

Optimizing Wound Bed and Diabetic Foot Ulcer Healing with Proprietary Natural Herbal Cream - A Case Series in the US

Brock A. Liden, MD/DPM/FAPWCA
OhioHealth Physician Group, OH

+ Introduction

The prevalence of diabetic foot ulcer (DFU) has been reported to be 13% in the US (third highest in the world)¹. However, issues from current wound dressings have been noted, i.e. poor moisture management, inadequate wound bed preparation, limited antimicrobial properties, and inadequate healing stimulating capabilities². A proprietary natural herbal formulation* with novel mechanism of action was previously studied in a randomized controlled trial (RCT) with 236 subjects and demonstrated significantly better healing compared to hydrofiber dressings ($p < 0.001$)³. We attempt to evaluate its efficacy in hard-to-heal DFUs in an Ohio-based clinic.

+ Methods

DFUs not responsive to standard care for at least 6 weeks with mild or no infection and adequate blood perfusion were eligible. After debridement at the clinic, the proprietary natural herbal cream* was applied twice daily by patients at home until healing or for up to 20 weeks. The wound closure and percentage change of slough, granulation tissue, epithelialization and eschar were observed at every weekly or bi-weekly visit at the clinic.

+ Results

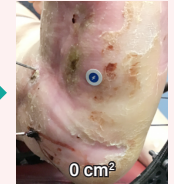
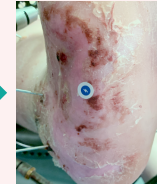
Wagner Grade 2 DFU patients with baseline HbA_{1c} 6.5% to 11.8% who were non-responsive to standard care after 6 weeks were included in the study. The size of DFUs ranged from 1.39 cm² to 5.5 cm². After using the proprietary natural herbal cream* for 1-3 weeks, patients and we soon started observing obvious change of the ulcer environment rapidly, particularly in increasing granulation tissues and promoting healing of DFUs in 2 to 4 weeks the earliest. Particularly, it is worth noting that after the proprietary cream* treatment started, a DFU aged 58 weeks healed in only 2 weeks.

+ Discussion

Unlike other medical dressings or hydrogels, the novel mechanism of macrophage regulation by the proprietary cream* is able to dually repair tissue by optimizing the wound bed and then promoting healing. The observation and results align with previous RCT results and also real-world cases collected from Egypt, Malaysia, Taiwan, and India. This sheds some light on future treatment prospects.

Case Demonstration 1

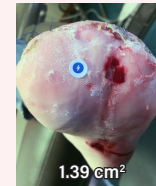
- 48 y/o male
- Type 2 DM for 6 yrs
- HbA_{1c} 5.9%
- Wagner grade 2
- Ulcer duration 58 weeks



Healed in **2 weeks**

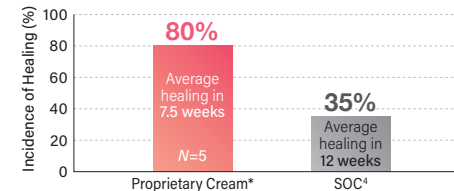
Case Demonstration 2

- 47 y/o female
- Type 2 DM for 30 yrs
- HbA_{1c} 7.4%
- Wagner grade 2
- Ulcer duration 8 weeks



Healed in **3 weeks**

+ Clinically Proven Efficacy



References:

1. Zhang P, Lu J, Jing Y, Tang S, Zhu D, Bi Y. Global epidemiology of diabetic foot ulceration: a systematic review and meta-analysis. *Ann Med*. 2017;49(2):106-116.
2. Monika P, Chandrababha MN, Rangarajan A, Waiker PV, Chidambara Murthy KN. Challenges in Healing Wound: Role of Complementary and Alternative Medicine. *Front Nutr*. 2022;8:791899.
3. Huang YY, Lin CW, Cheng NC, et al. Effect of a Novel Macrophage-Regulating Drug on Wound Healing in Patients With Diabetic Foot Ulcers: A Randomized Clinical Trial. *JAMA Netw Open*. 2021;4(9):e2122607.
4. Armstrong DG, Tan TW, Boulton AJM, Bus SA. Diabetic Foot Ulcers: A Review. *JAMA*. 2023 Jul 3;330(1):62-75.