCTS—SOUND ADVICE

There are three main factors that contribute for elevated foot pressure resulting in ulceration:

- Intrinsic: Genetic/Structural
- Extrinsic: Shoes/Traumatic accident/Surger
- Behavioral: Poor choices of footwear/Walking pattern

There is ongoing research into the impact that shear forces may have on ulcerations of the diabetic foot. It has been found through pressure mapping that the locations of "peak shear pressure" are different from the locations of general "peak pressure" of the foot. More research is planned in this area.

The takeaway message is to look at structure, function and footwear to be able to treat the diabetic foot appropriately.

Offloading

It was stimulating to hear that the term *offloading*, is being changed to *tissue protection*, as offloading is limited to devices but fails to factor patient activity and lifestyle. The change in term should aide in patient understanding of their condition.

On the issue of devices, it was stressed that no open ulcer should be treated with shoes and orthotics. The total contact cast (TCC) and the instant total contact cast (ITCC) still offer the best healing rates in forefoot diabetic ulcers. There was no difference in peak pressure between TCC and ITCC. It was pointed out that the ITCC had advantages over the TCC as it is easier to apply, less expensive and can be used in infected wounds.

Some presenters found through their work in their clinical practice that the majority of patients with diabetes don't require custom-

made shoes unless they have a severe deformity like chronic Charcot. There are presently on the market multiple extra-depth shoes that can be modified.

It was highlighted that even though the evidence was poor on the efficacy of footwear in ulcer prevention, it was still an important part of managing the diabetic foot and more research is needed in this area.

After healing of the diabetic foot ulcer, there should be a transition period of three or four weeks before returning to regular footwear, otherwise the foot may reulcerate.

Diabetic Foot Surgeries

Robert Frykberg presented his surgery classification system, which was validated in 2006.

Amputations

Neuropathy is one of the leading factors (equivalent to ischemia) contributing to increased rates of lower limb amputations.

Digital amputation, and specifically hallux amputation, often results in biomechanical alteration, digital contractures, ulceration and fractures. Keeping all toes is not always in the best interest of the patient's long-term goals related to rehabilitation, footwear, mechanical stress when walking and quality of life.

The most common foot amputations performed (in order, from distal to proximal) are transmetatarsal, Lisfranc and Chopart. Sometimes, shorter is better!

Prevention

Lawrence Lavery commented that most of the diabetic foot-care recommendations

have execution problems as a result of self-care barriers such as limited range of motion, obesity and visual impairments.

It was also stated that optimal foot care alone is 25 to 45 per cent effective at decreasing the rate of diabetic amputations. Caregivers who are educated in foot care can catch problems early (61 per cent). Males were shown to be less likely to attend foot-care clinics. Men experience a higher rate of foot infections and amputations when compared with women due to their beliefs and lack of access to care.

We were reminded by the diabetes educators, that for us to achieve amputation prevention, we need behavioral change. The only way this can be achieved is to consider the patient, clinician and environment. The area many of the presenters found challenging and that is often forgotten is the environment. This was a repetitive theme in the area of adherence to medication, devices and self care.

The future seems positive in the area of the diabetic foot ulcers through ongoing research. With emerging technologies, the cornerstone to managing the diabetic foot seems to remain a thorough assessment of the VIP (vascular, infection and pressure) and correction of these factors, a patient-centred approach, use of a multidisciplinary team and patient education. We were also reminded throughout the diabetic stream that our key goal as clinicians is to improve quality of life, limb salvage and to prevent recurrence of ulcers. To achieve this, early presentation, swift diagnosis and timely treatment are needed. ☺

Research

 continued from page 50

G. Gethin

Manuka honey versus hydrogel to deslough venous ulcers: A randomized controlled trial.

In this study the role of honey was compared with hydrogel in persons with VLU's. Overall, honey may be more efficacious than hydrogel in the initial treatment of sloughy venous ulcers; it demonstrated statistical superiority over hydrogel for

reduction of slough at four weeks and for healing outcomes after 12 weeks.

Katrina Bruzdanski

Evaluation of efficacy: Canadian honey against wound infecting bacteria.

In a laboratory study of various Canadian honeys' action against bacteria in culture, four strains of MRSA, three of VRE and

E. coli were investigated. The most susceptible to honey's effects were two strains of MRSA, and the least susceptible was *E. coli*. The most effective honeys were monofloral (buckwheat and blueberry). Canadian honey is not as active as Manuka honey against the studied strains of bacteria but still had significant bacteriostatic efficacy. ☺

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Canadian Association of Wound Care News

Are You Ready for Change?

This Fall the CAWC Presents Special Meetings in Two of Canada's Most Beautiful Locations!

By Heather L. Orsted

The CAWC 2009 Theme Meetings, in Victoria and Halifax, are going to change the way you practice wound care. Why do I say this? Because if you attend one of these two meetings we will help you realize which part of your wound-care practice is working and which part may actually be hindering healing.

Each session will begin with a brief look at what your practice currently is. Following this evaluation, best practice information will be presented using a multimedia format and interactive activities. Each session will end with steps you can take to modify your existing practice toward best practice!

The format will come as close to the bedside as possible, using a case-based approach. In each session we will be discussing real-life events that you encounter regularly in your daily practice.

We will look at the reality of implementing new strategies and explore tactics for integrating what you have learned into your plans of care and institutional culture.

If you missed the World Union Congress in June, these Theme Meetings will be a great opportunity to catch up on the latest information on best practices.

To get the most out of this meeting, BYOT (**B**ring **Y**our **O**wn **T**eam). Nurses, doctors, therapists, dietitians, social workers, foot-care specialists, unit managers—



Together we can make best practice happen.

anyone who makes or breaks best practice—need to be sitting at the table beside you. But if you can't get a team together you'll still benefit by attending. One way or another make it happen in 2008!

Victoria, BC
October 24–26, 2008
Victoria Conference Centre
720 Douglas Street
Victoria, BC
V8W 3M7

Halifax, NS
November 7–9, 2008
World Trade &
Convention Centre
1800 Argyle Street
Halifax, NS
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Bonus Features: Free with Your Theme Meeting Registration

- Each participant will be credited with an S1 equivalent, providing a prerequisite for the S2 educational workshop component (see the description of the Three-part Educational Series [S-series] in the education section of the CAWC Web site at www.cawc.net for more information about the entire S-series).
 - Each participant will receive a free S3 CD! The S3, The Reflective Learning & Practice Portfolio, provides a framework to assist you in developing your wound-care practice. Regular price is \$30.00.
- For further information regarding the meetings, including the agenda and hotel information, please visit www.cawc.net/open/conference/conferences.html.

For immediate online registration, visit www.cawc.net/open/conference/registration.html.

continued on page 58

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Caution: Federal law restricts this device to sale or on the order of a physician or licensed healthcare professional.

¹ In vitro studies, data on file.

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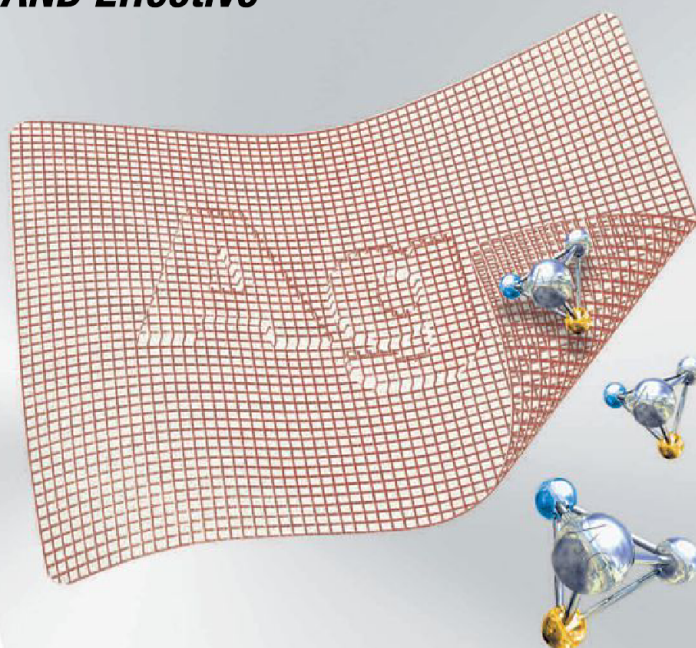
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CAWC Scholarships Promote Best Practice

There's still time to get your application in for a CAWC scholarship. Each year, the CAWC offers scholarships worth up to \$2,500 each to support educational and research initiatives to promote best practice and improve patient care within the Canadian wound-care community.

For full information on all educational and research scholarships and details on how to apply, please visit the CAWC scholarship page at www.cawc.net/open/scholarship/scholarships.html. But don't delay. Applications close October 1!

Education for Everyone!

The CAWC is dedicated to providing the best wound-care education in Canada. And we're expanding to serve you better. Beginning in 2009 the CAWC will offer online modules on all the important wound-care topics. This initiative will provide novice and experienced wound-care clinicians with a best-practice-based curriculum using the latest interactive online learning tools. Eventually it will replace the S1 component of the S-series, allowing the S-series weekend to consist of two hands-on workshop days. The longer-term plan is to provide educational modules for general practitioners and the public as well. Stay tuned for details of this exciting initiative!

In the meantime, don't forget the S-series. This popular interactive series lays the foundation for best-practice in wound care for novices interested in learning about wound-care or for more established clinicians aiming to improve their wound-care practices. This year we'll be in Vancouver, BC, February 13-14, Toronto, ON, March 6-7 and Montreal, QC, April 17-18. Visit the CAWC Web site at www.cawc.net for details and online registration.

PUAP Moves into New Territory

The CAWC's Pressure Ulcer Awareness and Prevention (PUAP) program has been implemented in facilities right across the country, with new facilities signing up all the time. Improvements in prevalence and incidence rates, reduced treatment costs and changes in practice and policy relating to pressure ulcers have been consistent outcomes in all types of facilities implementing the program. But we're still not satisfied.

In response to clinician frustration about the transfer of pressure ulcers from one facility type to another, the CAWC is introducing a radical new concept for the PUAP: the pressure-free zone (PFZ).

A PFZ would result when all three sectors of health care—acute care, long-term care and home care—are involved in the program. This approach would support the delivery of consistent levels of pressure ulcer prevention care within each catchment area—along with the corollary benefits that accompany best prevention practices.

The introduction of the PUAP into an entire community, rather than just into facilities in one sector of health care, is a perfect fit with the local health regions as they plan, integrate and fund local health services to ensure that health-care dollars are spent efficiently and effectively for the best results possible.

Mieux vous servir, dans les deux langues

Au début de l'année 2008, un groupe de travail de langue française fût mandaté par l'ACSP afin d'évaluer comment elle pourrait mieux desservir le contingent francophone à travers le Canada. Ce groupe a préparé et présenté un rapport contenant les problématiques les plus importantes à résoudre grâce à l'information recueillie lors d'un sondage et une série de rencontres. L'ACSP est heureuse de travailler à mettre en pratique les idées énoncées lors des activités par le groupe de travail. Plus de détails, sur cette initiative, seront disponibles dans le prochain numéro de *Wound Care Canada*.

Serving You Better in Two Languages

In early 2008, the CAWC struck a French-language task force to investigate ways the CAWC can more effectively serve our francophone constituents across Canada. After a survey and a series of meetings, the task force prepared and presented a report on the most important issues to be addressed. The CAWC is looking forward to implementing the ideas that came out of the task force's activities. More detailed information on this initiative will follow in the next issue of *Wound Care Canada*.

Do you want to reach the people who need your help most?

Many patients don't know where to turn when they have a wound that won't heal. Many general practitioners need quick access to specialized wound-care resources in their geographic regions. If you are part of a wound practice, the CAWC invites you to post your details on the **Clinic Directory** section of the **CAWC Web site** so your colleagues and the public will have access to the information they need—when they need it. To have your clinic listed on the CAWC Web site, please go to the Clinic Directory form in the members-only section of the CAWC Web site and input the required information. A CAWC staffer will follow up by phone to ensure the information is accurate and approved by management for posting. Once this is done, it will be posted to the clinic listings page.



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^{1,2} Data on file.

³ Dykes, P.J., Heggie, R., and Hill, S.A. Effects of adhesive dressings on the stratum corneum of the skin. *Journal of Wound Care*, Vol. 10, No. 2, February 2001.

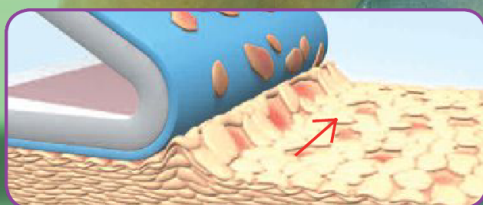
⁴ Dykes, P.J. and Heggie, R. The link between the peel force of adhesive dressings and subjective discomfort in volunteer subjects. *Journal of Wound Care*, Vol. 12, No 7, July 2003.

⁵ Williams C. *British Journal of Nursing*. Vol 4, No 1, 1995.

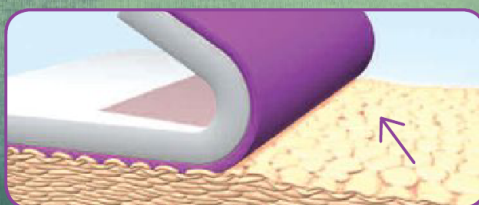


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