

**Cutimed®**  
Closing Wounds. Together

A woman with short blonde hair and glasses is sitting on a dark brown leather armchair. She is wearing a white long-sleeved shirt under a dark grey vest, and dark blue jeans. Her right leg is in a white Cast Med cast, which extends from her ankle up to her knee. She is holding a white mug with a fruit design in her right hand. The background shows a wooden floor, a potted plant, and a wooden door.

## CUTIMED® TOTAL CONTACT CAST KIT

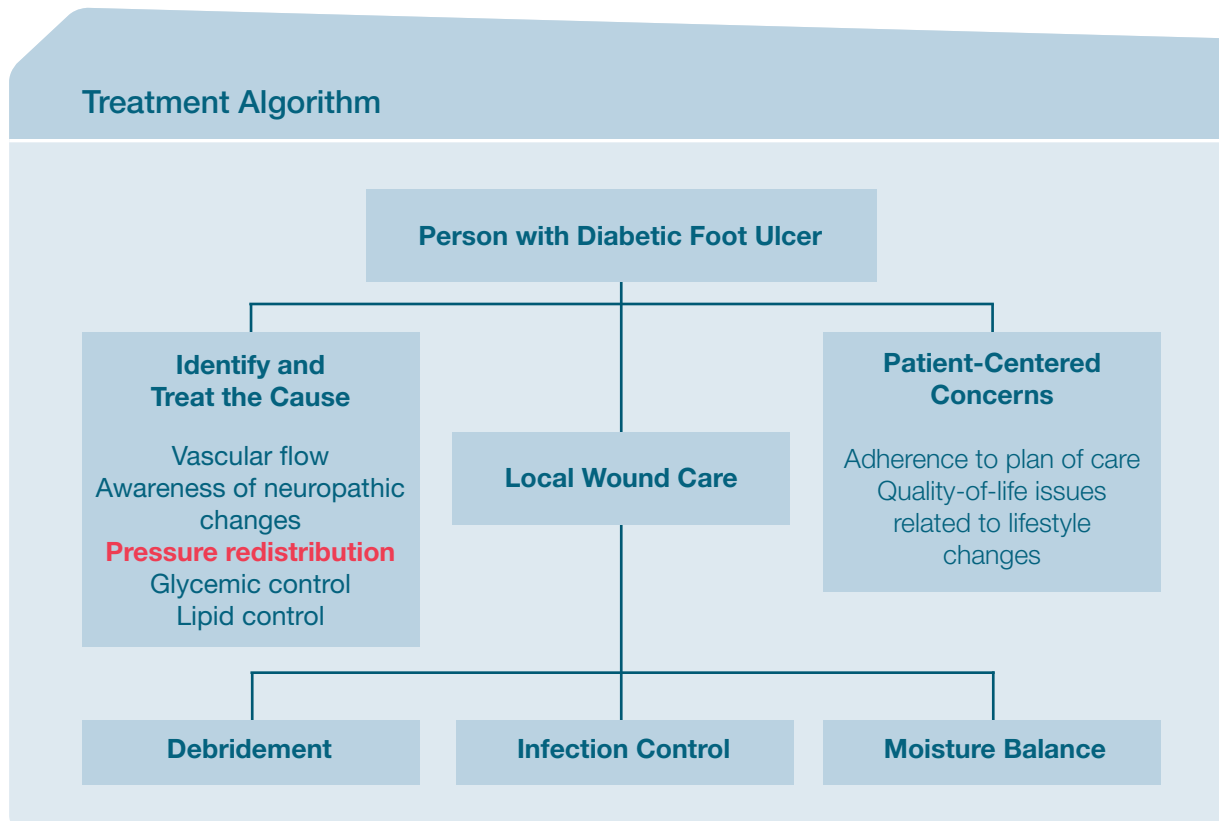
PRESSURE OFFLOADING  
GOLD STANDARD MADE EASIER

**THERAPIES. HAND IN HAND.**

**BSN** medical

# ASSESSMENT AND TREATMENT OF THE DIABETIC FOOT ULCER.

The Canadian Association of Wound Care has developed Best Practice Recommendations for the Prevention, Diagnosis and Treatment of Diabetic Foot Ulcers<sup>1</sup> and recommends the following treatment algorithm<sup>2</sup>, in which pressure redistribution is a key component in treating the cause.



## THE IMPORTANCE OF OFFLOADING

Pressure is a factor in 90 percent of diabetic plantar ulcers, and the pressure must be modified or removed. Pressure-induced ischemia occurs in tissues over bony areas of weight-bearing during ambulations and standing. Neuropathy prevents the perception of protective pain, resulting in an increased potential for tissue breakdown. Diabetic plantar ulcerations require aggressive and effective downloading in order to achieve wound healing.<sup>3</sup>

<sup>1</sup> Heather L. Orsted, RN, BN, ET, MSc; Gordon Searles, OD, MD, FRCPC, FACP; Heather Trowell, BSc, OT (c); Leah Shapera, RN, MSN; Pat Miller, RN, ET; and John Rahman, Certified Orthotist.

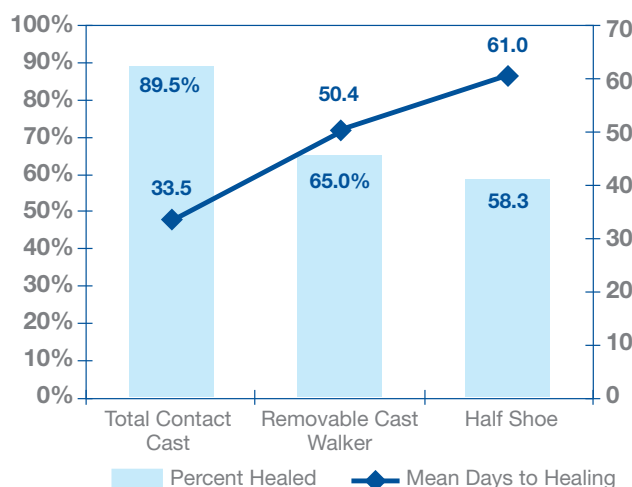
<sup>2</sup> Sibbald RG, Orsted HL, Schultz GS, Coutts P, Keast D. Preparing the wound bed 2003: Focus on infection and inflammation. *Ostomy/Wound Management*. 2003;49(11):24-51.

<sup>3</sup> Nursing Best Practice Guideline: Assessment and Management of Foot Ulcers for People with Diabetes. Toronto: RNAO. 2004

# THE OFFLOADING GOLD STANDARD: TOTAL CONTACT CASTING<sup>4</sup>

## THE SUPERIOR CLINICAL EFFECTIVENESS OF TCC IS INDISPUTABLE

A study by Armstrong et al.<sup>5</sup>, involved 63 patients with non-infected neuropathic plantar foot ulcers and compared the TCC with a removable cast walker and a half shoe.



Mueller et al.<sup>6</sup> also demonstrated that a group treated with TCC showed 90.4% healing rate in an average of 33.5 days, as the non-TCC group showed 31.5% healing in an average of 65.0 days.

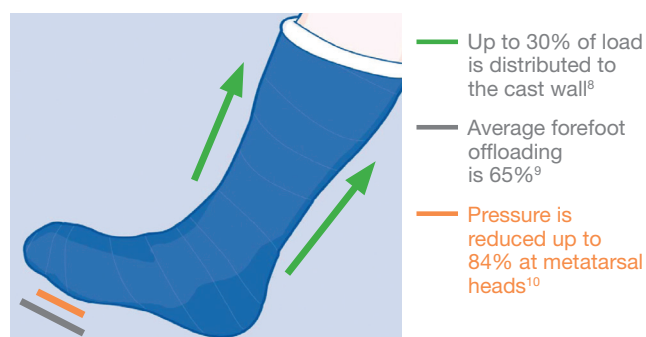
Those are just a few examples of the clinical evidence available supporting the use of total contact casting as pressure offloading device. In short:

- 18 studies (4 randomized) show total contact casting results in consistent healing of active diabetic foot wounds from 36-52 days for 85-95% of patients.
- A meta-analysis of 526 ulcers in 493 patients presented by Peter Cavanagh at the 2000 American Diabetes Association 60th Scientific Sessions, showed TCC use resulted in 88% healing in mean time of 43 days.

## TOTAL CONTACT CASTING FORCES COMPLIANCE

Armstrong et al.<sup>7</sup> demonstrated that patients using removable cast walker for off-loading wore their device on average during only 28% of their total daily activity, and even the subset most adherent to their off-loading regimen still only wore the device for a total of 60% of their total daily activity. This highlights a key advantage of the total contact cast: it is a non-removable device, which the patient must wear 100% of the time, therefore increasing treatment efficacy.

## OFFLOADING WITH A TCC



<sup>4</sup> American Diabetes Association. Consensus development conference on diabetic foot wound care. Diabetes Care 1999;22:1354-60.

<sup>5</sup> Armstrong DG, Nguyen HC, Lavery LA, et coll. Off-loading the diabetic foot wound: a randomized clinical trial. Diabetes Care 2001;24:1019-1022.

<sup>6</sup> Mueller et al. Total contact casting in treatment of diabetic plantar ulcers. Controlled clinical trial. Diabetes Care, 1989 Jun; 12(6):384-8.

<sup>7</sup> Armstrong DG, Lavery LA, Kimbriel HR, et al. Activity patterns of patients with diabetic foot ulceration: patients with active ulceration may not adhere to a standard pressure off-loading regimen. Diabetes Care 2003;26:2595-7.

<sup>8</sup> Shaw, J.E., et al. The mechanism of plantar unloading in total contact casts: implications for design and clinical use. Foot Ankle Int, 1997. 18(12): p. 809-17.

<sup>9</sup> Hartsell HD, Fellner C, Frantz R, et al. The repeatability of total contact cast applications: implications for clinical trials. J Prostheses et orthèses 13 (1):4-7, 2001.

<sup>10</sup> Birke, JA, Sims DS, Buford WL. Walking casts: effect on plantar foot pressures. J Rehabil Res Dev 22:18-22, 1985.



# CUTIMED® TOTAL CONTACT CAST KIT

**BSN MEDICAL IS SIMPLIFYING THE PRESSURE OFFLOADING GOLD STANDARD SOLUTION!**

The Cutimed® Total Contact Cast Kit has been developed in partnership with healthcare professionals dealing with diabetic foot ulcers every day. The result is a recipe that offers the most effective TCC through an easy **standardized technique**. It combines specifically chosen and proven casting materials to provide an intimate close fit and proper pressure redistribution for an **optimized healing environment**.

Cutimed TCC Kit is a TRUE total contact cast, as defined in the literature:

- Rigid and solid cast made of multiple layers
- Combination of plaster and fiberglass casting material
- Custom fit
- Limb fully enclosed and protected from external trauma



One single code for ordering: 7349900

## SOME WOUNDS HEALED WITH CUTIMED® TOTAL CONTACT CAST KIT



3 weeks



3 weeks



3 weeks



5 weeks

Ask your BSN representative about our hands-on educational sessions and training material

**BSN Medical Inc.**

4455 Autoroute Laval West, Suite 255  
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[www.bsnmedical.ca](http://www.bsnmedical.ca)  
Tel 1-877-978-5526  
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