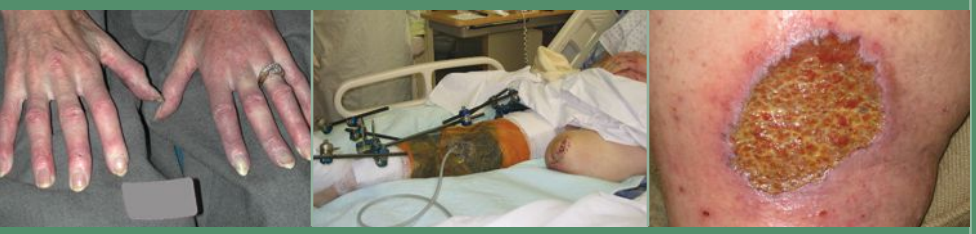
VOL.4 NO.3 2006
CAN $9.95

Wound Care CANADA

THE OFFICIAL PUBLICATION OF THE CANADIAN ASSOCIATION OF WOUND CARE



Surviving Acute Traumatic Wounds: A Soldier's Story

Canadian Association of Wound Care
Association canadienne du soin des plaies

Canadian Publication Mail Sales Product Agreement No. 40065546

Biatain - Ibu

Exudate management and release of ibuprofen

After living with pain for eleven years this dressing was a true miracle!

Stanley Begg
wound patient
Toronto, Canada

Exudate management and release of ibuprofen

- **Biatain - Ibu** is a unique combination of excellent exudate management and continuous release of ibuprofen[2,4]
- **Biatain - Ibu** may reduce wound pain caused by tissue damage[1,2,3]
- **Biatain - Ibu** releases ibuprofen locally with no observed systemic effect[2]

www.biatain-ibu.coloplast.com

1 Sibbald et al., 2006. Decreased chronic (persistent) wound pain with a novel sustained release ibuprofen foam dressing. Symposium on advanced wound care, 2006, April, San Antonio, Texas, USA

2 Jørgensen, B.; Friis, G. J.; Gottrup, F. Pain and quality of life for patients with venous leg ulcers: Proof of concept of the efficacy of **Biatain - Ibu**, a new pain reducing wound dressing. Wound repair and regeneration 2006, 14 (3), in press.

3 Flanagan, M.; Vogensen, H.; Haase, L. Case series investigating the experience of pain in patients with chronic venous leg ulcers treated with a foam dressing releasing ibuprofen. World Wide Wounds April 2006.

4 Steffansen, Bente and Herping, Sofie Paarup Kirkeby. Novel wound models for characterizing the effects of exudates levels on the controlled release of ibuprofen from foam dressings. European Wound Management Association, Poster. 2006, Prague, Czech Republic.

Biatain - Ibu

Coloplast

1-888-880-8605
www.coloplast.ca

Canada at War: A New Reality for Canadian Clinicians

Sue Rosenthal

Every day in the newspaper and on TV we read and see frightening reports of war, terrorism and increases in crime. Is it all just sensationalistic reporting, or does it really impact on our lives? In this issue of *Wound Care Canada*, we get a glimpse of one aspect of Canadian life that reflects a harsh, new reality: Canada at war.

For many of us, war is something that other countries engage in, not Canada. We have always had a reputation as a peacekeeping country. But today, Canadian troops are on the frontlines of a war, and the ramifications of their presence overseas are being felt here at home as military personnel continue to be injured and killed in Afghanistan. In this issue, the interview with Master Corporal Paul Franklin, Princess Patricia's Canadian Light Infantry, by Associate Editor Catherine Harley tells a compelling story of one person's experience in a war zone far from home, while also providing readers with insight into what the implications of Canada's engagement in Afghanistan might be for wound-care clinicians, as injured soldiers find their way into the Canadian health-care system.

This new reality will involve the treatment of traumatic wounds not normally seen in the average clinical setting, as well as the need for long-term care for chronic and recurring wounds, years down the road. As well, the psychological component of treating patients who have been injured in armed conflict will be a challenge for most clinicians, as addressing patient-centred concerns takes on a whole new meaning in the new Canadian reality.

Sue Rosenthal,
Editor

Le Canada est en guerre : Une réalité nouvelle pour les cliniciens canadiens

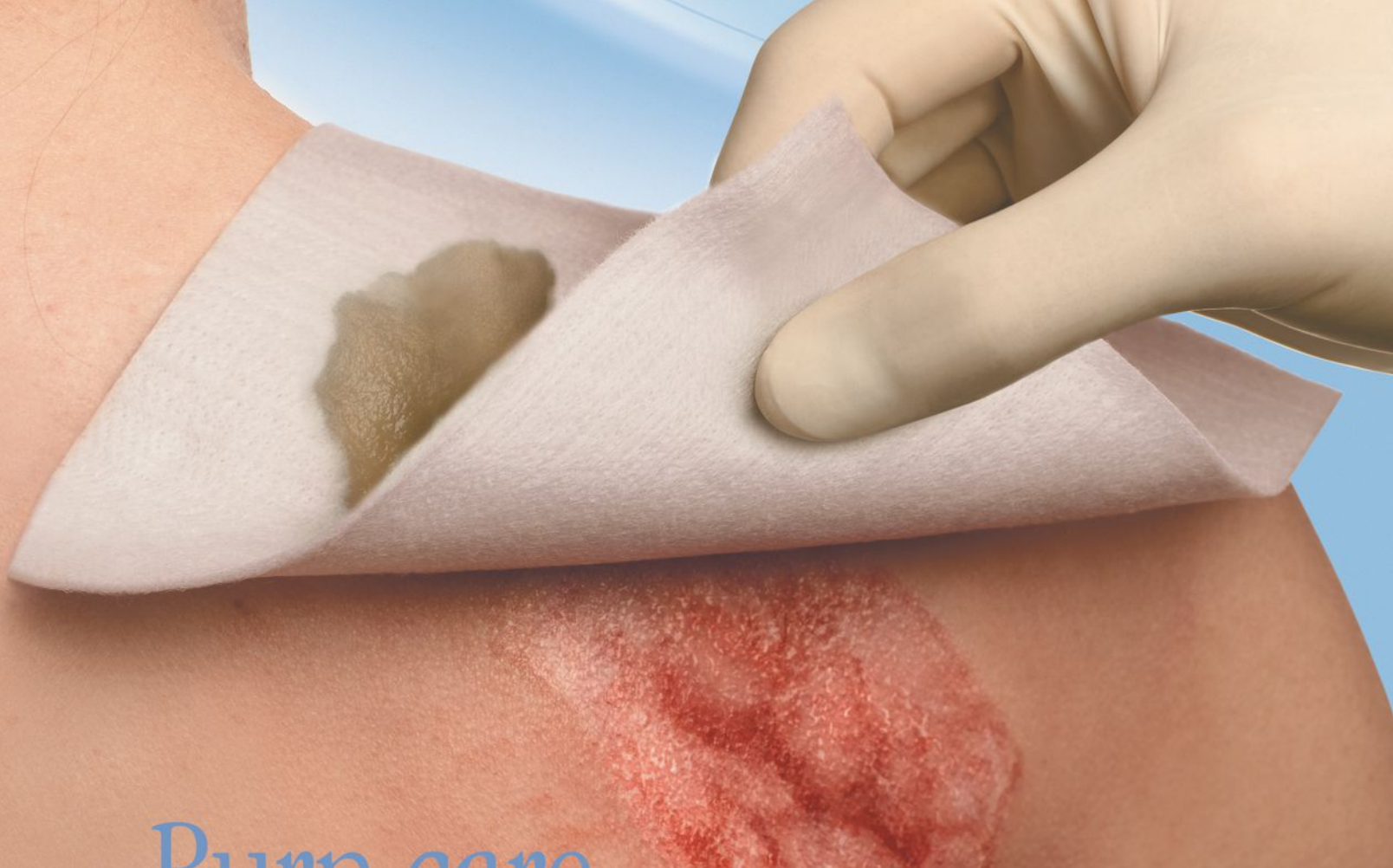
Chaque jour, les journaux et la télévision nous font voir les horreurs de la guerre, du terrorisme et de la hausse de la criminalité. Est-ce uniquement du sensationnalisme, ou cela affecte-t-il réellement nos vies? Dans ce numéro de *Wound Care Canada*, nous entrevoyons un aspect de la vie canadienne qui se veut le reflet d'une nouvelle réalité brutale : le Canada est en guerre.

Pour bien d'entre nous, la guerre est une chose qui frappe les autres pays, mais pas le Canada. Nous avons toujours eu la réputation d'être un pays pacifique. Mais aujourd'hui, les troupes canadiennes sont sur la ligne de front d'une guerre, et les ramifications de leur présence outre-mer se fait sentir ici au pays, alors que le personnel militaire continue de subir des blessures et de se faire tuer en Afghanistan. Dans ce numéro, l'entrevue du Caporal-chef Paul Franklin, du bataillon canadien d'infanterie légère du Princess Patricia, par la co-rédactrice en chef Catherine Harley, raconte l'histoire saisissante d'une personne en zone de guerre et loin de sa maison, tout en donnant aux lecteurs une idée de ce que les implications de l'engagement du Canada en Afghanistan pourraient être pour les cliniciens en soin des plaies, alors que les soldats blessés essaient de s'y retrouver dans le système de santé canadien.

Cette réalité nouvelle impliquera le traitement de plaies traumatiques qu'on ne voit pas normalement dans un contexte clinique habituel, de même que le besoin de soins de longue durée pour les plaies chroniques et récurrentes, dans les années à venir. De plus, la composante psychologique de traiter les patients qui ont été blessés dans des conflits armés sera un défi pour la plupart des cliniciens, alors que d'aborder les besoins particuliers du patients prennent un tout autre sens dans cette nouvelle réalité canadienne.

La rédactrice, Sue Rosenthal

Sue Rosenthal, BA, MA, specializes in health and wellness communications and has been associated with the CAWC since 2000.



Burn care transformed

Change the way you manage second-degree burns and donor sites at risk of infection—choose AQUACEL Ag® dressing

- Immediate action of ionic silver starts killing a broad spectrum of pathogens in the dressing on contact[†]
- Unique Hydrofiber® technology forms a cool gel sheet on contact with wound fluid to lock exudate in the dressing and create a moist wound environment to support the healing process
- Helps to reduce the pain associated with frequent dressing changes
- Dressing can stay in place on second-degree burns for up to 14 days as indicated by a physician*

AQUACEL Ag Hydrofiber® Dressing with Silver

Think of it as silver made **smarter**

For more information, call the ConvaTec Customer Relations Center at 1-800-465-6302, Monday through Friday, 8:00 AM to 7:00 PM (EST), or visit our Web Site at www.convatec.com or www.aquacelag.com

*Please see package insert for full product information, including Instructions for Use.

[†] *In vitro* testing, using simulated wound fluid model.

Reference: 1. Bowler PG, Jones SA, Walker M, Parsons D. The spectrum of activity of an antimicrobial Hydrofiber® dressing against potential wound pathogens. Poster presented at: the 16th Annual Symposium on Advanced Wound Care; April 2003; Las Vegas, Nev.

ConvaTec
A Bristol-Myers Squibb Company

WC-26-17-0504-DA

Canadian Association of Wound Care / Association canadienne du soin des plaies

Volume 4, Number 3, 2006

ISSN 1708-6884

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.

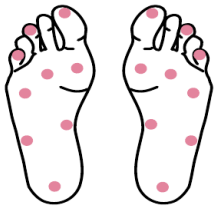
L'Association canadienne du soin des plaies est un organisme sans but lucratif regroupant des professionnels de la santé, des gens de l'industrie, des patients et des membres du personnel soignant fortement intéressés à l'avancement des connaissances pour le soin des plaies au Canada.

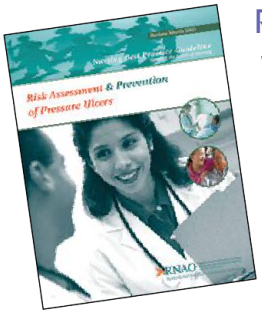
Fondée en 1995, l'ACSP organise, chaque année, au Canada, un congrès qui lui tient lieu de réunion officielle, le Congrès annuel de l'ACSP. L'association consacre ses efforts dans cinq domaines particuliers : les politiques gouvernementales, la pratique clinique, la formation, la recherche et la création 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.

Features

CLINICAL PRACTICE

EDUCATION





INTERNATIONAL PARTNERSHIPS

If you didn't receive this copy of *Wound Care Canada* by post, make sure you get on the mailing list for future issues. Send us your name and address at cawc@sympatico.ca.

Wound Care Canada

Editor/Rédactrice
Sue Rosenthal
E-mail: WCCeditor@cawc.net

Associate Editor/Rédactrice adjointe
Catherine Harley

Scientific Advisor/ Conseiller scientifique
Heather Orsted, RN, BN, ET, MSc

Publisher/Éditeur
BCS Communications Ltd.
101 Thorncliffe Park Drive
Toronto, ON M4H 1M2

Editorial Advisory Board/ Comité consultatif de rédaction
Pamela Houghton, BScPT, PhD
David H. Keast, MSc, MD, FCFP

Advertising Sales/Publicité et vente
Steinman and Company
Phone: 416-782-2350
E-mail: WCCadvertising@cawc.net

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.

Discussions, views and recommendations as to medical procedures, choice of treatments, dosage or other medically specific matters are the responsibility of the authors. No responsibility is assumed by the publisher or publishing partners for any information, advice, errors or omissions contained herein.

The inclusion of advertising and sponsored material in *Wound Care Canada* does not constitute a guarantee or endorsement of any kind by the Canadian Association of Wound Care.

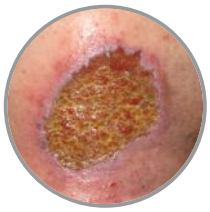
Special thanks to Smith & Nephew for augmenting the *Wound Care Canada* mailing list.

Canadian Publication Mail Sales Product Agreement No. 40065546

Return mail to CAWC, 4 Glenarden Road, Toronto, ON M6C 3J7

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

Departments

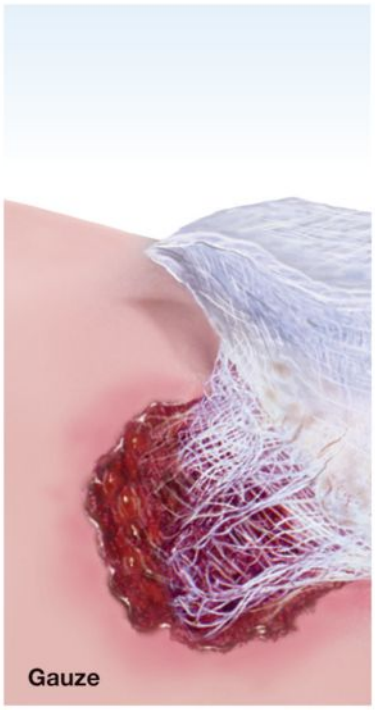


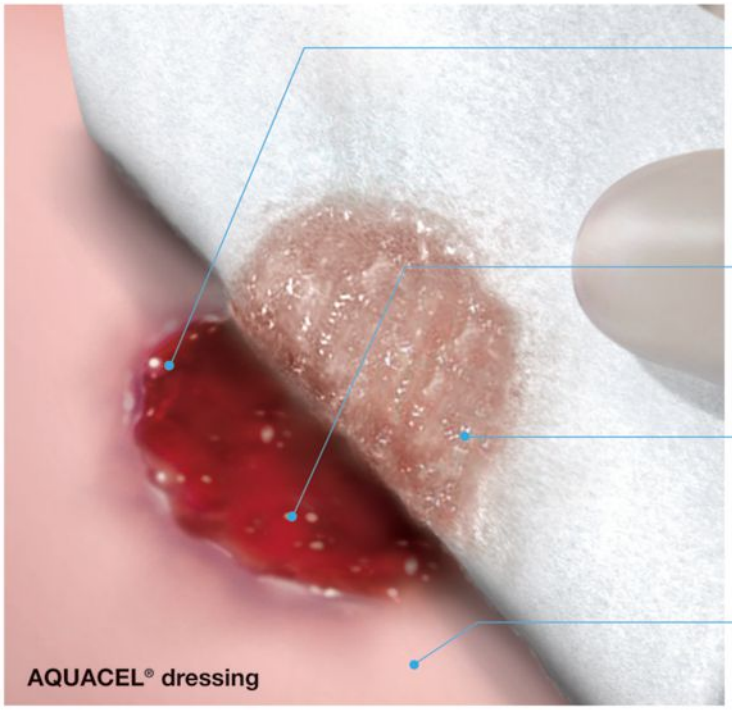
Interested in sharing your research?

If you are interested in submitting an article to Canada's only national wound care journal, visit the *Wound Care Canada* section of the CAWC Web site at www.cawc.net and click on "Information for Authors."

AQUACEL®
Hydrofiber® Wound Dressing

Think of it as gauze
made smarter





- Facilitates nontraumatic removal
- Creates a moist wound healing environment
- Fibers trap bacteria[2]
- Reduces the likelihood of maceration[3]

Unique gelling action of Hydrofiber® Technology absorbs and locks in exudate and bacteria.[2]

- Gentle for patients—gelling action is designed to prevent dressing from adhering to wounds
- Absorbs and retains more fluid than gauze[1]
- Provides longer wear time and fewer dressing changes than gauze

For more information, call the ConvaTec Customer Relations Center at 1-800-465-6302, Monday through Friday, 8:00 AM to 7:00 PM (EST), or visit our Web Site at www.convatec.com

References: **1.** AQUACEL™ Hydrofibre™ dressing. In: Krieg T, Harding KG, eds. AQUACEL™ Hydrofibre™ dressing: the next step in wound dressing technology. Proceedings Satellite Symposium, European Academy of Dermatology & Venereology. February 1998. London, UK: Churchill Communications Europe Ltd; 1998:1-3. **2.** Walker M, Hobot JA, Newman GR, Bowler PG. Scanning electron microscopic examination of bacterial immobilisation in a carboxymethyl cellulose (AQUACEL®) and alginate dressings. *Biomaterials.* 2003;24:883-890. **3.** Robinson BJ. The use of a hydrofibre dressing in wound management. *J Wound Care.* 2000;9(1):32-34.

Hydrofiber®
ConvaTec Technology

ConvaTec
Wound Therapeutics®
A holistic approach to wound healing.

ConvaTec
A Bristol-Myers Squibb Company

CAWC Events

"Working Well: Taking the Pressure Off" Twelfth Annual Conference of the Canadian Association of Wound Care
November 16–19, 2006
Ottawa Congress Centre
Ottawa, ON
www.cawc.net

Other Events

National Pressure Ulcer Advisory Panel Biennial Conference
Best Practice and Consensus for Shaping the Future of Pressure Ulcer Staging
February 9–10, 2007
San Antonio Hilton
on the Riverwalk
San Antonio, TX
www.npuap.org

American Professional Wound Care Conference
Wound Care and the Related Sciences
April 19–22, 2007
Sheraton Philadelphia
City Center
(formerly Wyndham Philadelphia)
Philadelphia, PA
www.apwca.org

Symposium on Advanced Wound Care/Wound Healing Society combined meetings
April 28–May 1, 2007
Tampa Convention Center
Tampa, FL
www.sawc.net

"Navigating the Seas of Change"- Wound, Ostomy, Continence Canadian Association for Enterostomal Therapy
26th Annual Conference
May 23–26, 2007
The Lord Nelson Hotel
Halifax, NS
www.caet.ca

RNAO Biennial International Conference on Evidence-based Best Practice Guidelines: Setting the Context for Excellence in Clinical Practice and Healthy Work Environments
June 7–8, 2007
Markham, ON
www.rnao.org

International News

Wound Infection Institute

"Wound infection scares me on a daily basis," says Professor Keith Harding, Director of the Wound Healing Research Unit at the University of Wales College of Medicine, Cardiff, U.K. "Increasing our knowledge of why a wound is infected and how we may best be able to treat it is fundamental."

This challenge was the impetus for the inaugural meeting of the Wound Infection Institute (WII) that took place in Budapest this past June. Chaired by Professor Harding, the WII meeting was a multidisciplinary forum involving wound management experts from across the globe.

Over 130 institute members attended the inaugural meeting, bringing together people from 23 countries and 18 specialties in wound management.

Much of the meeting was devoted to setting collaborative and cross-functional projects in research, evidence, diagnosis and education, as well as in assessments of systemic and topical treatments for wound infection. These projects will have progressed well by the time of the Institute's second meeting in 2007. "I believe we can strengthen the scientific and educational basis of wound infection management to ultimately benefit patients," says Professor Harding.

The inaugural meeting of the Wound Infection Institute was supported by an unrestricted educational grant from Smith & Nephew Wound Management. "Wouldn't it be great to say in a couple of years time that I was there when this body came together?" says Bill Allan, Global Vice President, Smith & Nephew. "A body that changed the face of the management of infected wounds."

News from the Corporate World

New from 3M Health Care: 3M™ Coban™ 2 Layer Compression System

3M Health Care is proud to introduce a low-profile, two-layer compression system that is easy to apply and that delivers seven days of sustained compression while being comfortable for patients to wear.

3M™ Coban™ 2 Layer Compression System consists of two latex-free roll bandages. The inner comfort layer is a soft, gentle foam layer that provides patient comfort. The outer layer is a cohesive bandage designed to provide sustained compression levels shown to be effective in the treatment of venous leg ulcers. The revolutionary interlocking materials help reduce slippage, while the thin, lightweight design allows patients to wear normal footwear!

Contact your 3M Skin Health Representative or visit the 3M booth at the upcoming CAWC conference.

When you see the Web Connect icon associated with an article, look for more information on the CAWC Web site at www.cawc.net. Click on *Wound Care Canada*.

"All the world's a stage..."

William Shakespeare

. . . and 3M™ Coban™ 2 Layer Compression System is the ***Star Performer*** for the treatment of edema associated with venous leg ulcers and related conditions.

Patients will applaud the comfortable and long-lasting design of the Coban 2 Layer compression system, while clinicians will cheer its innovative, low-profile design and fast-easy application.

- Soft, gentle inner foam layer provides patient comfort.
- Cohesive outer layer delivers sustained compression.
- Revolutionary interlocking materials help reduce slippage.
- Thin, lightweight design allows patients to wear normal footwear.
- Latex-free product.

Seeing is believing! Call your 3M Skin Health Representative or call the 3M Health Care Customer helpline at 1 800 364-3577.

3M Health Care

Palliative Dilemmas: Wound Odour

BY Cynthia A. Fleck

Abstract

Wound malodor is a subject vital to patients, caregivers and clinicians, yet it is sometimes underrated, not fully appreciated nor appropriately addressed. Exudating, odoriferous wounds are a complex clinical quandary.[1] Precise information concerning incidence and prevalence is unknown. Research has shown that wounds most commonly associated with odour include exudating wounds, chronic pressure ulcers, venous leg ulcers, diabetic/neuropathic ulcers, fungating,[2] cancerous or malignant lesions and wounds with necrotic tissue.[3,4]

Deodorizers, ventilation[5] and charcoal dressings that absorb fatty acids[6] seldom effectively control wound odours. Newer strategies, including prudent wound-bed preparation with the use of metronodiazole gel and dressings utilizing cyclodextrin technology, can further boost the goal of destroying wound odour entirely. This article will outline the causes of wound odour and discuss treatment options.

Cynthia A. Fleck, MBA, BSN, RN, APN/CNS, ET/WOCN, CWS, DNC, DAPWCA, FCCWS, is a certified wound specialist and dermatology advanced practice nurse, author, speaker, Secretary/Treasurer of the American Academy of Wound Management (AAWM), Member of the Board of Directors of the Association for the Advancement of Wound Care (AAWC), and Vice President, Clinical Marketing for Medline Industries, Inc., Advanced Skin and Wound Care Division.

The patient, Ms. R.L. is a 78-year-old female with chronic lower extremity venous disease (LEVD) and frequent ulcerations. She recently suffered a hip fracture after falling down her basement steps and was hospitalized for surgical repair and implantation. She is rehabilitating in a nursing home. She has consequently developed a Stage III pressure ulcer on her sacrum secondary to immobility. As the wound-care clinician, you are called in after the charge nurse notices that Ms. R.L.'s overall condition is beginning to decline and the staff are worried that she will develop more wounds or that her pressure ulcer will deteriorate. A patient-care conference is planned to discuss this with the interprofessional team.

The care conference uncovers some little known facts brought forward by one of Ms. R.L.'s nurses. The patient is very self-conscious of her wounds, the exudate they produce and, most of all, the odour she perceives. The staff have noticed that Ms. R.L.'s family has been bringing in room deodorizers, potpourri, perfume and the like. The family is anxious because of her condition and because of the smell in her room. Ms. R.L.'s daughter sheepishly admits to the social worker that, "No one wants to come and see mom anymore. It smells terrible, like rotting flesh. We can even smell it on our clothes when we leave. Isn't there anything that you can do?" Ms. R.L. is constantly asking to take a shower. She refuses to go to the dining room, "because I stink." The nurse also confesses that the staff regularly flip coins to see who will have to care for her wounds since they "smell so horrible."

Impact

No one enjoys having or taking care of a putrid wound. Smell carries a social stigma and may cause patients to feel embarrassed or shameful. It can inhibit sexuality and intimacy with a loved one, further causing depression.[7] The psychological effect of wounds can include depression, anxiety, poor body image, and diminished self-esteem. Add odour to the equation and it can have a profound effect. It can affect how the patient relates to his or her loved ones, disturb sleep patterns, cause a loss of appetite and present a distressing situation to both the patient and the caregiver(s).[8]

People with highly exudating wounds with malodor may be emotionally or psychologically humiliated and

overwhelmed by the odour originating from the wound. They may choose to isolate themselves[9] or use extreme actions to eradicate the smell. Individuals with malodorous wounds often make attempts to disguise the odour with candles, potpourri, room deodorizers, aromatherapy, perfume and frequent bathing or showering. They commonly verbalize feelings of being "dirty." In addition, the need for frequent dressing changes, bulky dressings, or negative pressure devices to handle the exudate can significantly impact self-image and lifestyle as well as decrease mobility.[10]

Control of wound odour is imperative, especially for palliative patients, as it can significantly improve the quality of life for patients with non-healing wounds.[11]

Causes

Research has shown that wounds most commonly associated with odour include exudating wounds, chronic pressure ulcers, venous leg ulcers, diabetic/neuropathic ulcers, fungating,[2] cancerous or malignant lesions and wounds with necrotic tissue.[3,4]

Wound odour is largely due to tissue degradation and/or tissue death, or necrosis, or nonsporing anaerobic bacteria that colonize cutaneous lesions, releasing compounds such as putrescine, cadaverine, unstable sulphur compounds, and short-chain fatty acids as metabolic end products.[12] Aerobic bacteria such as *Pseudomonas* and *Klebsiella* species also can generate unpleasant odours.[13] Odours that point to infection may be sweet, pungent, foul, strong, fecal or musty. A sweet odour may indicate a *Pseudomonas* infection, especially if accompanied by thin, foamy, green drainage. A strong pungent odour along with tissue necrosis or separation of the skin into paper-thin black-purple layers may indicate *Clostridium* and life-threatening, moist gangrene. Putrescine and cadaverine are frequently described as pungent-smelling. They tend to be constant and persistently evident.[14] They are known to elicit the gag reflex and can cause vomiting. Certain dressings, such as hydrocolloids (one of the most frequently used advanced products) also tend to produce a characteristic odour due to their occlusive nature and the chemical reaction that takes place between the dressing and wound exudate.

Deodorizers, ventilation[5] and charcoal dressings that absorb these fatty acids[6] seldom effectively control wound odours.

Through an involuntary course of acclimatization, the body protects an individual from being inundated by feeble stimuli in the form of smells or scents by desensitizing sensory cells.[15] This can happen to patients with malodorous wounds, but not necessarily to caregivers. An inability to acclimate can have consequences such as increased sensitivity from recurring contact with the odour, which can become a stressor, and ultimately cause symptoms such as nausea and vomiting.[16] This situation is commonly described by patients with fungating breast carcinomas. For many, consciousness of a specific smell frequently disappears rapidly, which may not be the case for chronic disagreeable odours.

Foul odour is usually caused by Gram-negative bacilli. *Pseudomonas* species have another specific odour that is characteristically described as "ripe" or "fruity." Anaerobic bacteria cause a pungent or rotten odour. Foul odour is usually associated with the presence of anaerobes;[17] the combination of anaerobic and aerobic bacteria is believed to be the most common cause of smelly wounds.[18] Critically colonized wounds also may

continued on page 12

A Comprehensive Plan to Assess and Treat Wound Odour

A comprehensive plan to assess and treat wound odour is as easy as the A, B, C, D and Es and should include the following:

- **A**ssess for and **A**cknowledge the report of wound odour from the patient, patient's family and/or caregivers and the staff caring for the patient's wound.
- **B**ioburden. Odour can indicate the presence of a high number of micro-organisms. If a wound is odour-free and suddenly develops a bad smell, suspect an increase in wound bacterial load beyond colonization.[1] Address and treat wounds known to have heavy bioburden including venous hypertension wounds (heavily contaminated) and diabetic neuropathic wounds (increased potential for infection) and wounds in "dirty" areas such as the sacrum (which are particularly susceptible to fecal contamination). Broad-spectrum antimicrobials such as silver and PHMB can provide safe protection.[2]
- **C**leanse. Consider cleansing the odiferous wound with an antimicrobial wound cleanser such as those containing quaternary ammonium compounds such as benzalkonium chloride (BZK) and benzethonium chloride (BC). These compounds further address overgrowth of pathogens and can safely be used for short periods of time in critically colonized or locally infected ulcers.
- **D**ressings and **D**ebridement. Prepare the wound bed and debride those wounds with necrotic and devitalized material. Choose appropriate dressings, such as the new ones containing cyclodextrins, to address wound odour and exudate, thus nipping the smell at the source.
- **E**xplain the measures, techniques and treatments to the patient and family. **E**valuate the effectiveness of your odour-elimination efforts.

References

1. Jones V, Bale S, Harding K. Acute and chronic wound healing. In Baranoski S, Ayello EA, (eds.). *Wound Care Essentials: Practice Principles*. Philadelphia, PA: Lippincott Williams and Wilkins. 2003:72-73.
2. Fleck CA. Fighting infection in chronic wounds. *Advances in Skin and Wound Care*. 2006;19(4):184-185.

TABLE 1

Current Wound Odour Treatment Strategies

Treatment	Action	Effectiveness	Safety	Ease of Use
Deodorizers, ventilation, candles, potpourri, perfume	Attempts to mask or cover up odour.	Seldom control odours.	Safe but can cause sensitivity and allergic reaction in patient and others.	Simple to use; no prescription or clinical directive necessary.
Wound bed preparation (cleaning and debriding)	Preparing the wound bed through cleansing with commercial cleansers with or without BZK or BC. Thorough debridement of the wound. Utilizing silver and PHMB dressings to decrease critical colonization.	If the cause of the wound odour is an overgrowth of bioburden and/or devitalized material in the wound, prudent WBP measures and use of broad spectrum antimicrobials can be effective.	Benzalkonium chloride (BZK) and benzethonium chloride (BC) are extremely safe (can be used in the ophthalmic arena). Silver and PHMB are quite safe and have little issue with sensitivity and/or allergic reaction. They do not contribute to antibiotic resistance.	Simple to use with clinical directive. If infection is deep, may additionally require systemic antibiotics.
Metronidazole	Eradicates wound odours caused by anaerobic bacteria.	Effective against odour caused by anaerobes only.	Low or no resistance of anaerobes despite systemic use.	Simple to use at dressing change. Requires physician prescription and can be expensive.
Charcoal	Is designed to act like filters or traps to absorb odour-causing molecules. Activated charcoal works by absorbing many odour molecules onto a large surface area, which prevents the volatile odour molecules from reaching receptors in the nose.	Effectiveness decreases in the presence of wound exudates because serum proteins in the exudates deactivate the activity of charcoal.	Safety has been well established.	Simple to use. Charcoal is incorporated into some dressings to address wound odour.
Alpha sepiolite	Natural clay has absorptive qualities (e.g., kitty litter).	Can absorb some odours.	Safety in wounds has not been clearly defined.	No current commercial applications or dressings available.
Cyclodextrin dressings	Hydrated cyclodextrin (starch) molecule irreversibly captures odour molecules permanently neutralizing odour.	Cyclodextrins work optimally in the presence of wound exudates, and allow for effective odour capture and neutralization.	Cyclodextrins occur naturally and are proven safe to use in modern wound care.	Simple to use. Cyclodextrins are incorporated into new modern dressings such as hydrocolloids so there are no extra steps in addressing wound odour.

exhibit new and sudden odour with increased exudate production.[19]

Treatment

Strategies to combat odour include identifying the cause and working to eliminate it. A simple solution would include increasing wound cleansing and dressing-change frequency, although this can cause other problems. Cleansing odoriferous wounds with antimicrobial wound cleansers containing safe ingredients like benzalkonium chloride (BZK) and benzethonium chloride (BC), universal biocides that further address overgrowth of pathogens, is a practical primary measure.[11] Preparing the wound bed through debridement removes devitalized material, which can be a source of odour. Preventing or treating microbial colonization, critical colonization or wound infection that is causing the offensive smell may also achieve odour reduction. This can be accomplished using a variety of broad-spectrum antimicrobials such as silver or polyhexamethylene biguinide (PHMB). They offer a cost-effective, over-the-counter solution that kills a wide range of pathogens and does not contribute to antibiotic resistance.[20] If the infection is deep and/or systemic, a combination of topical antimicrobials and systemic antibiotics may be helpful.

Other effective options include the use of metronidazole gel to eradicate anaerobic infection. In a study of metronidazole use on malodorous wounds, all 16

patients had favourable responses, and nearly two-thirds experienced complete odour elimination within 24 hours.[21] One caveat, however, is that some patients are sensitive and/or allergic to metronidazole. In addition, it is only effective against anaerobes.

Another novel dressing additive option that has been explored in the literature is alpha sepiolite, a natural clay mineral with powerful absorptive properties.[22] It's what makes kitty litter absorb odour. Though kitty litter may offer support as a room deodorizer, there are no dressings currently available with this technology.

The use of odour-controlling dressings is another measure to manage wound odour. These products are designed to act like filters or traps to absorb odour-causing molecules. Some of these products incorporate charcoal that absorbs unpleasant smells from wounds. Activated charcoal is a widely used deodorizing agent. It works by absorbing many odour molecules onto the large surface area of the activated charcoal, which prevents the volatile odour molecules from reaching receptors in the nose.[2,3] Charcoal has been incorporated into some modern wound dressing for this purpose.

A new dressing technology has recently been introduced to the wound-care market specifically to address odour. Most odours are lipophilic (oil-loving). Novel dressing products utilize cyclodextrins (the same technology as in the fabric deodorizer Febreze®), a hydrated cyclodextrin (starch) molecule to irreversibly capture lipophilic odour molecules, thus neutralizing the odour. Cyclodextrins occur naturally and are proven safe to use in modern wound care. This carbohydrate molecule is safe enough for human consumption, so use in wounds is extremely reliable.

How do these newer odour-elimination dressings compare to the older technology of charcoal-based dressings? Cyclodextrins work optimally in the presence of wound exudate and need the wound's moisture to work effectively.[24]

For odour control when utilizing negative-pressure adjunctive treatment, options include utilizing silver in the wound bed prior to placement of the negative pressure apparatus, adding a gel pack or povidone iodine in the canister and changing the canister when it is two-thirds full.[25]

There is no debate that wound odour causes social embarrassment and has a destructive psychological impact on the individual with the wound, as well as causing feelings of unease or reluctance in the caregiver. Once identified, the cause of wound odour can be effectively treated, removing or inactivating the inciting problem. More effective than simply attempting to mask the odour, easy tactics such as using an antimicrobial wound cleanser, debriding a necrotic wound or changing the dressing more frequently can be instituted. Newer strategies, including prudent wound-bed preparation with the use of metronodiazole gel and dressings utilizing cyclodextrin technology, can further increase the chances of destroying wound odour.

Revisiting Ms. R.L.'s Case

Ms. R.L.'s case is not unique. Many patients have poor quality of life because of wounds that produce odour, which shift our concerns away from just healing and toward improved symptom control.

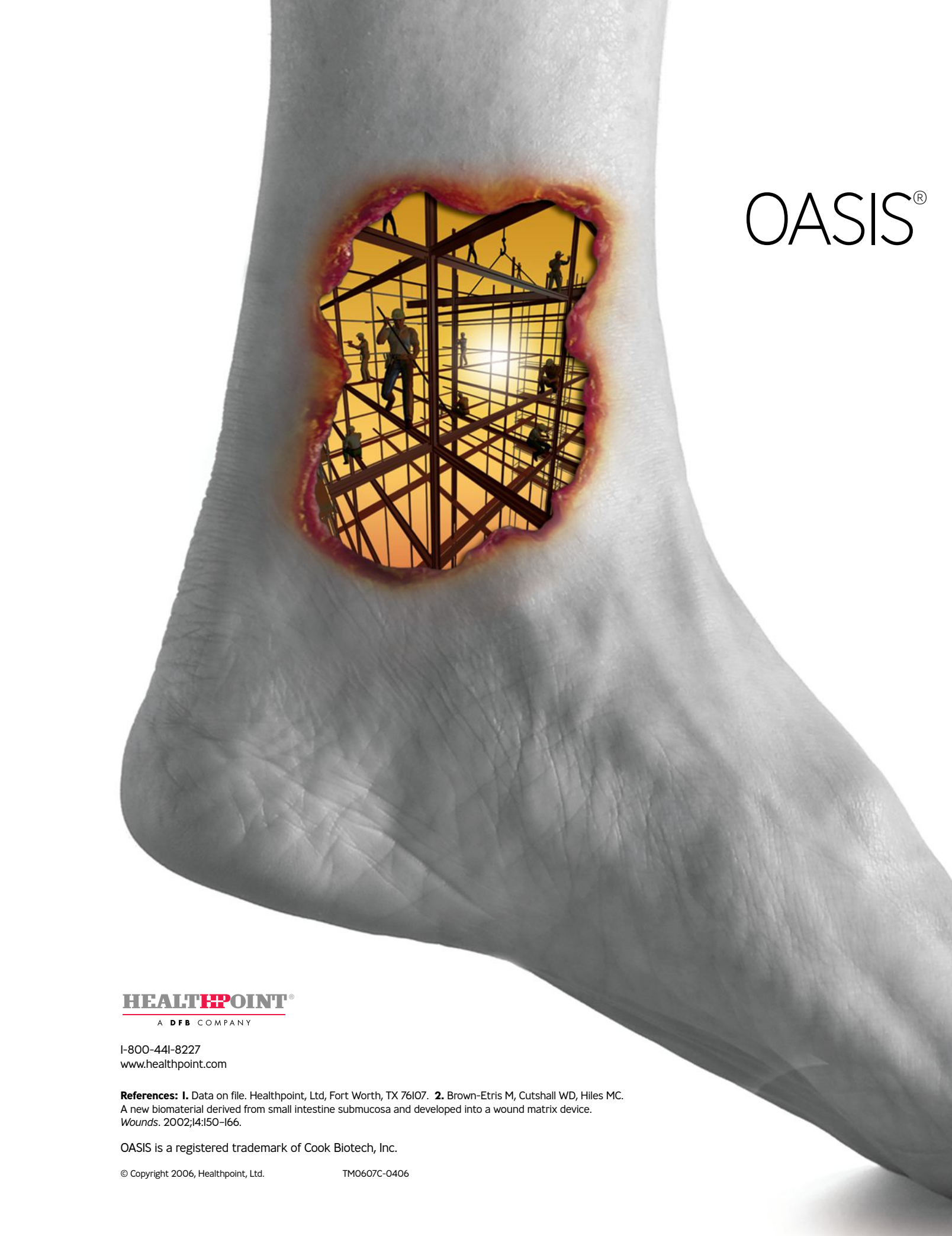
After meeting to discuss her case, the interprofessional team came away with an extensive plan of care, including eradicating wound odour. After discussing the strategy with Ms. R.L. and her family, the staff began utilizing a safe broad-spectrum antimicrobial cleanser containing benzethonium chloride (BC) at every dressing change. Since the wound did not produce signs and symptoms of critical colonization or infection, no further antimicrobials, such as silver, were considered; rather, a new hydrocolloid utilizing cyclodextrin technology was used, effectively eradicating the wound's odour at its source. Ms. R.L., her daughter and the nurses involved with her wound treatment immediately noticed the difference within the first few days and at the initial dressing change. The patient's mood was much more positive. She began going to the dining room again, and she even agreed to go to dinner on an out-pass with her family for Mother's Day. Success came by tackling this important palliative issue head-on.

No longer will patients, family and staff suffer wound odour silently. Simple solutions are available and can easily be incorporated into the facilities' plans of care.

References

1. Grocott P. The palliative management of fungating malignant wounds. *Journal of Wound Care*. 1995;4(5):240-242.
2. Grocott P, Browne N, Crowley S. Quality of life: Assessing the impact and benefits of care to patients with fungating wounds. *WOUNDS*. 2005;17(1):8-15.
3. Thomas S, Fisher B, Fram PJ, Waring MJ. Odor absorbing dressings. *Journal of Wound Care*. 1998;7(5):246-250.
4. Benbow M. Malodorous wounds: How to improve quality of life. *Nurse Prescriber*. 1999;Feb:43-46.
5. Finlay IG, Bowszyc J, Ramlau C, Gwiezdzinski Z. The effect of topical 0.75% metronidazole gel on malodorous cutaneous ulcers. *J Pain Symptom Manage*. 1996;11(3):158-162.

references continued on page 54



HEALTHPOINT®
A DFB COMPANY

1-800-441-8227
www.healthpoint.com

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.

 TM0607C-0406

When wounds fail to progress after 2–4 weeks with your standard care...

enables the body to get things moving again

Simple application, proven results[1]

- Significantly improves wound management[1]
- Supports the body's natural wound response by replacing the missing or failing extracellular matrix (ECM)[2]
- An easy addition to your standard wound care
- In the office, off the shelf for once-weekly application
- In a recent clinical study, the average cost of OASIS® for 12 weeks in venous stasis ulcers was $320 (US dollars)[1]

INTRODUCE

OASIS® WOUND MATRIX

Sheet of OASIS® Wound Matrix

Get things moving again

Systemic Sclerosis: "Scleroderma"

BY Paul Chapman

Systemic sclerosis (SSc) is a relatively rare condition but is an important entity that wound-care practitioners should be aware of. Data from the United States report an incidence of 10 to 20 new cases per million people per year. This would equate to 300 to 600 new cases per year in Canada. The disease is three to four times more common in females than in males. It is rare before age 30 but can occur at any age. Most cases are seen between 40 to 80 years of age.

Systemic sclerosis, as the name implies, is a disease that involves sclerotic (fibrotic) changes in many organ systems throughout the body. The disease is categorized as limited or diffuse, based on the degree of cutaneous involvement. The number of organs involved generally parallels the cutaneous distribution. With limited disease, fewer organ systems are involved, and the skin changes are mostly in distal extremities. With diffuse disease, there is a greater degree of organ involvement, and skin changes include the extremities, face and trunk.

Prognosis

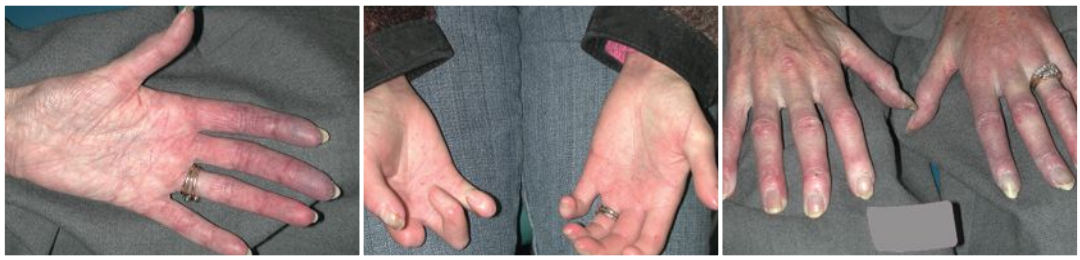
In a meta-analysis, Ioannidis et al. conclude that there

TABLE 1

Systemic Sclerosis Involvement

Organ System	Manifestations
Vascular	Raynaud's phenomenon: Triphasic response to cold; hands turn white, blue, then red. Vasospasm may be so severe as to cause digital ischemia with eventual necrosis and autoamputation.
Heart	Fibrosis and thickening of vessels → occlusion of vessels with associated infarcts of cardiac tissue. May then develop arrhythmias, pericarditis, congestive heart failure.
Skin	Dermal fibrosis, loss of subcutaneous fat, epidermal atrophy → loss of sweat glands, hair → thick, tight, dry skin with decreased joint mobility that is more prone to damage/infection Characteristic "mask-like" face with beak nose and radial perioral furrows.
Gastrointestinal	Atrophy and fibrosis of GI-tract → decreased motility, dysphagia, gastroesopageal reflux (with heartburn), possible ulcers/strictures. Often have diarrhea or constipation with malabsorption and bacterial overgrowth.
Muscluloskeletal	Affects joints and muscles. Sclerosis of synovium, which may lead to resorption of underlying bone (seen often in terminal phalanges), fibrosis and atrophy of muscle with tendonitis, arthritis.
Renal	Fibrosis of small arteries may lead to focal areas of necrosis of renal tissue and possible malignant hypertension. If untreated → renal failure.
Lung	Fibrosis and thickening of lung tissue and vessels resulting in non-productive cough, shortness of breath, fatigue and pulmonary hypertension.

Paul Chapman is a fourth-year medical student at the University of Manitoba with special interests in dermatology and wound healing.



Skin damage resulting from sclerosis.

is a high mortality risk (from 1.5–7.2) for persons with SSc. Rates increase with internal organ involvement and anti-topoisomerase antibodies.[1]

Causation

Arnett et al. report that "A positive family history of SSc is the strongest risk factor yet identified for SSc."[2] There is also evidence to suggest links to environmental agents; occupational exposure to solvents may be a risk factor for developing SSc.[3,4] However, the cause(s) of this disease remains unknown. Whatever the cause, three components to the mechanism causing damage are typical: fibroblasts over-produce collagen and other extracellular matrix proteins; damage to, and subsequent thickening of, vessel walls with narrowing (and possible obliteration of the vessel lumen) manifests as vasculopathy; and an element of autoimmunity develops with auto-antibodies directed against cellular nuclear elements such as the centromere, topoisomerase I and RNA polymerases.

With so many systems affected by this disease (nutrition, circulation, oxygenation, cardiac output, etc.) and with tight, dry, thin skin, the person with SSc can easily be wounded and experience difficulty in healing.

Globally, one's ability to perform activities of daily living is detrimentally affected by SSc.

Raynaud's Phenomenon

Virtually all persons affected with SSc develop Raynaud's phenomenon. The resultant vasospasm limits its distal circulation and hinders wound healing; in some cases it is so severe that autoamputation results. Many pharmacological treatments for Raynaud's have been studied. Some have been found to be beneficial, others not. Calcium channel blockers or prostacyclin (or synthetic derivatives such as Iloprost) have been used to "relax" the vasculature. ACE-inhibitors, ARBs or alpha-blockers have been used to decrease peripheral vascular resistance. Side effects are common, as with any medication, and may outweigh the benefit derived.

In a study of leg ulcers in patients with collagen vascular disease, Hafner et al. report that five of their six SSc subjects had concomitant arterial and venous disease.[5]

Treatment

As the disease is not well understood, treatments are, at times, of an experimental nature based on clinical experience. A number of studies have used the agents listed below with varying results. They are listed here by way of example, rather than as treatment suggestions. The reader is urged to study the literature on particular agents prior to using any of them.

Regarding wounds: local wound care employing the principles of wound bed preparation of moist, interactive healing is the mainstay of treatment.[6] Patients often avoid cold and wear hats and mittens to prevent distal extremities from entering into vasospasm. Emolients may be beneficial in maintaining a certain moisture level in the skin in an effort to reduce the likelihood of skin drying and breakdown.

Some newer studies may have practical wound-care implications:

- A pilot study (17 patients with SSc) by Sandqvist et al.[7] investigated the effects of hand exercises and the use of warm (50°C) paraffin baths in persons with SSc. Treatments were carried out daily for one month. Measurements were made at baseline and at one month. Participants experienced significantly increased mobility and a decrease in perceived stiffness of the treatment hand (the opposite hand was used as the control).
- Another study investigating the effects of stretching exercises on mouth-opening (n=10) demonstrated a significant increase in opening after the 18-week period in all patients. Patients also reported clinical improvements in eating, speaking, oral hygiene and denture insertion.[8]
- In a pilot study of 26 patients Pfizenmaier et al.[9] investigated whether Intermittent Pneumatic Compression would aid in the healing of ulcers in the upper extremity, as it had been shown to do with lower extremity ulcers. Compression treatments were for five hours per day. They report a 96 per cent (26/27 ulcers) healing rate with a mean healing time of 25 weeks.

TABLE 2

Agents and Interventions to Treat Systemic Sclerosis

System	Agent/Intervention	Desired Effect
Vascular	Calcium channel blocker	Vasodilation
	ACE-inhibitor/ARB	Vasodilation
	α-1 blocker	Vasodilation
	Prostecyclin (and analogues)	Vasodilation
	Smoking cessation	Vasodilaton
	Nitroglycerin patch	Vasodilation
Gastrointestinal	Octreotide	Increase in gastric motility
	Antibiotics	Prevention of bacterial overgrowth
	Proton pump inhibitors, Histamine H2 blockers	Decrease in gastric acid production
Renal	ACE-inhibitors	Prevention of renal crisis
Cardiac	Antiarrhythmics	Antiarrythmic activity if heart so affected

Summary

SSc is a relatively rare disease that ranges from mild to extremely debilitating. With extensive involvement, manifestations are protean and wound-healing is difficult. Wound care may involve systemic agents, surgery, exercise, and augmentative therapy, as well as local wound care. A patient-centred, multidisciplinary approach will best serve the patient as this is a complicated and multifaceted disease process.

References

1. Ioannidis JPA, Vlachoyiannopoulos PG, Haidich A, Medsger TA, Lucas M, Michet CJ, Kuwana M, Yasuoka H, van den Hoogen F, Boome L, van Laar JM, Verbeeti NL, Matucci-Cerinic M, Georgountzos A, Moutsopoulos M. REVIEW Mortality in systemic sclerosis: An international meta-analysis of individual patient data. *The American Journal of Medicine*. 2005;118:2-10.
2. Arnett FC, Cho M, Chatterjee S, Aguilar B, Reveille JD, Mayes D. Familial occurrence frequencies and relative risks for systemic sclerosis (scleroderma) in three United States cohorts. *Arthritis and Rheumatism*. 2001;44:1359-1362.

references continued on page 54

Pressured to Prevent Heel Ulcers?

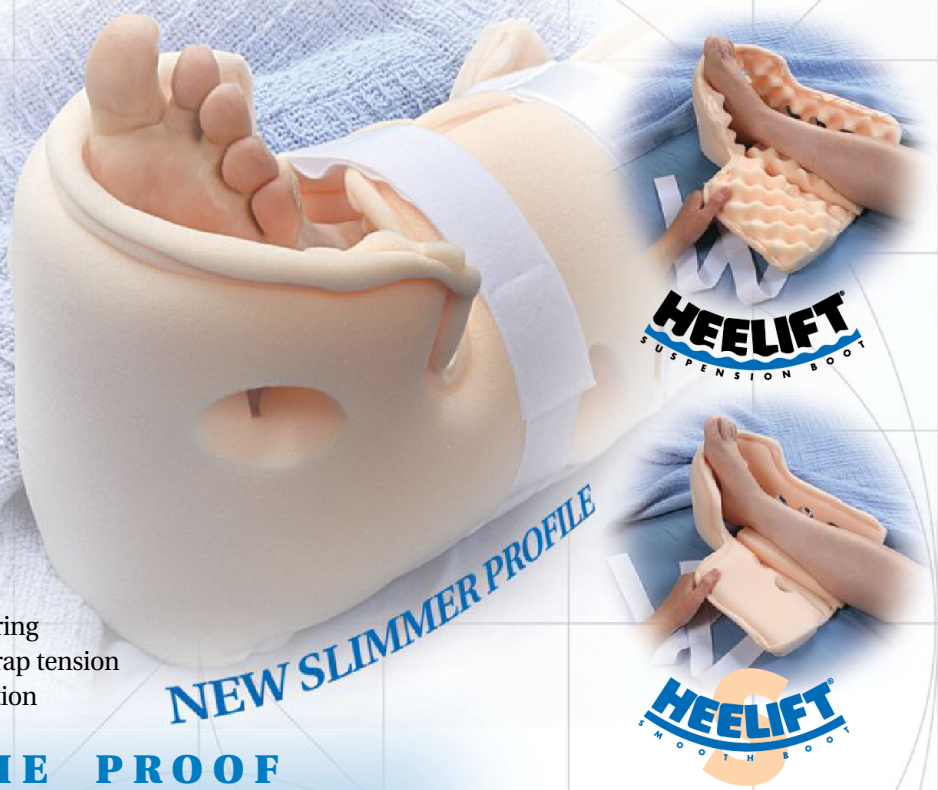
Choose Heelift® Suspension Boot—The Pressure-Free Solution

Latest testing proves it!

Heelift® Suspension Boots provide a pressure-free environment that helps eliminate the onset of pressure ulcers for susceptible high risk patients, as well as patients already suffering from heel pressure ulcers.

And Heelift® has added design features for more comfort, support and easier, one-handed closure.

- Extended stitching along the top rim narrows the forefoot, increasing the support to give improved protection against foot drop, equinus deformity or heel cord contracture
- Two non-abrasive, soft straps with D-ring closures permit easy adjustment of strap tension while eliminating potential skin irritation



HERE'S THE PROOF

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.

In all tests, Heelift® provided a pressure-free solution compared to the other typically used options.

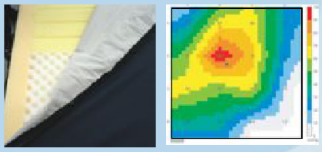
Pressure Mapping of the Heel - Supine

Heelift® Suspension Boot

Sensors included	15
Variation coefficient	63.7%
Standard deviation	1.47
Average pressure	2.3
Maximum pressure	5.9
Center of pressure	2.7, 2.5

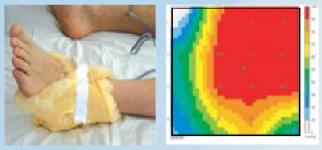
Pressure Reduction Mattress

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



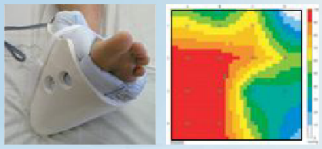
Heel Protector

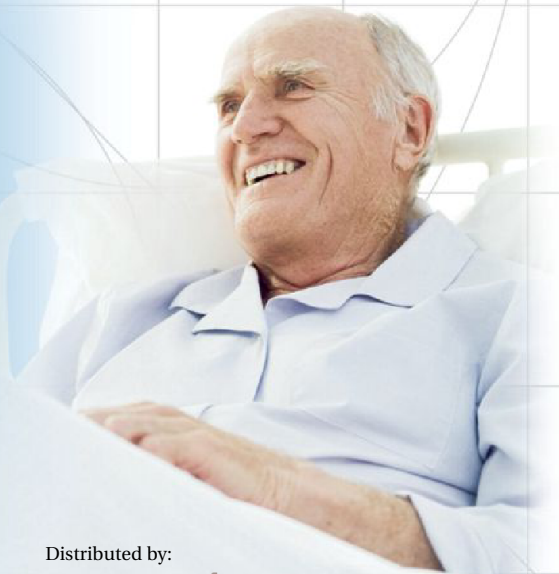
Sensors included	16
Variation coefficient	36.4%
Standard deviation	28.2
Average pressure	77.5
Maximum pressure	100
Center of pressure	2.8, 2.4



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





Distributed by:

MMSI McARTHUR MEDICAL SALES INC.

McArthur Medical Sales Inc.
1846 5th Concession W. • Rockton, ON L0R 1X0
1.800.996.6674
www.mcarthurmedical.com

Manufactured by: DM SYSTEMS INC www.dmsystems.com

Suggested Code: E0191

Processus de validation d'une traduction française du « Braden Scale for Predicting Pressure Sore Risk© »

PAR
Nicole Denis
et Diane St-Cyr

Afin d'alléger le texte, le genre féminin sera utilisé pour désigner les membres de la profession infirmière.

La pratique infirmière est basée sur des résultats probants. Les outils d'évaluation utilisés doivent donc être valides et fiables. Ce souci de rigueur, a amené les investigatrices à évaluer les instruments disponibles en français pour évaluer les risques de développer des plaies de pression. L'Hôpital d'Ottawa, en Ontario (LHO) et le Centre universitaire de santé McGill, au Québec (CUSM), sont deux centres hospitaliers bilingues de soins tertiaires et d'enseignement clinique, dans lesquels les investigatrices travaillent respectivement. Ces deux institutions, affiliées à des programmes d'enseignement de soins infirmiers respectivement à l'Université d'Ottawa et à l'Université McGill, utilisent le même instrument d'évaluation du risque de plaies de pression, soit l'échelle de Braden©. Cet instrument a été développé originalement en anglais. Étant donné la vocation bilingue de ces institutions, un grand nombre d'infirmières œuvrant dans ces hôpitaux ont le français comme langue maternelle. L'utilisation d'un instrument d'évaluation dans une langue seconde peut entraîner des écarts de compréhension dus au risque d'interprétations possibles par les utilisatrices. Par conséquent le résultat numérique de l'échelle d'évaluation peut ainsi varier.

Selon plusieurs auteurs, une simple traduction libre ne suffit pas lorsqu'il s'agit de la validité scientifique d'un instrument de mesure. En effet, bien qu'un outil d'évaluation soit valide dans sa langue d'origine, ceci n'en garantit pas sa validité ni sa fiabilité lorsqu'il est traduit dans une autre langue.[10,12,17,20]

Les investigatrices ont considéré les deux instruments d'évaluations des risques d'ulcères de pression recommandés par le « Agency for Health Care Research and Quality » (AHCRQ autrefois connu sous le nom du Agency for Health Care Policy & Research, 1992), qui sont les échelles de Norton et de Braden. L'échelle de Braden est l'instrument le plus connu en Amérique du Nord et l'Association canadienne du soins des plaies (ACSP)[14] et l'Association des infirmières et infirmiers autorisés de l'Ontario (RNAO 2005) recommandent son utilisation. De nombreuses traductions françaises de cet instrument ont été faites mais aucune n'a fait l'objet de validation.

La traduction et la validation de l'échelle de Braden décrite dans cet article s'est effectuée en trois phases qui se sont échelonnées sur plusieurs années. La première phase comporte l'étape de traduction de l'échelle origi-

Nicole Denis, inf., stomothérapeute, M.Sc.inf, Infirmière spécialisée, Stomothérapie / Soins de la peau et des plaies L'Hôpital d'Ottawa, campus général.

Diane St-Cyr, inf., stomothérapeute, M.Éd, Infirmière consultante en Stomothérapie, Centre universitaire de santé McGill, campus Hôpital Général de Montréal.

Barbara Braden, co-developer of the Braden Scale, will be part of a panel discussing the "Launch of Pressure Ulcer Awareness" at the CAWC conference, November 16-19, 2006, in Ottawa, Ontario. For more conference-related information and online registration, visit www.cawc.net.

Barbara Braden, co-développeur de l'échelle de Braden, fera partie du panel sur la discussion du « Lancement de la campagne sur la sensibilisation des ulcères de pression, » qui aura lieu lors du congrès de l'ACSP du 16 au 19 novembre 2006 à Ottawa en Ontario. Pour plus de renseignements à propos du congrès et de l'inscription en ligne, veuillez consulter le www.cawc.net.

nale (de l'anglais au français) et ensuite de la traduction renversée de l'outil d'évaluation français utilisé par les investigatrices, soit le traduire à nouveau dans sa langue originale (du français à l'anglais). La deuxième phase est le recensement des instruments d'évaluation en français et l'analyse comparative de sept versions utilisées couramment au Québec afin de développer la version expérimentale. Finalement, la troisième phase est l'étude de la validité linguistique, de la stabilité temporelle et de l'accord inter-juges de la version expérimentale.

Historique

L'échelle de Braden[5,9] a été élaboré afin de fournir un outil clinique permettant d'identifier les principaux facteurs de risque qui contribuent au développement des plaies de pression afin de les contrer par l'implantation d'interventions préventives de soins infirmiers. Les auteures de l'outil original ont élaboré un schéma conceptuel mettant en relation l'intensité et la durée de la pression, ainsi que la tolérance des tissus qui sont les postulats fondamentaux de cet outil.[7]

L'échelle de Braden est composé de six paramètres d'évaluation, chacun mesurant un facteur de risque lié au développement des plaies de pression. Les facteurs de risques de l'échelle sont: la perception sensorielle, l'humidité, l'activité, la mobilité, la nutrition, ainsi que la friction et le cisaillement. Ces facteurs de risque sont évalués séparément et un pointage est attribué à chacun. Cinq des six paramètres d'évaluation présentent quatre niveaux de risque et l'un d'eux n'en comporte que trois.

Le score total possible de l'échelle de Braden se situe de 6, condition la plus défavorable à 23, condition optimale. Le score se calcule en additionnant la valeur numérique attribuée à chaque paramètre. Le niveau de risque est donc inversement proportionnel au pointage; plus le résultat est faible plus le risque de développer une plaie de pression est élevé.

L'échelle originale a fait l'objet d'études de fiabilité et de validité dans plusieurs milieux de soins. L'accord inter-juges de l'outil est élevé (99%) lorsqu'il est utilisé par des infirmières.[5] Dans un milieu de soins aigus, l'outil a démontré une spécificité *(identification du nombre de patients qui ne sont pas à risque et qui ne développent pas d'ulcère de pression)* variant de 61%[22] à 100%.[16] La sensibilité de l'outil *(identification du nombre de patients qui sont à risque et qui développent un ulcère de pres-*

Process for the Validation of a French Translation of the Braden Scale for Predicting Pressure Sore Risk©

Abstract

The Braden Scale is one of the most widely used, validated assessment tools to determine the risk of developing pressure ulcers for patients in all types of clinical settings. Numerous English to French translations were done, but none went through the rigorous process of a validation study. In response to this need, the investigators undertook a three-phase validation study, using the methodology recommended by several authors.[11,12,17,23]

In phase one, the English Braden Scale was translated into French by the investigators in order to obtain a preliminary experimental version. This version was then translated back into English (the tool's original language) to identify and analyze all linguistic discrepancies with the original version.

In phase two, six alternate French translations of the Braden Scale were compared with the preliminary experimental version to determine the most accurate French terminology and to develop the final French experimental version.

The final phase of the study was to verify if the French experimental version of the Braden Scale would provide professionals with an identical score to the one obtained with the original English tool. The linguistic validity, the temporal stability as well as the inter-rater reliability were measured in this study.

The Pearson *r* correlation coefficient reached statistical significance $>.90$, demonstrating the reliability of the French experimental version of the Braden Scale. The inter-rater reliability was also statistically significant, with a Pearson *r* correlation coefficient $\geq .85$ for the total sample.

This endeavour provides French-speaking professionals with a reliable, validated Braden Scale to use in their clinical practice.

TABLEAU 1 :

Échelle De Braden©

Perception Sensorielle Capacité de répondre d'une manière significative à l'inconfort causé par la pression	**1. Complètement limitée:** Absence de réaction (ne gémit pas, ne sursaute pas, n'a pas de réflexe de préhension) aux stimuli douloureux, dû à une diminution du niveau de conscience ou à la sédation. OU A une capacité limitée de ressentir la douleur ou l'inconfort sur la majeure partie de son corps.	**2. Très limitée:** Répond seulement aux stimuli douloureux. Ne peut communiquer l'inconfort que par des gémissements ou de l'agitation. OU A une altération sensorielle qui limite la capacité de ressentir la douleur ou l'inconfort sur la moitié de son corps.	**3. Légèrement limitée:** Répond aux ordres verbaux, mais ne peut pas toujours communiquer l'inconfort ou le besoin d'être tourné. OU A une certaine altération sensorielle qui limite sa capacité de ressentir la douleur ou l'inconfort dans un ou deux de ses membres.	**4. Aucune atteinte:** Répond aux ordres verbaux. N'a aucun déficit sensoriel qui pourrait limiter sa capacité de ressentir ou d'exprimer la douleur ou l'inconfort.
Humidité Le degré d'humidité auquel la peau est exposée	**1. Constamment humide:** La peau est presque constamment humide à cause de la transpiration, de l'urine, etc. La moiteur est notée à chaque fois que la personne est changée de position.	**2. Très humide:** La peau est souvent mais pas toujours humide. La literie doit être changée au moins une fois par quart de travail.	**3. Occasionnellement humide:** La peau est occasionnellement humide nécessitant un changement de literie additionnel environ une fois par jour.	**4. Rarement humide:** La peau est habituellement sèche. La literie est changée aux intervalles habituels.
Activité Le degré d'activité physique	**1. Alité:** Confinement au lit.	**2. Confinement au fauteuil:** La capacité de marcher est très limitée ou inexistante. Ne peut supporter son propre poids et/ou a besoin d'aide pour s'asseoir au fauteuil ou au fauteuil roulant.	**3. Marche à l'occasion:** Marche occasionnellement pendant la journée, mais sur de très courtes distances, avec ou sans aide. Passe la plupart de chaque quart de travail au lit ou au fauteuil.	**4. Marche fréquemment:** Marche hors de la chambre au moins deux fois par jour et dans la chambre au moins une fois chaque deux heures en dehors des heures de sommeil.
Mobilité Capacité de changer et de contrôler la position de son corps	**1. Complètement immobile:** Incapable de faire le moindre changement de position de son corps ou de ses membres sans assistance.	**2. Très limitée:** Fait occasionnellement de légers changements de position de son corps ou de ses membres mais est incapable de faire des changements fréquents ou importants de façon indépendante.	**3. Légèrement limitée:** Fait de fréquents mais légers changements de position de son corps ou de ses membres de façon indépendante.	**4. Non limitée:** Fait des changements de position importants et fréquents sans aide.
Nutrition Profil de l'alimentation habituelle	**1. Très pauvre:** Ne mange jamais un repas complet. Mange rarement plus du tiers de tout aliment offert. Mange deux portions ou moins de protéines (viandes ou produits laitiers) par jour. Boit peu de liquides. Ne prend pas de supplément nutritionnel liquide. OU Ne prend rien par la bouche et/ou reçoit une diète liquide ou une perfusion intraveineuse pendant plus de 5 jours.	**2. Probablement inadéquate:** Mange rarement un repas complet et mange généralement que la moitié de tout aliment offert. L'apport de protéines comporte 3 portions de viandes ou de produits laitiers par jour. Prend occasionnellement un supplément nutritionnel. OU Reçoit une quantité insuffisante de liquide ou de gavage.	**3. Adéquate:** Mange plus de la moitié de la plupart des repas. Mange un total de 4 portions de protéines (viandes, produits laitiers) chaque jour. Peut refuser à l'occasion un repas, mais prend habituellement un supplément nutritionnel s'il est offert. OU Est alimenté par gavage ou par alimentation parentérale totale qui répond probablement à la plupart des besoins nutritionnels	**4. Excellente:** Mange presque entièrement chaque repas. Ne refuse jamais un repas. Mange habituellement un total de 4 portions ou plus de viandes et de produits laitiers. Mange occasionnellement entre les repas. Un supplément nutritionnel n'est pas nécessaire.
Friction et cisaillement	**1. Problème:** Le patient a besoin d'une aide modérée à maximale pour bouger. Il est impossible de le soulever complètement sans que sa peau frotte sur les draps. Il glisse fréquemment dans le lit ou au fauteuil, ce qui requiert d'être positionné fréquemment avec une aide maximale. La spasticité, les contractures ou l'agitation entraînent une friction presque constante.	**2. Problème potentiel:** Le patient bouge faiblement ou requiert une aide minimale. Pendant un changement de position, la peau frotte probablement jusqu'à un certain degré contre les draps, le fauteuil, les contentions ou autres appareils. Il maintient la plupart du temps une assez bonne position au fauteuil ou au lit mais glisse à l'occasion.	**3. Aucun problème apparent :** Le patient bouge de façon indépendante au lit ou au fauteuil et a suffisamment de force musculaire pour se soulever complètement pendant un changement de position. Il maintient en tout temps une bonne position dans le lit et au fauteuil.	

SILVERCEL* Hydroalginate dressing with Silver combines the potent broad-spectrum antimicrobial action of silver with the enhanced exudate management properties of new hydroalginate technology.

- Unique Hydroalginate technology provides superior absorbency for the management of moderate to heavily exuding wounds.
- New X-Static® silver technology combines a sustained and balanced release of silver ions with a broad spectrum of anti-microbial activity.
- High wet tensile strength allows for easy intact removal.
- Dressing gelling properties minimize disruption to healing tissues.

Johnson & Johnson
Wound Management

SILVERCEL
hydroalginate
with silver

Tel: (English) 1 800 668-9045 Tél. : (Français) 1 800 668-9067 Website : www.jnjgateway.com

X-static
THE SILVER FIBER

* Trademark of Johnson & Johnson - X-STATIC® is a registered trademark of Noble Biomaterials, Inc
Johnson & Johnson Wound Management is a Unit of Johnson & Johnson Medical Products, a Division of Johnson & Johnson Inc.

TABLEAU 2 :

Description de l'échantillon

Caractéristiques	Nombre = (N)	(%)
Sexe		
Homme	11	(55)
Femme	9	(45)
Service		
Médecine[1]	8	(40)
Chirurgie[2]	12	(60)
	Moyenne	**(Écart-type)**
Âge	63.5	(16.3)

1 – Service de médecine = Médecine 4; Soins intensifs coronariens 1; Néphrologie 1; Neurologie 1; Soins de longue durée 1
2 – Service de chirurgie = Chirurgie générale 6; Plastie 3; Orthopédie 2; Cardio/Vasculaire/Thoracique 1

sion) avait pour sa part des résultats variant de 35%[16] à 100%.[5]

Phase 1 : Le processus de traduction

En 1994, suite à l'approbation écrite du Dre. Braden, le groupe de travail des soins de plaies de l'Hôpital général d'Ottawa, a effectué une traduction française du Braden Scale. La traduction initiale a été faite par une infirmière qui avait une connaissance approfondie de l'outil et de son utilisation. En collaboration avec des expertes cliniques du Québec, cette traduction a été révisée. Cette consultation a donné une deuxième version de la traduction. Selon la méthodologie d'usage pour la traduction d'un outil d'évaluation[11,13,17,23] la traduction de l'instrument doit faire l'objet d'une traduction renversée afin de la comparer à la version originale. Il est aussi important dans la méthodologie proposée par les auteurs précités, que la personne qui procède à la traduction renversée ne connaisse pas l'outil dans sa langue originale afin de ne pas être biaisée par le rappel de certains termes. Les investigatrices se sont assurées de respecter cette recommandation. Les différences obtenues entre la version originale et la traduction renversée ont été analysées simultanément par le groupe de travail de chaque investigatrice.

Phase 2 : Analyse des multiples traductions de l'échelle de Braden

Six traductions françaises non validées, ont été sélectionnées dans les écrits afin de les comparer à la version développée par les investigatrices en 1994. Les similarités et les différences ont été identifiées et la terminologie jugée la meilleure a été retenue afin d'assurer l'équivalence linguistique de l'instrument. Les investigatrices ont consulté une traductrice professionnelle afin de clarifier certains mots ou des phrases ambiguës. Par la suite, les investigatrices ont consulté le Dre. Barbara Braden, (auteure de l'outil original) par téléconférence. Cette entrevue a confirmé que la version expérimentale respectait le sens de la version originale et rencontrait les exigences d'équivalence sémantique. Suite à cette consultation, certains ajustements mineurs ont été apportés à la version expérimentale préliminaire.

Les investigatrices ont ensuite procédé à un pré-test de la version expérimentale afin de s'assurer de sa clarté linguistique. Dans chacun des deux centres de l'étude, quinze infirmières, dont la langue maternelle est le français (N=30) ont lu la version expérimentale pour identifier les mots ou les phrases considérés ambigus ou incompris. Les données ont été analysées par les investigatrices et discutées à nouveau avec le Dre. Braden afin de finaliser la version expérimentale de l'Échelle de Braden (voir tableau 1).

Les investigatrices ont fait appel à des experts-conseils en méthodologie et en analyse statistique afin de déterminer la meilleure méthode pour valider la version expérimentale de l'Échelle de Braden. Le protocole de recherche a été révisé par les comités de recherche de soins infirmiers et il a reçu l'approbation des comités d'éthiques de recherche de LHO et du CUSM.

Phase 3 : Processus de validation

Le but de cette dernière phase du projet est de vérifier si l'utilisation de la version expérimentale de l'Échelle de Braden fournit un score identique à celui qui serait obtenu par l'utilisation de la version originale. Les objectifs sont d'évaluer la validité linguistique, la stabilité temporelle et l'accord inter-juges de la version expérimentale lorsqu'elle est utilisée par des infirmières. Cette troisième phase est divisée en deux étapes. Premièrement, les investigatrices ont complété la validité linguistique et ont vérifié la stabilité temporelle de la version expérimentale (étape 1). Par la suite, les investigatrices ont été jumelées à des infirmières dont le français est la langue maternelle afin d'établir l'accord inter-juges (étape 2).

Les données ont été vérifiées, saisies et analysées par le programme statistique SPSS-PC, version 11.0. Des statistiques descriptives (fréquence, moyenne et médiane) ont été utilisées pour présenter les caractéristiques de l'échantillon de l'étape 1 et 2. Un test comparatif de deux échantillons appariés (score-*t*) a été sélectionné pour analyser la validité linguistique. Pour vérifier l'accord

inter-juges et la stabilité temporelle, un coefficient de corrélation de *r* de Pearson a été choisi pour analyser les données.

Méthodologie : Étape 1

Chaque investigatrice a évalué 10 patients (N=20) choisis par un échantillon de commodité à partir des patients soignés dans leur service. La version originale en anglais de l'échelle de Braden et la version expérimentale française de l'Échelle de Braden ont été utilisées en alternance afin d'évaluer le même patient à deux reprises. À la première évaluation (T1), la langue de l'instrument a été déterminée de façon aléatoire par tirage au sort. Chaque patient a été réévalué après 72 heures (T2) avec l'instrument de l'autre langue. Les investigatrices ont vérifié qu'entre les deux évaluations, l'état clinique du patient n'avait pas changé de façon notable, afin de ne pas introduire un biais dans l'étude.

Résultats

L'échantillon se composait de onze hommes (55%) et neuf femmes (45%) et la majorité des sujets étaient hospitalisés en chirurgie (60%). L'âge moyen et médian des patients était identique, soit de 63.5 ans et l'écart type était 16.3 (voir tableau 2). L'intervalle variait pour sa part de 22 à 90 ans.

Afin de déterminer si les résultats étaient similaires en utilisant les deux versions de l'Échelle de Braden (originale et expérimentale), les moyennes obtenues ont été comparées. Les moyennes du score total et celles de chaque paramètre obtenues lors de la première évaluation (T1) ont été comparées à celles de la deuxième évaluation (T2). La version originale a été utilisée lors de la première évaluation (T1) pour onze patients (55%) et la version expérimentale pour les neuf autres (45%) et vice versa pour la deuxième évaluation (T2).

Le tableau 3 présente les résultats de la comparaison des sept moyennes appariées (le score total et les six paramètres individuels), qui ont été calculés en utilisant un score-*t* et le coefficient de corrélation de *r* de Pearson avec un niveau de signification de 0.05. Le score-*t* n'a pu être calculé pour deux paramètres (paire #2 perception sensorielle et paire #5 mobilité) car l'erreur type de la moyenne était 0. Pour les cinq autres paires (paire #1 score total, paire # 3 humidité, paire # 4 activité, paire # 6 nutrition, paire # 7 friction et cisaillement), les scores-*t* variaient de 1.453 à -2.179. Les coefficients de corrélation de *r* de Pearson se situaient de .925 à 1.0.

TABLEAU 3 :

Comparaison des moyennes

Paires	Moyenne	Valeur *t*	*P*	Valeur *r*	*P*
#1 Score total					
T1	17.0500	-1.453	.163	.988	.000
T2	17.2500				
#2 Perception sensorielle					
T1	3.5000 *			1.000	.000
T2	3.5000 *				
#3 Humidité					
T1	3.3500	1.453	.163	.958	.000
T2	3.2500				
#4 Activité					
T1	2.4000	-.567	.577	.941	.000
T2	2.4500				
#5 Mobilité					
T1	3.3000 *			1.000	.000
T2	3.3000 *				
#6 Nutrition					
T1	2.4500	-2.179	.042	.925	.000
T2	2.6500				
#7 Friction et cisaillement					
T1	2.0500	-1.000	.330	.959	.000
T2	2.1000				

* Le score-*t* n'a pu être calculé car l'erreur type de la moyenne était 0.

Le tableau 4 résume la différence des résultats entre la version originale et expérimentale. Une différence de deux points était présente pour le score total lors de l'évaluation d'un patient et de un point pour quatre autres patients. Pour l'ensemble des évaluations (N=20) au T1 et T2, les scores étaient identiques pour les paramètres de la perception sensorielle et de la mobilité. Pour trois paramètres (humidité, activité et friction/cisaillement), le score de la version originale était plus élevé que celui de la version expérimentale. Finalement, pour le paramètre de la nutrition le score était plus élevé avec la version expérimentale.

Méthodologie : Étape 2

Dans chaque centre participant à l'étude, des infirmières dont le français est la langue maternelle et provenant de cultures différentes ont évalué 20 patients (N=40) en utilisant la version expérimentale de l'Échelle de Braden. Les investigatrices ont évalué les mêmes patients durant le même quart de travail en utilisant la même version.

Résultats

L'échantillon se composait de quinze hommes (38%) et vingt-cinq femmes (62%) et la majorité des sujets étaient hospitalisés en chirurgie (90%). L'âge moyen et médian des patients était de 62.4 ans et de 66 ans respective-

ment et l'écart type était 16.2 (voir tableau 5). L'intervalle variait pour sa part de 28 à 86 ans. Les caractéristiques des patients de l'échantillon étaient similaires dans les deux institutions à l'exception de la moyenne d'âge qui était inférieure à LHO, soit de 60.9 ans comparativement à 63.9 ans au CUSM.

Le tableau 6 présente les résultats comparatifs des évaluations inter-juges (infirmières et investigatrices) avec la version expérimentale. Les pointages obtenus pour le score total et ceux attribués à chaque paramètre par les infirmières et les investigatrices, ont été comparés. Un coefficient de corrélation de *r* de Pearson avec un niveau de signification de 0.05 a été utilisé pour évaluer l'accord inter-juges. Pour l'échantillon total, les coefficients de corrélation se situaient entre .85 et .97 et lorsque les données furent traitées séparément pour les deux centres de l'étude, les coefficients pour LHO et le CUSM se situaient entre .84 et 1 et .77 et .95 respectivement.

Discussion

Étape 1 : Les score-*t* ne démontrent aucune différence statistique significative pour le score total et pour cinq des six paramètres à l'exception de celui de la nutrition. Ceci démontre que la version originale et la version expérimentale de l'Échelle de Braden donnent des résultats comparables.

La nutrition est l'aspect qui est le plus difficile à évaluer pour les infirmières qui utilisent l'Échelle de Braden. Ce paramètre estime le profil de l'alimentation habituelle du patient. Selon les Dres. Braden et Bergstrom (1989) un changement dans le profil alimentaire d'un patient doit être constant durant une semaine afin qu'il soit considéré comme habituel. Il est donc nécessaire de questionner le patient et les membres de l'équipe soignante (au besoin) pour attribuer un score numérique. Le résultat est donc fondé sur la mémoire de l'apport alimentaire ou sur la documentation de la semaine précédente. Malgré cette constatation des auteures, une recherche plus approfondie serait nécessaire pour expliquer pourquoi une différence significative est présente et préciser les causes qui génèrent des résultats plus élevés lorsque la version originale est utilisée.

Les coefficients de corrélation de *r* de Pearson élevés >.90 entre les moyennes des scores de la première (T1) et la deuxième évaluation (T2) sont statistiquement significatifs et démontrent la fiabilité des deux échelles.

Étape 2 : Les coefficients de corrélation démontrent qu'il n'y a aucune différence significative entre les pointages du score total et ceux des paramètres individuels obtenus par les infirmières et les investigatrices de chaque centre ou ceux cumulés par les deux centres. Les coefficients de corrélation élevés à ≥ .85 pour l'échantillon total démontrent la fiabilité de la version expérimentale et indiquent un accord inter-juges acceptable.

Limites

Étant donné que la collecte de données de l'étape 1 a été effectuée par les investigatrices, qui sont aussi les auteures de la version expérimentale, ceci a pu introduire un biais dans les résultats. De plus, vu que les investigatrices sont toutes deux, des expertes cliniques dans les soins des plaies, elles possèdent une très grande familiarité avec l'échelle de Braden© dans sa version originale et la version expérimentale. Il est possible que les scores choisis par les investigatrices aient été influencés par le rappel des définitions opérationnelles de l'échelle.

TABLEAU 4 :

Différence des résultats entre la version originale et la version expérimentale

Paramètres	Fréquence des différences des résultats	Écart numérique des scores des deux versions	Fréquence ou les scores de la version originale étaient plus élevés	Fréquence ou les scores de la version expérimentale étaient plus élevés
Score total	5	2 points (pour 1 paire) 1 point (pour 4 paires)	3	2
Humidité	2	1	2	
Activité	3	1	2	1
Nutrition	4	1	1	3
Friction et cisaillement	1	1	1	

Dedicated to Healing Wounds

V.A.C.® Therapy™
Decreases wound volume
Removes excess fluid
*Assists granulation**

acute/traumatic wounds
dehisced wounds
flaps and grafts
subacute wounds
pressure ulcers
chronic wounds
diabetic ulcers

The new V.A.C.® GranuFoam™ heel dressing is one of a range of dedicated dressings for challenging wounds. Designed to fit the contours of the heel for easier, faster and more comfortable dressing application.

It can be used in combination with proven, cost-effective and safe V.A.C.® therapy to help promote wound healing.

To find out more about V.A.C.® Therapy visit **www.kci-medical.com** or call us at **1-800-668-5403**

THE V.A.C. VACUUM ASSISTED CLOSURE®

KCI
The Clinical Advantage

For use with V.A.C.® ATS and V.A.C.® Freedom Therapy systems.

*Joseph, et al, WOUNDS 2000; 12 (3); 60–67. Additional articles and studies on file and available upon request. Data on file and available on request.

Note: Specific indications, contraindications and precautions and safety tips exist for this product and therapy. Please consult your physician, product instructions and safety tips prior to applications.

TABLEAU 5 :

Description de l'échantillon de l'étape 2

Caractéristiques	Nombre = (N)	(%)
Sexe		
Homme	15	(38)
Femme	25	(62)
Service		
Médecine	4	(10)
Chirurgie[1]	36	(90)
	Moyenne	**(Écart-type)**
Âge	62.4	(16.2)

1 – Service de chirurgie = Chirurgie générale 20; Cardio/Vasculaire/Thoracique 6; Orthopédie 5; Urologie 2; Plastie 1; Gynécologie 1; Traumatologie 1

Les échantillons des patients étaient choisis par commodité pour les deux étapes ce qui peut affecter l'objectivité et la polyvalence des résultats. De plus, la petite taille des deux échantillons utilisés peut limiter le degré de précision des résultats. Une autre étude plus approfondie serait souhaitable afin de corriger les biais potentiels identifiés et de corroborer ou de réfuter les présents résultats.

Conclusion

Les investigatrices, persuadées de l'importance d'utiliser des outils cliniques fiables et valides, afin d'assurer l'excellence des soins infirmiers basés sur des résultats probants, ont procédé à la traduction systématique et à la validation scientifique de l'Échelle de Braden. Une simple traduction libre d'un outil d'évaluation ne garantit pas la même validité que l'instrument dans sa version originale. Il est important pour les infirmières d'utiliser des instruments d'évaluation dans leur langue maternelle, car lorsqu'elles utilisent des outils dans une langue seconde, ceci peut être la cause d'une évaluation erronée, qui peut avoir des répercussions sur le plan thérapeutique infirmier. Les investigatrices souhaitent ainsi promouvoir le bien-être des patients à risque de plaies pression.

Remerciements

Ce projet a reçu le support financier de ConvaTec Canada et du Fonds de dotation de la recherche en soins infirmiers, Département de la pratique professionnelle en soins infirmiers de L'Hôpital d'Ottawa.

Les auteures désirent remercier tous ceux et celles qui ont participé directement ou indirectement à l'élaboration de la traduction ou au projet de recherche.

Références

1. Agency for Health Care Policy and Research Panel for the Prediction and Prevention of Pressure Ulcers in Adults. *Pressure Ulcers in Adults: Prediction and Prevention, Clinical Practice Guideline*. Rockville: AHCPR. 1992.
2. ——. *Pressure Ulcer Treatment, Clinical Practice Guideline*. Rockville: AHCPR. 1994.
3. Barnes D. Payton RG. Clinical application of the Braden Scale in the acute-care setting. *Dermatology Nursing*. 1993;5(5):386-388.
4. Bergstom N, Braden B, Kemp M, Champagne M, Ruby E. Predicting pressure ulcer risk: A multisite study of the predictive validity of the Braden Scale. *Nursing Research*. 1998;7(5):261-269.
5. Bergstom N, Braden BJ, Laguzza A, Holman V. The Braden Scale for predicting pressure sore risk. *Nursing Research*. 1987;36(4):205-210.
6. Bergstom N, Demuth PJ, Braden B. A clinical trial of the Braden

suite des références à la page 54

TABLEAU 6 :

Résultats comparatifs des évaluations inter-juges

Comparaisons	Échantillon total		LHO		CUSM	
	Valeur *r*	***P* =**	**Valeur *r***	***P* =**	**Valeur *r***	***P* =**
Paire # 1 Score total	.95	.00	.96	.00	.94	.00
Paire # 2 Perception sensorielle	.97	.00	1.00	.00	.95	.00
Paire # 3 Humidité	.92	.00	.96	.00	.85	.00
Paire # 4 Activité	.88	.00	.86	.00	.92	.00
Paire # 5 Mobilité	.86	.00	.93	.00	.81	.00
Paire # 6 Nutrition	.90	.00	.84	.00	.95	.00
Paire # 7 Friction et cisaillement	.85	.00	.95	.00	.77	.00

Less trauma. Less pain.

Safetac® is a patented soft silicone adhesive technology. The dressings with Safetac® technology are atraumatic both during use and upon removal. The dressings provide a major development in the following areas: minimize trauma to the wound, minimize trauma to the surrounding skin, and minimize pain for the patient.

Dressings with Safetac® TECHNOLOGY

- Mepilex®
- Mepilex® Lite
- Mepilex® Border
- Mepilex® Border Lite
- Mepilex® Transfer
- Mepitel®

1-800-494-5134
www.molnlycke.com
CA06530060EN

MÖLNLYCKE HEALTH CARE

The Interdisciplinary Lower Leg Assessment Form:

The Evolution of a Clinical Assessment Tool

BY Richelle Gorst, BScOT, IIWCC, Gillian Bagg, HBPE, BScOT, IIWCC, Martine Albert, RN, BScN, IIWCC, and Byron Shier, MBA, BScOT, CLT

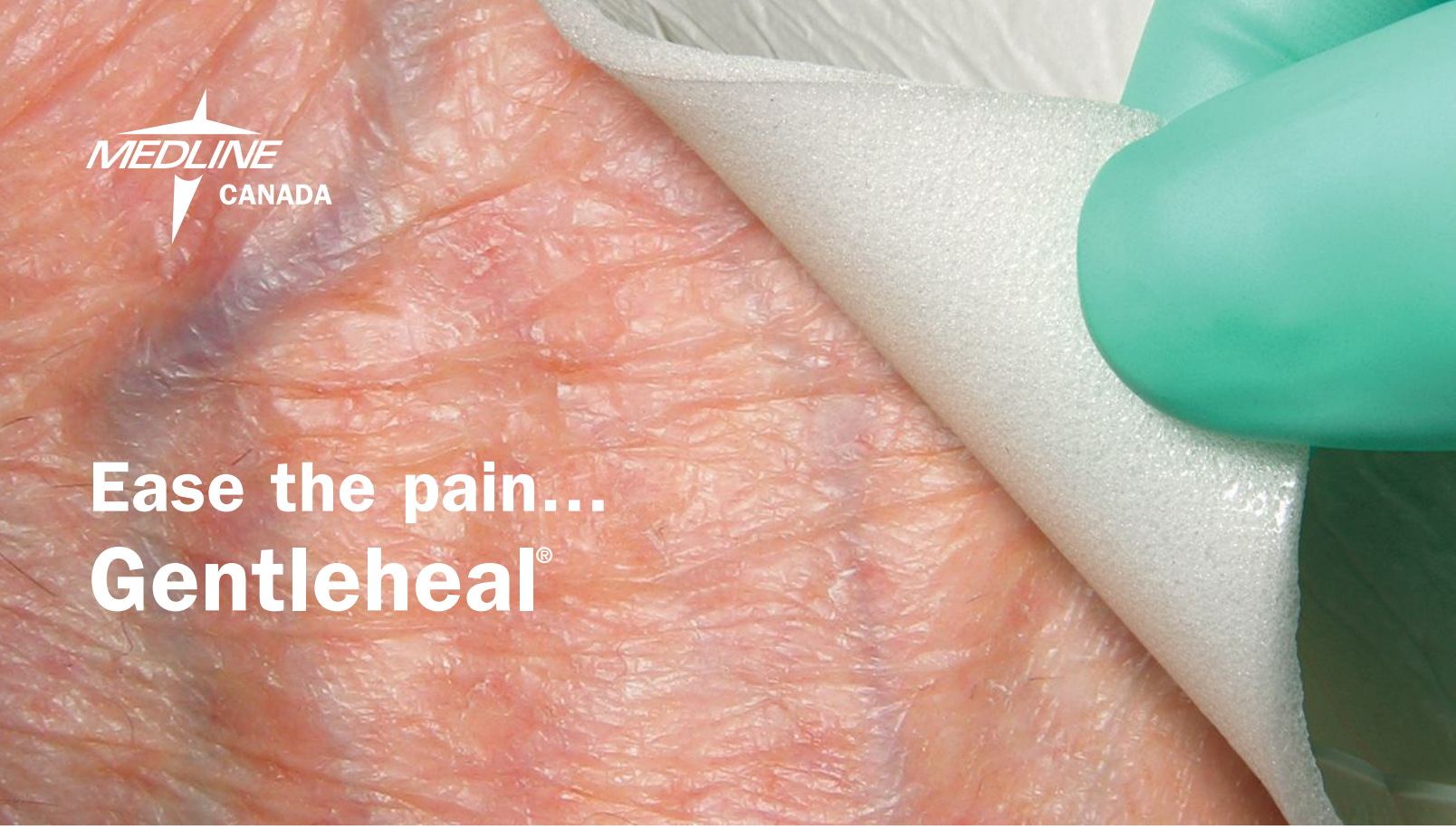
Clinical assessment is fundamental to health-care practice for both the medical and allied health-care professional. A formal evaluation process allows all aspects of the patient and their needs to be identified and addressed. Information is knowledge and, therefore, the importance of collecting relevant data for diagnostic and treatment purposes is undeniable. It is the detailed and comprehensive assessment that, along with patient goals, guides practice and directs appropriate treatment strategies. Interdisciplinary collaboration adds a balanced and holistic perspective and, consequently, much value to any patient assessment. In this article, the authors focus on the development of a formal lower leg examination tool.

A literature review was conducted to determine if any other lower leg assessment forms had been published within the last five years. The search, containing the terms "lower leg assessment form," "lower leg assessment tool" and "leg assessment tool," was performed using the databases Proquest Nursing Journals, Ovid Healthstar and Expanded Academic ASAP. No dedicated lower leg assessment form that enabled inclusive documentation from an interdisciplinary perspective was found. Therefore, the need to make such a form available was established.

The original Lower Limb Assessment Form was developed in 1997 for use within the Calgary Home Care Program, with numerous members of the Calgary Home Care's Skin and Wound Assessment and Treatment (SWAT) team instrumental in the format and content development. This original form has evolved and improved over the years and has been reviewed by Canadian wound-care leaders and adapted and adopted by the CAWC Seminar Series as part of the S2 Lower Leg Workshop. Three of the four authors have had the opportunity, as part of the SWAT team, to utilize the Lower Limb Assessment Form and have recognized the need to add modifications that capture additional information for a more comprehensive lower limb examination. The new version, titled the Interdisciplinary Lower Leg Assessment Form (on page 32), has been tailored to include more detailed information and supplemental sections for documentation related to the foot, ulcer, mobility, gait, range of motion and strength and standing posture.

The intent is to put forth the Interdisciplinary Lower Leg Assessment Form for review to stimulate discussion around its utility and encourage others to trial and critique it. All feedback is welcomed and can be sent to rgorst@shaw.ca.

references on page 50



MEDLINE CANADA

Ease the pain...
Gentleheal®

Gentle, for fragile skin

Gentleheal dressings use Sensil® technology, a silicone coating that helps prevent sticking to the wound, and won't damage the peri-wound skin. This means less trauma and pain during dressing changes.

Absorbs and locks in exudate, even under compression

Gentleheal offers unprecedented fluid handling with a combination of polyacrylate and foam. Exulock™ technology absorbs and locks in exudate, preventing maceration of peri-wound skin, even under compression dressings.

Longer wear time means fewer dressing changes

Gentleheal can be left in place for up to 7 days, so fewer dressing changes are required, which may also mean a cost savings.

Choose between *Gentleheal Standard*, *Gentleheal Extra* and *Gentleheal Secure (with bordered adhesive)*. With Gentleheal, you can ease the pain and frequency of dressing changes.

Atraumatic and Superabsorbent...Gentleheal.

1-800-396-6996 | 905-403-7000
www.medline.com

*Data on file.

Interdisciplinary Lower Leg Assessment Form

Name: _____ DOB: _____

PHN: _____ Phone: _____

Date of Assessment: _____

Referral Source: _____

Physician Name: _____ Phone: _____ Fax: _____

Specialist(s): _____ Phone: _____ Fax: _____

Reason for Referral:

_____

_____

Past Medical History:

Cardiac Hx: _____

Pulmonary Hx: _____

Renal Hx: _____

Endocrine Hx: _____

Neurological Hx: _____

Surgical/Orthopedic Hx: _____

Cancer Hx: _____

Dermatological Hx: _____

Other: _____

Medications:

_____ _____ _____

_____ _____ _____

_____ _____ _____

Treatment History:

_____

_____

_____

_____

Client Goals:

_____

_____

_____

Name: _____ Date: _____

BP: Rt. / Lt. arm	Pulse:	Weight:

Right Leg Circle or fill in the most appropriate response		**Left Leg** Circle or fill in the most appropriate response	
A. Pain With deep palpation Relieved with elevation Ache	"Knife like" Intermittent claudication Pain at rest Increased with elevation Pain at night	**A. Pain** With deep palpation Relieved with elevation Ache	"Knife like" Intermittent claudication Pain at rest Increased with elevation Pain at night
Comments:			
B. Skin Varicosities: superficial / deep Hemosiderin staining Lipodermatosclerosis Acute lipodermatosclerosis Stasis dermatitis Atrophie blanche Cellulitis Elephantiasis	Hairless / thin / shiny Dependent rubor Blanching on elevation Feet cool / cold Toes cool / cold Capillary refill time (__sec) N < 5 sec.[1]	**B. Skin** Varicosities: superficial / deep Hemosiderin staining Lipodermatosclerosis Acute lipodermatosclerosis Stasis dermatitis Atrophie blanche Cellulitis Elephantiasis	Hairless / thin / shiny Dependent rubor Blanching on elevation Feet cool / cold Toes cool / cold Capillary refill time (__sec) N < 5 sec.[1]
Comments:		Comments:	
C. Foot Deformities: Hammer toes / claw toes / dropped MTH / Hallux valgus / dropped arch Nails: thick / yellow / brittle / fungus / abnorm. growth Callouses / Corns Orthotics: Yes No Footwear appropriate: Yes No	Pressure Areas:	**C. Foot** Deformities: Hammer toes / claw toes / dropped MTH / Hallux valgus / dropped arch Nails: thick / yellow / brittle / fungus / abnorm. growth Callouses / Corns Orthotics: Yes No Footwear appropriate: Yes No	Pressure Areas:
Comments:			
D. Sensation (5.07 Monofilament) Score: _____ / 10 Digits: 1st ____ 3rd ____ 5th ____ MTH: 1st ____ 3rd ____ 5th ____ Medial: ____ Lateral: ____ Heel: ____ Dorsum: ____ Neuropathy (described below) Sensory: loss of protective sensation (LOPS) numbness / burning / tingling / crawling Autonomic: dry / cracking / fissures Motor: change in soft tissue distribution / Charcot / acute Charcot Lower LOPS score = ↑ risk		**D. Sensation** (5.07 Monofilament) Score: _____ / 10 Digits: 1st ____ 3rd ____ 5th ____ MTH: 1st ____ 3rd ____ 5th ____ Medial: ____ Lateral: ____ Heel: ____ Dorsum: ____ Neuropathy (described below) Sensory: loss of protective sensation (LOPS) numbness / burning / tingling / crawling Autonomic: dry / cracking / fissures Motor: change in soft tissue distribution / Charcot / acute Charcot Lower LOPS score = ↑ risk	
Comments:			

References

1. Williamson D, Paterson DM, Sibbald RG. Vascular assessment. In Krasner DL, Rodeheaver GT, Sibbald RG, (eds.). Chronic Wound Care: *A Clinical Source Book for Healthcare Professionals*, Third Edition. Wayne, PA: HMP Communications. 2001: 525-540.

2. Registered Nurses' Association of Ontario (RNAO). *Nursing Best Practice Guideline: Assessment and Management of Venous Leg Ulcers*. Toronto: RNAO. 2004. Available online at www.rano.org/bestpractices/.

Name: _____ Date: _____

Right Leg	Circle or fill in the most appropriate response	Left Leg	Circle or fill in the most appropriate response

E. Ulcer

Hx of previous ulcer Yes No Yr(s):_____
Cause(s) of previous ulcer: _____
Ulcer present: Yes No Location(s): _____
Cause of current ulcer:_____
Date of onset: _____
Skin stretched with signs of imminent breakdown: Yes No
Serous weeping from leg without signs of ulceration: Yes No

Comments:

F. Measurements

Date:			
Midfoot _____ cm			
Heel → 10 cm			
Heel → 20 cm			
Heel → 30 cm			
Heel → ____ cm			
Heel → ____ cm			
Weight			

Comments:

G. Edema

↓ in AM asymmetrical with contra-lateral limb: Yes No
Date of onset: _____
Location: Toes Foot B/K A/K Sacral

Description: pitting 1+ 2+ 3+ 4+
non-pitting / brawny induration
+ive Stemmer's sign

Comments:

H. Circulation

Palpation Dorsalis Pedis Pulse: Present / Diminished / Absent
Dorsalis Pedis: _____
Posterior Tibial: _____
Interdigital:_____
Toe: _____ Brachial: _____
(M - Monophasic, B- Biphasic, T- Triphasic)
ABPI: _____
TBPI: _____

ABPI N = 0.8 – 1.2
TBPI N = 0.55 mmHg

Comments:

Name: _____ Date: _____

Right Leg	Circle or fill in the most appropriate response	Left Leg	Circle or fill in the most appropriate response
Mobility	**ROM / Strength**	**Gait Pattern**	**Standing Posture**
Cane W/C 2 W/W Power W/C Standard Walker 4 W/W _____ Transfers: _____ _____ L/E dressing: Independent / Independent with aids / Requires assistance	DF ↓ ROM ↓ Strength PF ↓ ROM ↓ Strength 1st Toe ↓ ROM _____ _____ Able to ↑ ROM: Yes No Able to ↑ Strength: Yes No _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____	Foot Supination Rt. Lt. Foot Pronation Rt. Lt. Arches _____ _____ _____ _____ _____ _____

Adapted from Calgary Home Care and the CAWC Seminar Series.

Name: _____ Date: _____

Summary of Results:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Recommendations:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name: _____ Signature: _____ Date: _____

Glossary of Terms

Acute lipodermatosclerosis	Presents much like cellulites with a red flare of the skin, and tender or painful medial aspect of the leg. It is also thought to be the acute counterpart of chronic lipodermatosclerosis and likely a result of underlying venous disease.[5]
Atrophie blanche	"Small ivory-white depressed plaques on the ankle and/or foot; stellate and irregular, coalescing; stippled pigmentation; hemosiderin-pigmented border, usually within stasis dermatitis. Often following trauma."[15]
Brawny induration	Pathological hardening and thickening of tissues, usually due to inflammation.[13]
Plantar callouses	Thickening of the skin over the bottom of the foot or on the outer edge of a toe or the heel in response to friction or pressure against the skin.
Capillary refill time	The length of time taken for normal skin colour to reappear after pressure is applied and the area blanches. In a normal limb, this is less than five seconds; in a limb with peripheral arterial disease, the time is longer.[14]
Cellulitis	A spreading bacterial infection of the skin, usually caused by streptococcal or staphylococcal infections, that results in severe inflammation with erythema, warmth, and localized edema.[13]
Claw toes	Extensor contracture of toes, which increases pressure of the metatarsal heads, causing reduction of weight-bearing through the toes. This can lead to anterior displacement of the fat pad cushioning over the metatarsal heads. Claw toes are either congenital, and associated with the pes cavus deformity, or acquired. Acquired claw toes result from an imbalance between motor units usually caused by a motor neuropathy; the most common cause is diabetic peripheral motor neuropathy. Claw toes are often the first sign of Charcot-Marie-Tooth disease.[11]
Corns	A horny induration and thickening of the skin that may be hard or soft according to location. Pressure, friction, or both cause this condition. Hard corns on exposed surfaces have a horny, conical core extending down into the derma, causing pain and irritation. Soft corns that occur between the toes are kept soft by moisture and maceration.[13]
Dependent rubor	Tissues of the lower extremities turn red/blue as the blood rushes back into ischemic tissue. Peripheral vessel damage so severe that vessels are no longer able to constrict but remain permanently dilated.[16]
Elephantiasis	Profound edema with tissue on palpation that is brawny and does not recede with elevation. Extensive fibrosclerosis and proliferation of adipose tissue. Tissue may have a brownish-grey colour. Term used to describe Stage III lymphedema: lymphedema elephantiasis.[5]
Hallux valgus	Lateral deviation of the great (1st) toe. The great toe moves toward the second toe, causing a progressive deformity at the base of the great toe. This deformity is called a bunion.[11] In some cases the adjacent toes begin to buckle or become hammer toes.
Hammer toes	Contraction of the proximal interphalengeal joint based on ligaments and tendons that have tightened to cause the toe's joints to curl downward. May result in a callous over the dorsal aspect of the joint.[11]
Hemosiderin staining	Venous hypertension causes abnormal pressures to be exerted against capillary walls, which over time allows red blood cells and proteins to seep out into surrounding tissues and hemoglobin to break down. This iron-containing pigment from the red blood cells eventually stains the skin, resulting in a brown discoloration known as hemosiderin staining.[8]
Intermittent claudication	Characterized by pain, limping and lameness caused by insufficient blood flow to the limbs during exercise.[4]
Lipodermatosclerosis	An extension of the venous hypertension process, whereby the body attempts to normalize the leakage by forming fibrinogen "cuffs" around distended capillaries.[8] The tissue in the gaiter area becomes taut and hardens, presenting as an inverted champagne bottle.
Motor neuropathy	Damage to the motor nerves causing wasting of the supportive muscle of the foot leading to misalignment and development of deformities.
Pitting edema	Edema in which external pressure leaves a persistent depression in the tissues; it occurs because the pressure pushes the excess fluid out of the intercellular spaces in the tissue.[6]
Pronation	Excessive inward rolling of the foot. Pressure is placed on the inside of the foot.
Sensory neuropathy	Peripheral nerve dysfunction that can lead to a loss of protective sensation.
Stasis dermatitis	Direct result of venous insufficiency, leading to increased permeability of dermal capillaries and a subsequent inflammatory reaction. These skin changes that occur are often an early sign of impending venous-related problems.[2]
Stemmer's sign (+ive)	Inability to tent the edematous skin on the dorsal surface of the toes (when pinched), which suggests lymphedema.[7,9] The absence does not exclude presence of lymphedema.
Supination	Rolling motion of the feet onto the outer edges. Typical of high-arched, stiff feet.
Varicosities: superficial / deep	Varicosities are dilated superficial veins and varicose veins that become progressively larger and increasingly painful.[1]

If every patient got the nutrition advantage they deserve maybe every wound could heal like this.

The power of nutrition in preventing wound complications and accelerating healing is well established.[1] Early intervention is key. **Nutren 2.0 and Nutren VHP** can help make the difference. Because the potential to heal is in every patient with Nutren.

1. MacKay D, Miller AL. Nutritional support for wound healing. Altern Med Rev. 2003; 8(4):359-377.

Nestlé Nutrition

Peptamen

Peptamen JUNIOR

Nutren JUNIOR

Carnation Breakfast

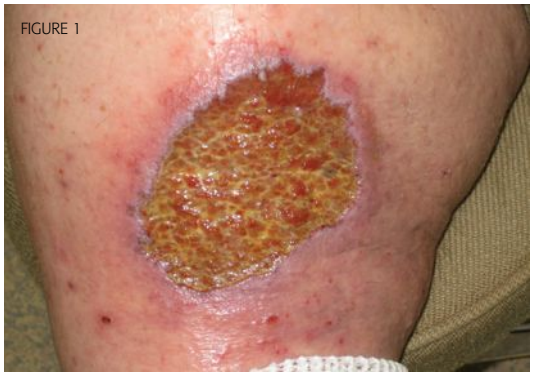
To learn more about the science of healing through nutrition call 1-800-565-1871 or visit us at **www.nestle.nutrition.ca**

Puzzling Cases:
Non-healing Venous Leg Ulcer

BY Rob Miller

A 65-year-old female presents with a chronic venous ulcer (Figure 1) of one year's duration that will not heal with standard venous ulcer management, including adequate compression. Her Doppler studies are normal with respect to her arterial circulation, and her venous studies show deep-vein incompetence.

FIGURE 1



Questions

1. Why does this ulcer not heal?
2. What clinical features suggest the cause of non-healing?
3. How would you restart the healing process?

Answers

1. This ulcer illustrates the features of critical colonization. As shown in Diagram 1, there is a range of bacterial insult in a wound depending on not only the virulence of the organism but also the quantity of bacteria and the host resistance to this bacterial growth.

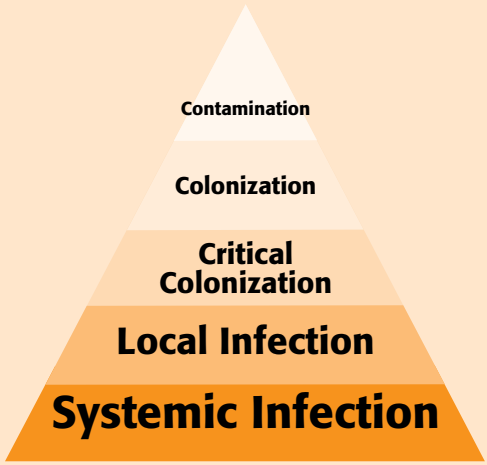
   A wound can normally tolerate contamination or colonization to a certain degree, but once critical colonization develops there is less chance for wound healing to occur.

2. Critical colonization can stall or create a non-healing wound environment. Signs of critical colonization are as follows:
   (a) **N**on-healing wound
   (b) Increased **E**xudate
   (c) Increased **R**ed colour or easy friability or bleeding
   (d) Increased **D**ebris
   (e) Increased **S**mell

   Remember N.E.R.D.S.

3. The fastest way to kick-start the healing process is through debridement by means of curettage. Subsequent treatment of the wound with a silver dressing or cadexomer iodine would help to prevent critical recolonization. Curettage may have to be repeated more than once.

DIAGRAM 1



Rob Miller, MD, FRCPC, has been practising dermatology for the past 20 years. He worked as a general practitioner in Ontario, British Columbia and South America before pursuing his studies in dermatology at McGill University in Montreal, QC. He is currently Associate Professor of Medicine at Dalhousie University and Co-director of the Chronic Wound Care Clinic at the QEII Hospital in Halifax, NS.

MEDLINE CANADA

Now you can manage the wound…and the odor.

Most occlusive dressings do a good job of managing moisture, but unfortunately they can also contribute to wound odor. Now there's a new option…

Introducing Exuderm® OdorShield™—the first odor-control hydropolymer

This patented new dressing uses cyclodextrins—naturally occurring, noncytotoxic molecules—to absorb odor as it absorbs wound exudate. It is the only dressing that combines the benefits of an advanced moisture management with powerful odor control.

More effective than charcoal

The Exuderm Odorshield dressing outperformed leading charcoal-based dressings in laboratory odor absorption tests.* While charcoal's odor-absorbing properties are deactivated by the proteins in wound exudate, Exuderm OdorShield's are actually enhanced. Other advantages: Exuderm OdorShield is conformable, absorbs more fluid than charcoal dressings, and requires no secondary dressing.

An improvement on yesterday's hydrocolloids

Exuderm OdorShield eliminates the major drawback of traditional hydrocolloids: their distinctive odor upon removal. It effectively absorbs exudate and provides a protective, occlusive barrier that promotes wound healing. Features include a tapered edge and low-friction backing to prevent rollup and extend wear time.

Ask your Medline representative for more information on Exuderm OdorShield dressings.

1-800-396-6996 | 905-403-7000
www.medline.com

*Data on file.

Patient Education:
The Creation of Patient Enablers

BY Heather L. Orsted

The primary mission of a patient enabler, such as a patient handout, should be to impart useful, "actionable" information, to *enable* best practice to occur.[1] Handouts should focus on your patient's needs and concerns while providing information that you think your patient will need to know.[2] Some patient handouts are read with interest while others are opened, scanned and dismissed. If a brochure's first impression does not create interest for the reader, the odds are that it will never be read.[1]

A key step to writing a good brochure or enabler is remembering your target audience. As a health-care professional you may be interested in the technical aspects of your patient's disease, but most patients won't care and will be bogged down by the medical jargon. They want basic information that will improve their quality of their life while living with a health-related disorder (such as diabetes). So, when creating your enabler, limit your content to what matters to the average patient, use the "KIS" principle (Keep it Simple), and try writing the enabler so your family will understand the information you are sharing.[1]

Handout text can be made more readable through the use of short words, short sentences, and short paragraphs. Low socioeconomic status, minimal education, and English as a second language correlate with reading difficulties, yet many people with reading difficulties have no outward signs of their disability.[3] According to recent Statistics Canada data, 48 per cent of Canadian adults have low literacy, leading to difficulty in interpreting written communication in everyday life.[4] An appropriate reading level, therefore, can make or break your handout. Patient education material should aim for a reading level at the fifth or sixth grade [Editor's note: For your interest the article you are reading now is at a grade 10 level]. If you are writing for the elderly or visually impaired (such as persons with retinopathy), use a larger type size—at least a 12-point font—and avoid using capital letters, which are harder to read.[2]

Keep the topic of the handout narrow; for example, a brochure on diabetes may be too long or too general to hold the interest of the reader, but a brochure on why people with diabetes should check their sensation is much more likely to be useful. Remember, 80 per cent of any handout should be directly relevant to the recipient.

It is true that a picture is worth a thousand words, so be creative when creating enablers. Insert visuals such as a good drawing or a photograph. The right visual can be more effective than paragraphs of text and will help overcome language and reading-level barriers.[1]

Effectively supporting a change in behaviour involves several approaches. Well-written, appropriately designed educational material for patients is only one strategy in a host of strategies to support change.[3] It is, however, a great first step!

Heather Orsted, MSc, RN, BN, ET, is a co-director of the University of Toronto's International Interprofessional Wound Care Course and has made major contributions to wound-care education both nationally and internationally.

References

1. Patient Education: Options for the Modern Healthcare Practice. Available online at www.u-write.com. Accessed June 9, 2006.
2. Clear Writing. Available online at http://uuhsc.utah.edu/pated/authors/clear_writing.html. Accessed June 9, 2006.
3. Designing Patient Education Materials. Available online at www.fammed.washington.edu/predoctoral/ruop/patientedu_materials.htm. Accessed June 9, 2006.
4. International Adult Literacy and Skills Survey. 2003. Available online at www.statscan.ca/Daily/English/051109/d051109a.htm. Accessed June 9, 2006.

To learn how to assess a document's readability using Microsoft Word®, visit the CAWC Web Site at www.cawc.net and click on *Wound Care Canada*.

How Are Your Feet Feeling?

A Simple Test that Could Save Your Feet

This patient/caregiver enabler was developed by Martine Albert, RN, BScN, IIWCC, to help facilitate the use of CAWC monofilaments by patients with diabetes.

Preventing foot sores should be a major goal of people with diabetes. Sometimes people who have diabetes do not feel pain or hot and cold sensations on their feet. This is called a Loss of Protective of Sensation, or "LOPS." A loss of sensation can also be referred to as *sensory neuropathy*. This condition increases a person's risk for injury to their feet. If LOPS is found, it is essential that the patient's feet get proper attention and care.

It is important that feet be *routinely* tested to see if they have a change in sensation. A quick, easy and inexpensive test can be done using a small piece of monofilament similar to a piece of fishing line. If a person cannot feel the monofilament on one or more sites on their feet there is an increased risk of injury. The test outlined below can be done by a health-care professional or by anyone trained in the procedure and will help determine if there is a loss of protective sensation.

How to Perform Sensory Testing

Step 1

- Ask the person who will be tested to get in a comfortable position.
- Remove his or her shoes and socks.
- Explain the test and the reason for doing it.
- Show the monofilament.
- Demonstrate on their forearm how the monofilament bends and feels.
- Clarify that the filament is not sharp and is like a fishing line.

Step 2

- Explain that you will be touching the feet (one at a time) in 10 areas (see Diagram 1 for the locations).
- Make sure the feet are in a neutral position and ask the person being tested to close their eyes.
- Ask them to say "yes" when they feel the filament and, if they can, to tell you where they are feeling it.

Step 3

- Hold the monofilament at 90° degrees to the foot.
- Press it against the first site.
- Make sure there is enough pressure to bend the filament into a C curve (see Diagram 2).
- Keep the pressure in place for one to two seconds.
- Do not slide and avoid making repeated contact in one area.

Step 4

- Keep a record using a + sign for feeling or a – sign for no feeling, then add the + signs to get a score.
- Change the sequence of test sites to prevent the person from sensing a pattern.
- Do not test over callouses or corns.
- Discuss your findings with the person being tested.
- Provide education as needed.

Conclusion

The monofilament tool can be a useful screening and assessment test to identify LOPS and to help reduce the incidence of diabetic foot problems.

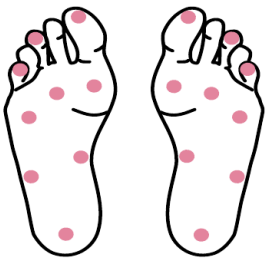
To order monofilaments, visit the Boutique section of the CAWC Web site at www.cawc.net.

DIAGRAM 2

DIAGRAM 1

10 Site Sensation Testing using a 5.07 gram monofilament

Right foot



Left Foot

And also on the dorsum of ***each*** foot.

Check for sensation at each of the following sites:

Sites 1-3: Toes: 1st ____ 3rd ____ 5th ____

Sites 4-6: Balls of foot: 1st ____ 3rd ____ 5th ____

Sites 7-10: Arch: _____ Other side of arch: ____ Heel ____ Top of foot: ____

Score _____/ 10

Tips for creating effective enablers are available in the *Wound Care Canada* section of the CAWC Web Site at www.cawc.net.

What's New with the RNAO Best Practices Program?

BY Tazim Virani, RN, MScN, PhD(c)

Over the past year, much activity has taken place with Canada's homegrown program of best practice guidelines development, dissemination, implementation and evaluation. The Registered Nurses' Association of Ontario (RNAO) continues to lead and partner with multidisciplinary teams and health-care organizations on the following:

- A 2005 update to the 2002 *Best Practice Guideline on Prevention of Pressure Ulcers* with new evidence and additional resources
- An accompanying implementation tool on "repositioning techniques"
- An educational package for registered nurses and registered practical nurses on assessment and management of pressure ulcers

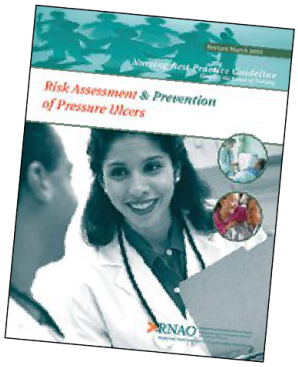
Other guideline implementation resources have been developed:

- Toolkit: Implementation of Clinical Practice Guidelines
- Educator's Resource: Integrating Best Practice Guidelines
- Sustainability of Best Practice Guidelines Implementation

The above and more are available at www.rnao.org.

With the vision to create robust research in guideline implementation and impact assessment, the RNAO has partnered with the University of Ottawa, School of Nursing, and established the Nursing Best Practice Research Unit (NBPRU). This unit provides opportunities for researchers to share and collaborate on research interests related to best practices. In its short one-year history, the NBPRU has provided the bedrock for the commencement of over one dozen research projects. The NBPRU website will soon be launched at www.nbpru.ca.

The RNAO is holding its biennial



International Conference on Evidence-based Best Practice Guidelines: Setting the Context for Excellence in Clinical Practice and Healthy Work Environments on June 7 and 8, 2007, in Markham, Ontario. Details can be found at www.rnao.org.

Wound Care Canada Guide to Networking

Networking is productive and fun, which is why it will always be a part of professional growth. Here are some guidelines to help you network:

- Attend functions where you can meet professional contacts. Conferences, educational sessions, meetings and social events are great places to meet others who share your interests.
- Join committees and task groups made up of people you don't regularly work with.

When you meet someone new:

- Always have a current business card ready to hand out, and make sure that you obtain the business card of the person you are networking with to be used for follow-up.
- Establish an attitude that is directed to helping someone out–not a "what is in it for me?" attitude. Always watch for opportunities to help the people around you. Make their needs a priority, and don't expect *quid pro quo* (payback). Be there for people because it's the right thing to do.
- Listen very carefully to the person you are speaking with and respond appropriately.
- Build a relationship through professional interests.
- Follow up with each contact you make within 48 hours.

At conferences:

- Go through the conference agenda and identify people you want to meet.
- E-mail these people ahead of time and set up a meeting time and place at the conference.
- Use conference-related social events as a place to meet new people. At dinner try to sit beside or near the people you want to get to know.
- The exhibit hall can be like the hallway at high school: a place to bump into people and stop and talk. If you meet people here, you can set up a meeting for later where you can talk without distraction.
- Organize informal meetings with like-minded health-care providers, (for example, occupational therapists), and book a meeting room to discuss topics of interest.

Networking is described as meeting people whom you can help and who can help you. As Ralph Waldo Emerson stated, "It is one of the most beautiful compensations of this life that no man can sincerely try to help another without helping himself … serve and thou shall be served"

Corrections

In the special "Best Practice" issue of *Wound Care Canada* (Volume 4, Number 1):

In the article "Best Practice Recommendations for Preparing the Wound Bed: Update 2006," Table 9 on page 25 should have indicated that *some* silver dressings *can* be moistened with saline.

In the article "Best Practice Recommendations for the Prevention and Treatment of Venous Leg Ulcers: Update 2006," in the first line of Table 3 on page 50, for "Low" pressure, with the characteristic "Single Layer" the example should be "tensors" not "Comprilan™."

Dans le numéro spécial de *Wound Care Canada*, sur les Recommandations des pratiques exemplaires (2006, Volume 4, Numéro 1):

Dans l'article « Recommandations des pratiques exemplaires pour la préparation du lit de la plaie : Mise à jour 2006, » le Tableau 9 à la page 81 aurait dû indiquer que *certains* pansements d'argent peuvent *être* humidifiés avec de la solution saline. Mupirocine: aurait dû être classé comme un agent pour le SARM et non pour le *Streptocoque*.

A New Initiative: The World Wound Care Alliance (WWCA)

According to John Macdonald, president of the Association for the Advancement of Wound Care (AAWC), adequate, medically sound care for acute and chronic wounds is arguably the most urgent, unaddressed health need in the developing world.

The cascade from infection to systemic complications, hospitalization, amputation and death is inevitable if there is no effective intervention. In addition to the etiological factors that lead to chronic wounds, risk factors in the developing world are compounded by parasitic, bacterial, and viral exposure, road accidents, and the indiscriminate use of guns. Perhaps the most poorly understood chronic wound endemic to these areas is the "tropical ulcer"—a leg wound that presents undefined by the usual etiologies (e.g., ischemia, diabetes) normally seen in Western cultures—which represents a debilitating disease process that is minimally understood. Plus, the face of the AIDS tragedy evolving in these nations can be visually defined in the chronic wound.

The World Wound Care Alliance (WWCA) was born of the AAWC board's collective determination to address this global wound-care crisis. Following are some frequently asked questions and answers regarding the WWCA's mission and vision.

What is the WWCA?

The WWCA is an initiative within the mission of the AAWC and is dedicated to bringing the science of wound care to underprivileged persons in North America and to developing countries. This entity is similar to a non-governmental organization (NGO) for international health care.

Currently a pilot study is being carried out by a group of AAWC members and University of Miami Department of Epidemiology and Public Health professors and graduate students. The purpose of the study is to define templates for logistics, public health needs, and teaching protocols. It is hoped that this team will visit a pre-selected site within the next few months.

How will the WWCA function once the pilot study is complete?

The WWCA will act as an agency to facilitate opportunities for teams of medical professionals to volunteer for short-term (five to seven days) visits to pre-selected medical sites throughout the Western hemisphere. The goal of these visits will be twofold: (1) to present an outlined teaching curriculum to both medical personnel and to the surrounding community, and (2) to teach while seeing patients in a clinical setting. Each site will have an On-site Co-ordinator in addition to a WWCA North America-based Director.

Who will be on the medical teams?

Each team will consist of approximately five volunteers. Ideally, varied specialties will be represented (e.g., nursing, physical therapy, podiatry, and medicine.) Teams of friends and associates will be encouraged. Responsible family members also may accompany volunteers.

Will the WWCA provide teaching materials for volunteer preparation and on-site teaching?

Yes. Educational material will be developed by the AAWC to prepare the volunteer in the broad aspects of tropical wound assessment and treatment. A flexible, constantly revised teaching outline will be provided. Detailed volunteer "tool kits" will be provided to assist in preparation.

Who will be eligible to volunteer?

Initially, any AAWC medical professional member in good standing will be eligible to volunteer for a team assignment. We hope to announce a call for AAWC volunteers in 2007. We anticipate and look forward to collaboration with Canadian wound-care associations, including the CAWC and CAET, after the program is underway.

What will be the volunteer's financial responsibilities?

Volunteers pay for transportation to and from a program site. Many sites provide room, board, and daily transportation for volunteers once they arrive. Because the AAWC is registered as a non-profit organization with the U.S. Internal Revenue Service, most travel and living expenses and related costs incurred by a U.S. volunteer are a tax-deductible donation. Should the program extend to Canadian associations, AAWC would investigate this matter and disclose whether a similar tax-deduction applies in Canada.

What about insurance?

WWCA volunteers, in their capacity as teachers rather than the primary providers of service, should not find liability insurance to be an issue. The WWCA also adheres to all local registration requirements in each country of service. On occasion, this means that volunteers will have to submit documentation about their education, licensure, and certification status. Travel and/or health insurance will be the responsibility of the individual volunteer.

What are the expected responsibilities of the WWCA volunteer?

Each team of volunteers will be expected to file a written summary of their experience. It is believed that these reports will be a catalyst for ongoing development. Each year, the AAWC will provide a forum for WWCA volunteers to report on their experiences.

As a Canadian, how can I get involved?

Please watch the AAWC's Web site, www.aawcone.org, for updates about the WWCA. Information about WWCA can be found in the News section at the bottom of AAWC's homepage.

We are currently continuing to collect donations to help fund at least one or more pilot studies. AAWC collected nearly $9,000 from AAWC members, non-members and representatives from corporations in eight hours of exhibit time at the Symposium on Advanced Wound Care (SAWC) this past April. Anyone who believes in this mission is encouraged to contribute. Contributions can be made at the AAWC Web site. Under the Contact Us menu, you will find an option to contribute to AAWC. Donations can also be made by phone at 866-AAWC-999. Checks made payable to AAWC WWCA Fund can be mailed to AAWC, Attn. WWCA Fund, 83 General Warren Blvd., Suite 100, Malvern, PA 19355, USA.

Making a Difference
When Disaster Strikes

BY Jill Allen

I watched the news the other night only to find out there had been another major earthquake, this time in Indonesia. Thousands had died and many more were left homeless. When I turned on my computer, I had an e-mail message from the Canadian Relief Foundation (CRF) asking for paramedics, orthopedic surgeons, and ICU and emergency nurses to volunteer and help on a medical relief mission to Indonesia immediately.

This reminded me of how my trip to Pakistan in 2005 evolved following the earthquake in the Kashmir region. The Registered Nurses' Association of Ontario (RNAO) sent out a request in October of that year on behalf of the CRF asking for nurses to help on medical relief missions. I volunteered.

Initially, they had needed emergency nurses, but later when they specifically asked for nurses with wound-care experience I thought I could help.

I was a member of Team #6, which consisted of a physician, a primary nurse practitioner, a registered nurse and myself. We were based out of Muzzaffarabad in the Himalayan mountains, near the U.N. camp. We slept in summer tents and cooked on propane burners. The water was frozen in our kettle each morning.

Every day we drove to Ghari Dupata where the Canadian Forces' Disaster Assistance Response Team (DART) hospital was set up. It was like something from the television show *MASH*. We treated upwards of 60 patients per day. I saw pressure ulcers, cavity wounds that were gradually filling in, a hand that was almost degloved, skin grafts, burns, old amputation sites, dog bites, fractures, lice, scabies, and a multitude of infections. We could treat wounds and infections, set bones and suture as needed, provide health teaching and hydration, but the hardest to deal with by far was the post-traumatic stress syndrome.

Many of these victims were suffering from insomnia, lack of appetite and numerous aches and pains. We held them and cried with them as they shared the stories of their losses. How do you console someone who has lost every member of his or her family?

One 30-year-old gentleman came to the hospital complaining of chest pains. On examination he had an apical pulse of 150. We had no ECG equipment to monitor his heart. Through an interpreter, he explained that he had lost his two sons in the earthquake, as well as his entire classroom of students when their school collapsed. Each night in bed he would think about the children, his heart raced and the chest pains began. His wife was unable to leave her bed because she was so overcome with grief. We gave him medication to slow his heart rate and help him sleep at night. We encouraged him to bring his wife to the hospital for assessment and treatment as well.

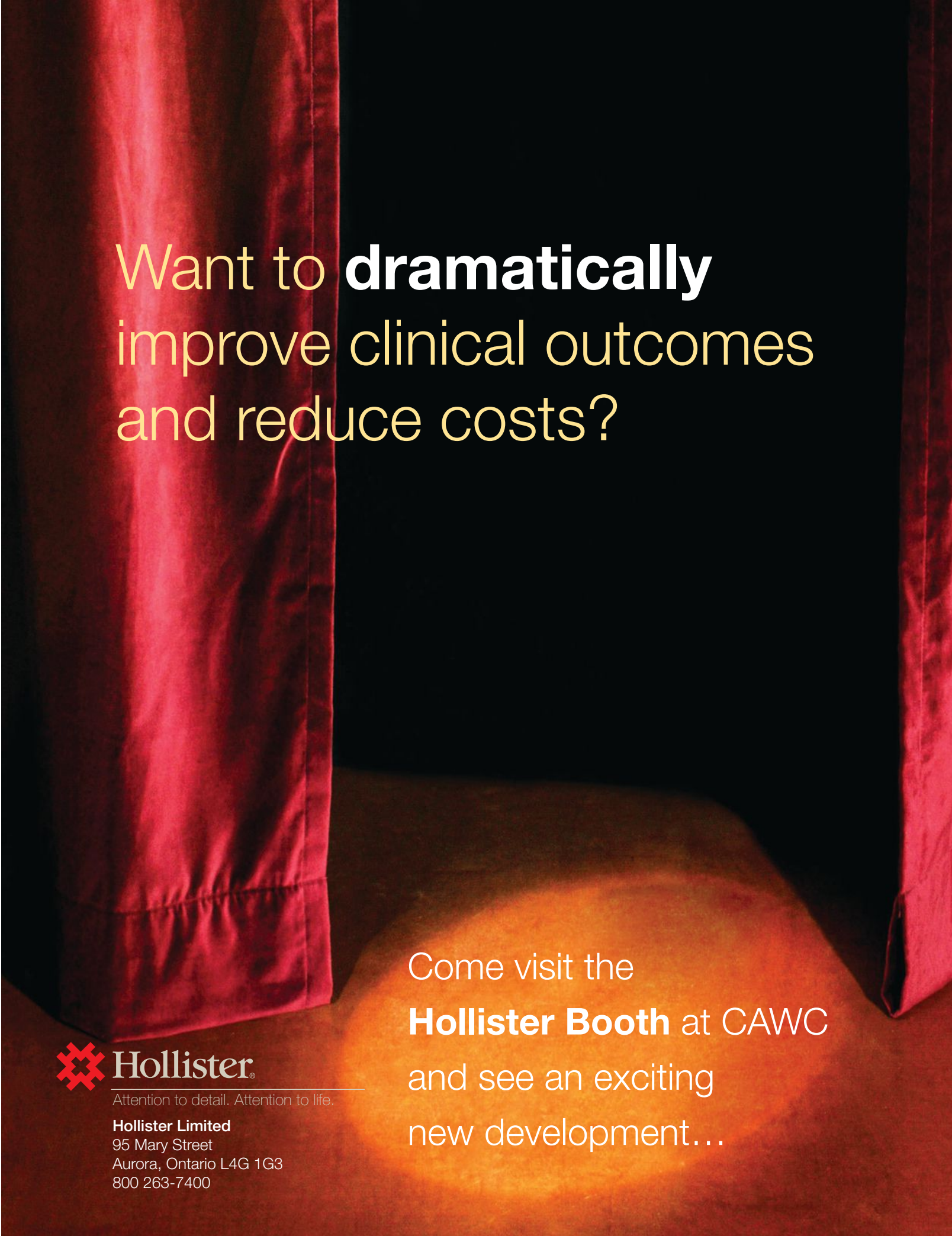
These people lost everything—their homes, families—and entire villages were wiped out. And yet they thanked us for our help. We were often humbled by their demonstrations of appreciation.

Since returning home, I often wonder about the people we treated. Did they survive the winter? Have they received the follow-up care they so desperately needed? How are they faring now? Have they rebuilt their homes or are they still living in tents? Are they still afraid to sleep indoors at night for fear of another earthquake striking?

These are some of my thoughts as I think of those I met in the Kashmir, as well as the earthquake victims in Indonesia. I can only imagine the deaths and devastation, and more families torn apart.

We are so blessed to live in Canada and to have the means to help those who are suffering. All that is needed is the desire to help those less fortunate. Each one of us can make a difference.

Jill Allen, RN, WOCN/ET, is the Senior Professional Services Advisor for Skin Health for 3M Canada.


Want to **dramatically** improve clinical outcomes and reduce costs?
Come visit the **Hollister Booth** at CAWC and see an exciting new development…
Hollister®
Attention to detail. Attention to life.
Hollister Limited
95 Mary Street
Aurora, Ontario L4G 1G3
800 263-7400

An Interview with
Master Corporal Paul Milsom Franklin

Wounded:

A Canadian Soldier's Experience Surviving a Suicide Bomber in Afghanistan

Master Corporal Paul Milsom Franklin in Afghanistan before he was injured.

INTERVIEWED BY Catherine Harley, Associate Editor, *Wound Care Canada*

Master Corporal Paul Milsom Franklin, Medical Technician, 1 Field Ambulance, 3rd Battalion, Princess Patricia's Canadian Light Infantry, Edmonton, Alberta

There was a massive explosion, and he felt himself flying through the air. He told himself not to lose consciousness. No matter what happened, he had to stay awake. He landed on the ground near a brick wall and quickly pulled off his helmet because his hair was on fire. Despite suffering second-degree burns to his hands and scalp and seeing that his leg had been severed from his body, he was able to instruct a colleague on how to give proper medical care, including the application of a tourniquet to what was left of his leg.

Paul Milsom Franklin is a 38-year-old Medical Technician (similar to a civilian paramedic) in the Canadian Forces. He is a proud soldier, a proud Canadian and a proud father. He lived to tell his story of surviving a suicide bombing in Afghanistan and was willing to share it with *Wound Care Canada* readers so that we can better understand what it is like for Canadian soldiers serving in Afghanistan who sustain acute traumatic wounds. Many of these soldiers will enter civilian hospitals, and Canadian clinicians need to be prepared to care for these "new" war veterans.

Master Corporal Franklin after his surgery.

Q Why did you decide to pursue a military career and how long have you been a part of it?

Seven years ago I decided to pursue a military career in order to continue my education and have the opportunity to travel globally. I believed that the military could provide an interesting and dynamic career path.

Q What led you to become a Medical Technician?

I had the opportunity to participate with the Medical Team and really found it rewarding. I enrolled in Basic Medical Training and then completed the Paramedic program.

Q How many times have you been deployed overseas with the Canadian Forces?

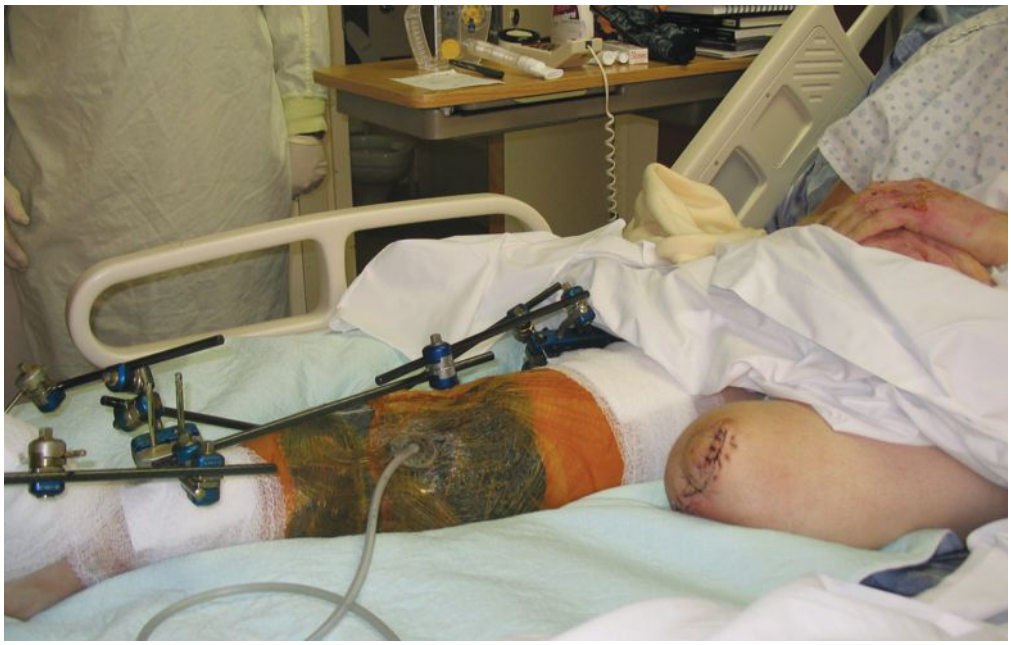
I have experienced two tours in Afghanistan. The first tour was in 2004 and lasted for two months. I was stationed at Camp Julien and was involved in teaching Afghan soldiers basic medical skills. I was also part of the camp patrol. The second tour was in late 2005 for five-and-one-half months in Kandahar, Afghanistan. I was working with the Provincial Reconstruction Team, funded by the Canadian Government, to help rebuild buildings and schools. I also assisted in providing security during this process.

Q How did your family react when they found out you were returning to Afghanistan when things were really heating up?

My family was very happy and supportive, because they understood that participating in this mission was very important to me. I told my wife and son that I would come back.

Q Tell me about the day you were injured. Where were you? Who were you with? What happened to you?

On January 15, 2006, I was driving a Canadian Forces G-Wagon (a military SUV) into the city of Kandahar accompanied by two other soldiers and a diplomat. A suicide bomber who was driving a taxi started to come after us. He drove into the side of our vehicle, hitting us hard, and seven rockets exploded. The diplomat was killed instantly. My colleagues and I were thrown 20 metres in the air, and I landed 50 metres from the vehicle, near a brick wall. I kept telling myself, "Don't pass out, stay awake." During the explosion, my left leg was blown off and my hair was set on fire. I quickly pulled my helmet off and rubbed my face and hair to put the fire out. I sustained second-degree burns to my hands and scalp and first-degree burns to my forehead. I looked over and saw that my left leg had landed near me. I reached out to try and grab it, but it was beyond my reach. A military colleague came and helped me to apply a tourniquet to what was left of my left leg. I was able to give instructions on how to deliver proper medical care. My remaining right leg was folded underneath my body; it was missing the tibia and all of the flesh and had compound fractures. I was immediately transported to the Provincial Reconstruction Site, Camp Nathan Smith Base, where my right leg was straightened out. I was then prepared for transport to the Kandahar Air Field where I was subsequently airlifted to Landstuhl, Germany, where both Canadian and American soldiers are treated for acute injuries at the base hospital.



Master Corporal Franklin at the University of Alberta Hospital in Edmonton before the amputation of his right leg.

In the June 19, 2006, issue of Time (Canada), Paul Milson Franklin was acknowledged as one of "Canada's Heroes"—people who have made a difference in their communities and country.

Q What happened to the other two soldiers who were with you?

The two soldiers survived but sustained brain injuries, one minor and one major. They are currently undergoing rehabilitation. There were also about 10 bystanders who were injured and three bystanders who were killed.

Q What helped you "survive" this devastating situation?

I kept telling myself that I could make it if I stayed awake. I thought about helping my injured colleagues. I had made a commitment to my wife and son that I would come home. The military notified my wife, letting her know that I had been in an accident but that I was stable. She flew to Germany with my son to be with me.

Q Once you were at the base hospital in Landstuhl, Germany, how did the medical team treat your right leg?

They cleaned out all of my wounds and discovered that my remaining right leg was infected. I ended up contracting an Afghan microbe* as well as MRSA. I was put on systemic antibiotics. They applied a medical device called Vacuum Assisted Wound (VAC®) Therapy to my left leg. VAC® Therapy saved my life by reducing my risk of systemic infection. They then started what would become the first of 21 surgeries to try and save my remaining leg by installing fixaters.

Q What happened next?

Once I was well

enough to make the trip, we flew back to Canada where I was admitted to the University of Alberta Hospital in Edmonton. The surgeons tried to save my remaining leg. I had multiple surgeries and major attempts at reconstruction. It was very difficult for my son to see me in the hospital going through surgeries with limited results. I assessed my options, and taking into consideration that I was at high risk for infection, and had a low chance of ever rehabilitating the leg, I decided that amputation of my remaining leg was the best option. I had a transfemoral amputation of the right leg.

Q Could you describe the next steps in your recovery?

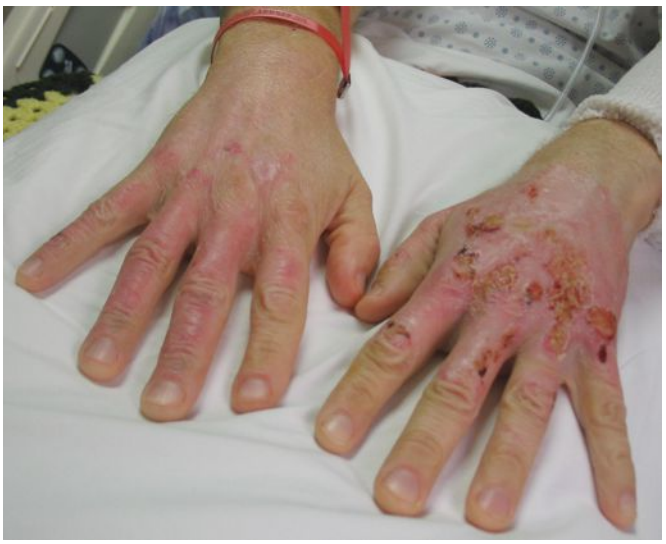
I am currently receiving rehabilitation at the Glenrose Rehabilitation Hospital in Edmonton. I have been fitted with two "C-Legs"** and can walk up to one kilometre without getting tired. Mobilizing does take time and requires a great deal of energy and patience.

Q What is important when caring for military personnel who have sustained acute traumatic wounds?

Psychologically, it is important to be comfortable to ask questions about what happened to the injured person. Listen to their story because they will have a story to tell. Be respectful of their situation, and if they don't want to talk, just be there. Physically, infection in acute traumatic wounds is a real issue and needs to be dealt with. It is important to provide information as to what is happening to their body and involve them in the decision-making process.

Q What is next in your career with the Canadian military?

I will be going back to work as soon as I am able. I cannot be deployed overseas in the future, but I have no regrets. I will be teaching tactical combat casualty care at the base in Edmonton to soldiers in the Medical Team. This is my next mission, and I look forward to it.



Second-degree burns on Major Corporal Franklin's hands.

* For more information on "superbugs" and the military, read the CBC Indepth article at www.cbc.ca/story/science/national/2006/02/22/acinetobacter060222.html.

** For further information on C-Legs, go to www.ottobockus.com.

If you are interested in learning more about a medical career in the military please visit www.recruiting.forces.gc.ca.

The Interdisciplinary Lower Leg Assessment Form

continued from page 30

References

1. Eberhardt RT, Raffetto JD. Chronic venous insufficiency [Electronic version]. *Circulation*. 2005;111(18):2398-2409.
2. Flugman SL, Clark RA. *Stasis dermatitis*. eMedicine. 2005. Available online at www.emedicine.com/derm/topic403.htm. Accessed April 23, 2006.
3. Földi M, Földi E. Lymphostatic diseases. In Földi M, Földi E, Kubik S (eds.). *Textbook of Lymphology for Physicians and Lymphedema Therapists*. Munchen: Elsevier. 2003. 254.
4. Goodman CC, Snyder TEK. *Differential Diagnosis In Physical Therapy*, Second Edition. Philadelphia, PA: WB Saunders Company. 1995.
5. Greenberg AS, Hasan A, Montalv BM, Falabella A, Falanga V. Acute lipodermatosclerosis is associated with venous insufficiency [Electronic version]. *Journal of the American Academy of Dermatology*. 1996;35(4):566-568.
6. *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*, Fifth Edition. Philadelphia, PA: WB Saunders Company. 1992:468.
7. Mondry T, Riffenburgh RH, Johnstone PA. Prospective trial of complete decongestive therapy for upper extremity lymphedema after breast cancer therapy. *The Cancer Journal*. 2004;10(1):43-48.
8. Murray J. Leg ulceration part 1: Aetiology and pathophysiology [Electronic version]. *Nursing Standard*. 2004;19(1):45-54.
9. Obrien J, Chennubhotla S, Chennubhotla R. Treatment of edema [Electronic version]. *American Family Physician*. 2005;71(11):2111-2117.
10. Registered Nurses' Association of Ontario (RNAO). *Nursing Best Practice Guideline: Assessment and Management of Venous Ulcers*. Toronto: RNAO. 2004. Available online at www.rnao.org/Storage/11/556_BPG_venous_leg_ulcer.pdf.
11. Reid DR. *Sports Injury Assessment and Rehabilitation*. New York: Churchill Livingstone Inc. 1992.
12. Stewart P. The Differential Diagnosis of Lymphedema. [Presentation] National Lymphedema Network Conference. October 20, 2004. Reno, NV.
13. Thomas CL. *Taber's Cyclopedic Medical Dictionary*, 19th Edition. Philadelphia, PA: Davis Co. 2001.
14. Williamson D, Paterson DM, Sibbald RG. Vascular assessment. In Krasner DL, Rodeheaver GT, Sibbald RG, (eds.). *Chronic Wound Care: A Clinical Source Book for Healthcare Professionals*. Wayne, PA: HMP Communications. 2001:505-516.
15. Wolff K, Johnson R, Suurmond D. *Fitzpatricks Color Atlas & Synopsis of Clinical Dermatology*, Fifth Edition. New York: McGraw-Hill. 2005:476
16. *Medical-Surgical Nursing*, Third Edition. 1987;1093.

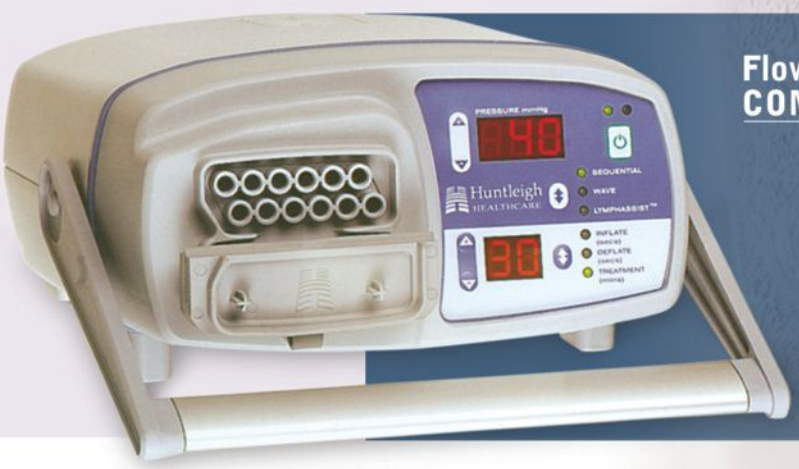
VALCO

mediven

Mediven **ULCER KIT:**

THE STRATEGY FOR THERAPEUTIC SUCCESS IN INTEGRATIVE CARE OF ACUTE LEG ULCERS

Mediven® Ulcer Kit, 2 components: Mediven Ulcer conceived for permanent compression for night and day treatment during the acute phase. The silver bonded to the yarn provides an effective antibacterial and antimycotic effect. Mediven Ulcer Plus, promotes and reinforces compression during the patient active phase of the day. Mediven Ulcer Kit safety, compliance and efficiency.



Flowtron Hydroven Intermittent COMPRESSION SYSTEM:

NEW STANDARDS IN THE TREATMENT OF VENOUS AND LYMPHATIC DISORDERS

Flowtron Hydroven 3 and Flowtron Hydroven 12 provide clinically effective non-invasive dynamic compression to the limbs to treat a wide variety of vascular and lymphatic conditions. Our Unique Flowtron Hydroven 12 offers a variety of cycles such as Gradient sequential, Wave Therapy and LymphAssist. Lymph Assist provides a sequence of pressures proximal to distal similar to MLD treatment.

PRODUITS VALCO PRODUCTS
MANUF./DISTR. J. VAILLANCOURT CORP./LTÉE/LTD
597 DUVERNAY ST, VERCHÈRES QC CANADA J0L 2R0
TEL.: 1 800 361.3153 FAX: 1 888 583.6827
WWW.VALCO.CA

Articles of Interest
Literature Review

Reviewers

Heather L. Orsted, RN, BN, ET, MSc

Leah Shapera, RN, MSN, GNC(c)

The Paths from Research to Improved Health Outcomes

Authors: Glasziou P, Haynes B

Publication: *Evidence-Based Medicine*. 2005;10:4-7.

Reviewer: Heather L. Orsted, RN, BN, ET, MSc

What happens when McMaster meets Oxford? This is an interesting discussion paper on how evidenced-based medicine (EBM) "should not just be concerned with clinical content but also about the processes of changing care and systems of care." Glasziou and Haynes simply ask clinicians to look at two aspects of EBM: you need to get the evidence *straight* and you need to get the evidence *used*.

One key point in this paper is that the discussion does not end with clinicians getting the information; it also involves getting patients to adhere to practice based on the evidence. This paper also includes a diagram depicting the research-to-practice pipeline, which is appealing for visual learners.

This is a very useful paper for the clinician struggling to support a shift toward best practice.

Further to this article, Glasziou and Haynes are on the team that has recently published *Evidenced-Based Medicine: How to Practice and Teach EBM*, Third Edition.*

*Straus S, Scott Richardson W, Glasziou P, Haynes RB. *Evidence-Based Medicine*, Third Edition. Edinburgh: Elsevier Churchill Livingstone. 2005.

Analgesic Effects of Topical Methadone: A Report of Four Cases

Authors: Gallagher RE, Arndt DR, Hunt KL

Publication: *Clinical Journal of Pain*. 2005;21(2):190-192.

Reviewer: Leah Shapera, RN, MSN, GNC(c)

The objective of this case series was to find both an opioid and a delivery system that would provide lasting pain relief between dressing changes for patients with open wounds. While studies have shown that topical morphine (often mixed with a gel) can be applied to open wounds to achieve a degree of pain relief, there is significant variation reported in the duration of pain relief achieved. This means that relief will not consistently last between daily dressing changes, which makes it generally unsuitable for the palliative care population.

In this study, four cases are presented. In each case, methadone powder (100 mg) mixed in absorbent protective powder (10 g) is sprinkled on the open wound once daily at the time of each dressing change.

The authors found that the best results were achieved when using the topical preparation on more exudative wounds with exposed tissue. Drier wounds with eschar showed less positive response, as the powder mixture tended to adhere to the wound beds. There were no reported or observed adverse effects from the topical methadone, nor did the mixture interfere with wound healing. As the authors point out, it has been noted that opioids may actually reduce wound inflammation, which would help with both pain and tissue repair.

In the last case presented, the patient did not experience any analgesic effect from the methadone mixture (after multiple attempts). This same patient had no significant improvement with oral methadone either. In this case the authors presumed that the patient did not have opioid receptors sensitive to methadone, and point out how this illustrates that "peripheral opioid receptors of an individual are from the same population as that individual's central receptors."

In summary, this short case series demonstrates that topical methadone is absorbed and can be effective in controlling pain in exudating wounds with exposed tissue. The degree of topical absorption is variable and likely somewhat dependent upon the site of the wound, the amount of eschar, and the degree of local peri-wound circulation.

It would be important for this study to be replicated with a larger sample size. Additionally, studying the effects of the topical methadone mixture used could be extended to populations other than palliative care. Nonetheless, the authors are to be commended for their innovative efforts in searching for new and more effective methods of pain management, as these are desperately needed to improve the comfort and quality of life for patients with wounds.

Take a closer look.

The 3M™ Tegaderm™ brand is expanding.

The Tegaderm™ brand you've trusted for over 20 years is expanding its family of dressings to include:

- **Advanced Wound Care**
- **Surgical Site**
- **IV Site Secural & Protection**

New packaging and naming will simplify product selection, and new products are designed to be simple, dependable, and trusted. And be sure to look for Tegaderm Ag Mesh – our newest member of the *Tegaderm Family of Products*.

Visit the new Tegaderm™ brand website at www.3M.com/Tegaderm or call 1-800-563-2921.

3M™ Tegaderm™ Dressings SIMPLE. DEPENDABLE. TRUSTED.

Product shown is 3M™ Tegaderm™ Transparent Film Dressing #9519HP.

3M Health Care

Palliative Dilemmas *continued from page 13*

6. Beckett R, Coombs TJ, Frost MR, McLeish J, Thompson K. Charcoal cloth and malodorous wounds. *Lancet*. 1980;2(8194):594-595.
7. Price E. Wound care: The stigma of smell. *Nursing Times*. 1996;88(20): 71-72.
8. Grocott P. Assessment of fungating malignant wounds. *Journal of Wound Care*. 1995;4(7):333-336.
9. Boardman M, Mellor K, Neville B. Treating a patient with a heavily exudating malodorous fungating ulcer. *Journal of Wound Care*. 1993;8(5):216-218.
10. Langemo, DK. Quality of life and pressure ulcers: What is the impact? *WOUNDS*. 2005;17(1):3-7.
11. Fleck CA. Ethical wound management for the palliative patient. *Extended Care Product News*. 2005;100(4):38-46.
12. Moody M. Metrotop: A topical antimicrobial agent for malodorous wounds. *Br J Nurs*. 1998;7:286-289.
13. Hampson JP. The use of metronidazole in the treatment of malodorous wounds. *Journal of Wound Care*. 1996;5(9):421-425.
14. Van Toller S. Invisible wounds: The effects of skin ulcer malodors. *Journal of Wound Care*. 1994;3(2):103-106.
15. Gold GH, Pugh EN. The nose leads the eye. *Nature*. 1997;385:677-679.
16. Dalton P, Wysocki CJ, Brady MJ, Lawley HJ. The influence of cognitive bias on the perceived odor, irritation and health symptoms from chemical exposure. *Int Arch Occup Environ Health*. 1997;69:407-417.
17. Sapico FL, Ginunas VJ, Thornhill-Joynes M, Canawati HN, Capen DA, Klein NE. Quantitative microbiology of pressure sores in different stages of healing. *Diagn Microbiol Infect Dis*. 1986;5:31-38.
18. Lindholm C. Pressure ulcers and infection: Understanding clinical features. *Ostomy/Wound Management*, May 2003;49(5A):4-7.
19. Kingsley A. A proactive approach to wound infection. *Nursing Standard*. 2001;15(30):50-58.
20. Percival SL, Percival PG, Bowler PG, Russell D. Bacterial resistance to silver in wound care. *Journal of Hospital Infection*. 2005;60:1-7.
21. Kalinski C, et al. Effectiveness of a topical formulation containing metronidazole for wound odor and exudate control. *WOUNDS*. 2005;17(4): 84-90.
22. Köse AA, Karabagli Y, Kürkçüoglu M, Çetin C. Alpha Sepiolite: An old clay mineral, a new dressing material. *WOUNDS*. 2005;17(5):114-121.
23. Ovington L. Bacterial toxins and wound healing. *Ostomy Wound Management*. 2003;49(7A):8-12.
24. Lipman RDA. Avery Dennison Medical. Odour absorbing hydrocolloid dressing for direct wound contact [Poster Number 82]. Wound Healing Society (WHS) 15th Annual Meeting, Chicago. May 18-21, 2005.
25. Fleck CA, Frizzell LD. When negative is positive: A review of negative pressure wound therapy. *ECPN*. 2004; 92(2):20-25.

Processus de validation d'une traduction française … *suite de la page 28*

Scale for predicting pressure sore risk. *Nursing Clinics of North America*. 1987;22(2):417-428.
7. Braden B, Bergstrom N. A conceptual schema for the study of the etiology of pressure sores. *Rehabilitation Nursing*. 1987;12(1):8-12.
8. ——. Clinical utility of the Braden Scale for predicting pressure sore risk. *Decubitus*. 1989;2(3):44-46, 50-51.
9. Braden B, Bergstrom N. Predictive validity of the Braden Scale for pressure sore risk in a nursing home population. *Research in Nursing & Health*. 1994;17:459-470.
10. Chang AM, Chau JPC, Holroyd E. Translation of questionnaires and issues of equivalence. *Journal of Advanced Nursing*. 1999;29(2): 316-322.
11. Coutu-Wakulczyk G, Chartier L. French validation of the critical care family needs inventory. *Heart & Lung*. 1990;19(2):192-196.
12. Delgreco L, Walop W, Eastridge L. Questionnaire development: 2. Validity and reliability. *CMAJ*. 1987;136:699-700.
13. ——. Questionnaire development: 3. Translation. *CMAJ*. 1987;136: 817-818.
14. Keast D, Parslow N, Houghton PE, Norton L, Fraser C. Best practice recommendations for the prevention and treatment of pressure ulcers: Update 2006. *Wound Care Canada*. 2006;4(1):31-43.
15. Langemo DK, Olson B, Hunter S, Hanson D, Burd C, Cathcart-Silberberg T. Incidence and prediction of pressure ulcers in five patient care settings. *Decubitus*. 1991;4(3):25-6, 28, 30, 32, 36.
16. Lyder Ch, Yu C, Stevenson D, Mangat R, Empleo-Frazier O, Emerling J, Mckay J. Validating the Braden Scale for the prediction of pressure ulcer risk in blacks and latino/hispanic elders: A pilot study. *Ostomy/Wound Management*. 1998;44(3A Suppl): 42S-50S.
17. Nelson McDermott MA, Palchanes K. A literature review of the critical elements of translation theory. *IMAGE: Journal of Nursing Scholarship*.1994;26(2):113-117.
18. Registered Nurses' Association of Ontario (RNAO). *Nursing Best Practice Guideline: Risk Assessment and Prevention of Pressure Ulcers*. Toronto: RNAO. 2005.
19. ——. *Nursing Best Practice Guideline: Assessment and Management of Pain*. Toronto: RNAO. 2002.
20. Robichaud-Ekstrand S, Haccoun RR, Millette D. Une méthode pour faire valider la traduction d'un questionnaire. *Canadian Journal of Nursing Research*. 1994;26(3):77-87.
21. Salvadalena GD, Snyder MI, Brogdon KE. Clinical trial of the Braden Scale on an acute care medical unit. *Journal of ET Nursing*. 1992;19(5):160-165.
22. Tourtual DM, Riesenberg LA, Korutz CJ, Semo AH, Asef A, Talati K, Gill RDF. Predictors of hospital acquired heel pressure ulcers. *Ostomy/Wound Management*. 1997;43(9):24-40.
23. Varricchio CG. *Instruments for Clinical Health-Care Research*, Third Edition. Sudbury: Jones and Bartlett Publishers. 2004.

Systemic sclerosis *continued from page 18*

3. Aryal B, Khunder S, Schab E. Meta-analysis of systemic sclerosis and exposure to solvents. *American Journal of Industrial Medicine*. 2001;40:271-274.
4. Bovenzi M, Barbone F, Pisa FE, Betta A, Romeo L, Tonello A, Biasi D, Caramaschi P. A case-control study of occupational exposures and systemic sclerosis. *Int Arch Occup Environ Health*. 2004; 77:10-16.
5. Hafner I, Schneider AE, Burg BG, Cassina PC. Management of leg ulcers in patients with rheumatoid arthritis or systemic sclerosis: The importance of concomitant arterial and venous disease. *J Vasc Surg*. 2000;32:322-9.
6. Sibbald RG, Williamson D, Orsted HL, Campbell K, Keast D, Krasner D, Sibbald D. Preparing the wound bed: Debridement, bacterial balance, and moisture balance. *Ostomy/Wound Management*. 2000;46:14-35.
7. Sandqvist G, Akesson A, Eklund M. Evaluation of paraffin bath treatment in patients with systemic sclerosis. *Disability and Rehabilitation*. 2004;26(16):981-987.
8. Pizzo G, Scardina GA, Messina P. Effects of a non-surgical exercise program on the decreased mouth opening in patients with systemic scleroderma. *Clin Oral Investig*. 2003;7:175-8.
9. Pfizenmaier D, Kavros S, Liedl D, Cooper L. Use of intermittent pneumatic compression for treatment of upper extremity vascular ulcers. *Angiology*. 2005;56:417-423.

It's not just silver. It's ACTICOAT silver.

Protect Yourself. Protect Your Patients against a broad range of organisms including MRSA to enhance wound healing.[1]

The speed. The power. The trust.

smith&nephew

ACTICOAT◇

Wound Dressings

AN ESSENTIAL COMPONENT OF WOUND BED PREPARATION

CERTIFIED SILCRYST™ NANOCRYSTALS SILVER

150 years Innovation. For generations.

1. Strohal R, et al. J Hosp Infect 2005;60:226-230. ◇ Trademark of Smith & Nephew © 2006.
™SILCRYST is a trademark of NUCRYST Pharmaceutical Corp., used under license by Smith & Nephew Inc.

Canadian Association of Wound Care News

Pressure Ulcer Awareness Pilot Program Completed

At the end of September 2006 the CAWC's Pressure Ulcer Awareness Pilot Program (PUAPP), involving five sites across the country, came to an end. The facilities chosen for the pilot were selected to reflect the variety of care common in Canada, ranging from small to large facilities, with acute and long-term care represented. The six-month-long pilot supported knowledge transfer through a "layered" implementation of educational sessions, printed materials, a Web site and changes in procedure within each facility with the aim to improve awareness of pressure ulcers—what they are, how they develop, and how to prevent them. The ultimate aim of the program was to create a "culture shift" that would actually reduce the prevalence of pressure ulcers in each facility. Clinicians, facility administrators, and patients and their families, were all involved in the educational, practice and research aspects of the program.

At this year's CAWC annual conference, the theme will be "Working Well: Taking the Pressure Off," and the results of the PUAPP will be a highlight of the proceedings. A plenary session featuring Elizabeth Ayello and Barbara Braden, as well as pilot team leader Heather Orsted, will showcase findings from the pilot program and discuss the implications of those findings. The CAWC forums immediately following the plenary session will go into more detail about the specific clinical practice, research, education and public policy aspects of the program. If you are concerned about the prevalence of pressure ulcers in your facility or agency, you will not want to miss these sessions!

Spotlight on the CAWC Boutique

Monofilaments for Sensation Testing

Before the CAWC stepped in to fill the need, monofilaments had been difficult to purchase in Canada. Developed by our own clinicians to meet our specifications for sale in Canada, CAWC monofilaments are now available to Canadian clinicians through the online CAWC Boutique. These simple devices are used to test patients for loss of protective sensation and are invaluable to both clinicians and patients. Monofilaments come in two types: with instruction cards and without instruction cards (available in either English or French). The option that includes instruction cards are particularly useful for patients and lay caregivers, and they can be used in conjunction with the patient enabler on page 41 of this issue of *Wound Care Canada*.

Generic CAWC Products Are the "New Normal"

The CAWC Boutique contains many different products, and over the years we have altered our stock to conform to changing circumstances. Originally, we required the support of industry to help us underwrite the production of many of the Boutique items, such as the wound rulers and Quick Reference Guides. Without industry support we would not have been able to launch these items, and we are very grateful to the companies who have supported these initiatives. However, the board has decided that we are now in a position to underwrite the costs of production ourselves, and that, from now on, we will be producing generic materials. These will be phased in over the next three to four months as we use up existing stock.

To purchase any item in the online Boutique, go to the CAWC Web site at www.cawc.net and click on the Boutique link in the left-hand menu for a downloadable order form.

A New Kind of Conference

As many of you know, the CAWC recently undertook a needs assessment through an online survey of members to find out what members wanted featured at the next annual conference. After careful analysis of the survey results, the Conference Organizing Committee has developed an agenda for this fall's meeting that is sure to please all attendees regardless of their level of wound-care expertise or specific areas of interest. As well, new policies that restrict the number of sessions in which any one speaker can present will reduce redundancy and ensure the presence of a wider variety of speakers and viewpoints.

The theme of this year's conference, "Working Well: Taking the Pressure Off," is an acknowledgement of two topics on every clinician's mind: how to reduce the prevalence and incidence of pressure ulcers, and how to reduce pressure in the work environment. With this in mind, the Organizing Committee has invited special guests Elizabeth Ayello, past president of the National Pressure Ulcer Advisory Panel (NPUAP) and Barbara Braden, co-developer of the Braden Scale, to be part of the panel that discusses the "Launch of Pressure Ulcer Awareness," a topic of essential interest to all wound-care clinicians (see page 63 for more information on the CAWC's Pressure Ulcer Awareness Pilot Program).

Keynote speaker Dr. Marla Shapiro will deliver an inspirational presentation entitled "Work, Family and Self" that will help audience members balance work and family demands while maintaining a healthy lifestyle.

To provide a diversified program for improving practice in a format that gives attendees structured choice, each of the conference's four major streams has been designed to be a mini symposium within the larger conference format. Attendees may choose to attend all of the sessions in one stream or move between the streams, depending on each individual's particular needs. The four streams are

- Foundations in Wound Care: for the beginning clinician, to lay the groundwork for the fundamentals of wound care
- Research Topics: what's new in evidence-based wound care
- Clinical Topics: challenging issues that are encountered in everyday practice
- Health Service Delivery: practitioner and patient education, the use of validated tools and the growing complexity of health-care delivery affecting our practice

Within the four-stream format, topics will range from updated favourites to all-new presentations on

- Special needs of Aboriginal populations
- Bacteriology 101
- Interprofessional education for collaborative patient-centred practice
- Hyperbaric oxygen treatment
- Limb salvage—new vascular surgery techniques
- The basic science of growth factors
- Pressure ulcers as quality indicators
- Pressure reduction/relief surfaces—new thinking about the evidence
- Psychosocial aspects of living with wounds
- Bariatric complexities and effects on the health-care system
- and more!

Two new post-conference workshops will also be offered:

- So Glad You Asked: A Case Study Discussion Workshop
- Nutrition and Wound Healing

A series of great social activities will complement the main sessions, ensuring something not only for the mind but also for the heart and soul, including

- the President's Banquet, which will kick off with a cocktail reception followed by a celebration featuring a delicious dinner with wine, a great live band, dancing, prizes, award presentations and more
- for first-time attendees, a special CAWC reception that will provide an opportunity to meet CAWC board members, buddy-up with other first-timers, and get some great insider information on how to make the CAWC conference experience meaningful, productive and fun!

The conference will take place November 16-19, 2006, at the Ottawa Congress Centre in Ottawa. For more information and to register online, please visit www.cawc.net.

S-Series 2007

The CAWC will be offering two S-Series sessions in 2007: (1) in Kelowna, British Columbia, at the Grand Okanagan Resort, March 23-24, and (2) in Halifax, Nova Scotia, date and place to be announced. Visit the CAWC Web site at www.cawc.net for updates and online registration.

Scholarships Help Advance Practice

The following are excerpts from letters written by the recipients of the 2005 CAWC scholarships, outlining how the courses they have taken or the research they are doing is advancing their practice. To learn more about the benefits of receiving a CAWC scholarship, visit the CAWC Web site (click on the Scholarships link in the left-hand menu) to read all the letters in their entirety.

From Dr. Warren Rottman Educational Scholarship recipient **Lyla Reichart**: "This course [International Interdisciplinary (now Interprofessional) Wound Care Course (IIWCC)] has most certainly advanced my practice, and in turn has allowed me to pass along the knowledge I have gained to my patients. The opportunity to educate and enhance the wound-care practice of fellow nurses has been very rewarding as well."

From T.J. Smith Global Wound Academy Award co-recipient **Kimberly LeBlanc**: "The knowledge gained during this process has been very valuable over the past few months as I have been working with a group of physicians in Ottawa to establish an ambulatory wound-care clinic."

From T.J. Smith Global Wound Academy Award co-recipient **Marjorie Fierheller**: "This research project involves an investigation into the relationship between increased peri-wound skin temperature and localized wound infection in patients with chronic non-arterial leg ulcers. It is hoped that enough data can be generated to support the use of infrared thermometry in routine clinical assessment of chronic leg wounds."

From Cathy Harley Educational Grant (in memory of Aldora Harder and Cathy Foster) recipient **Karen Barratt**: "Not only has the course [IIWCC] advanced my competency and practice confidence in skin and wound care, but it has also provided me with a wonderful network of wound-care practitioners and other resources that I can access for advice or to help me problem-solve or find answers for difficult wound situations."

Tendra Wound Care Educational Scholarship [now called the Mölnlycke Health Care Educational Scholarship] recipient **Kevin Woo**: "The study I am conducting is titled 'Pain during dressing change: How does attachment style affect pain in older adults?' The finding of this study may inform us of the importance of the psychosocial environment where pain is experienced, interpreted, and expressed."

Elise Sørensen Award recipient **Nancy Giles-McIntosh**: "This course [IIWCC] was so valuable for me ... with regards to learning current therapies. It has also given me much more confidence and credibility when dealing with my peers and wound-care issues in the critical-care setting."

From CAWC Research Award recipient **Carla Wells**: "In my study, I am speaking to patients who have a diabetic foot ulcer to learn about their experience caring for and living with their ulcer ... I anticipate completing interviews by December 2006, and I hope to have the analysis and writing completed in 2007."

Heather L. Orsted Scholarship for Team Development recipients **Barbara Shanks** and **Jennie Hollings**: "Our selective [in the IIWCC course] 'Pressure Ulcers-Awareness, Prevention, Education and Management' is an education-based initiative to improve practice. Our group is one of five pilot sites selected by the CAWC to test materials, delivery and outcomes of a campaign to decrease pressure ulcers."

CAWC Online Discussion Forum Is Better than Ever!

Over the past several months the online CAWC Discussion Forum has been invaded by hackers in the form of automatic programs called "crawlers." These programs crawl across the Internet looking for bulletin boards and then post inappropriate messages. The programs play no favourites, and all bulletin boards, including the CAWC Discussion Forum, can be victimized. It took us a couple of months to come up with what we hope is a permanent fix, but we think we have solved the problem.

If you haven't visited the discussion forum lately, please do. It is a vibrant, living space that facilitates the exchange of ideas and information between wound-care clinicians across the country. Just go to the CAWC Web site at www.cawc.net and click on the Discussion Forum link in the left-hand menu.

Technology Update

To serve members better, the CAWC has moved more of its systems online. Now you can apply for scholarships by filling out online forms, submit conference poster abstracts, and register for all CAWC events. For most people, online submissions provide an easy way to get business done at any time of the day, any day of the week, from a computer at home, work or even the public library!

Mepilex® Border

New enhanced performance.

Mepilex® Border, now with **enhanced fluid handling**, **dynamic permeability**, and **reduced friction co-efficient**. Mepilex® Border's outer film is waterproof, bacterial-proof, and **viral-proof**. Its advanced multi-layered absorptive foam core promotes fluid uptake even better than before for optimal moisture balance and reduced dressing change frequency. All of this and all the benefits of Safetac® soft silicone technology, including less trauma to the wound, less pain for the patient, and less risk of peri-wound maceration.

MÖLNLYCKE HEALTH CARE
Inspiring Confidence

Introducing...

PROMOGRAN PRISMA*

Wound Balancing Matrix

For *Protection* and *Growth* in a changing environment.[1]

PROTECTION

PRISMA Matrix protects the wound bed by eliminating factors that can slow healing.

GROWTH

PRISMA Matrix promotes healthy tissue growth while simultaneously delivering silver to the wound.

Use PRISMA Matrix early in your treatment as part of good ulcer care.

1. Data on file.

Johnson & Johnson Wound Management

Johnson & Johnson Medical Products
200 Whitehall Drive, Markham (ON) L3R 0T5

Tel: (English) 1 800 668-9045
Tél. : (Français) 1 800 668-9067

Website: www.jnjgateway.com