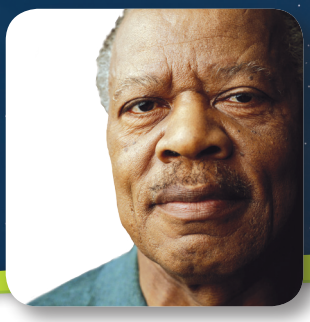


CASE STUDY

Chronic Diabetic Neuropathic Foot Ulcer

MIST Deep Healing Energy

Cost Savings Through the Addition of MIST® Therapy to Standard Wound Care

Background

Neuropathic foot ulcers are a serious complication of diabetes. 24 million Americans have diabetes[1] and 15% or 3.6 million will develop a lower extremity ulcer at some time.[2]

92,000 annual amputations are due to diabetes[3]

84% ➤ Started as a simple ulcer[4]

50% ➤ Experience a second amputation within 5 years[4]

Patient Profile: 76-year-old Male[5]

Conditions: Type 1 diabetes, hypertension, peripheral artery disease, venous insufficiency, peripheral neuropathy, chronic obstructive pulmonary disease and total knee replacement (right).

Care Setting: Long-term Care

Pre-MIST® Therapy

Wound: Wagner Grade III ulcer of the right plantar heel with chronic osteomyelitis that had been **non-healing for 14 years.**

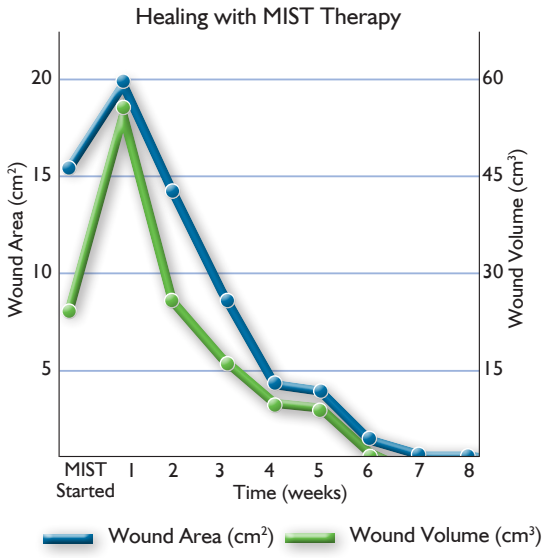
Area: 4.5 cm x 3.4 cm = 15.3 cm^2
Volume: 4.5 cm x 3.4 cm x 1.4 cm = 21.4 cm^3

Wound bed was 25% slough with bone and tendon exposure, chronic osteomyelitis and copious drainage consistent with pseudomonas.

Treatments: Compression therapy with bandages and garments, sharp and surgical debridement, negative pressure wound therapy (NPWT) and offloading shoes.

Amputation recommended by vascular and infectious disease physicians.

MIST® Therapy was added to standard wound care three times a week.



Infection can be a barrier to wound healing. The mechanical stress of the MIST® Therapy sound waves has been shown to disrupt biofilm and cause bacterial cell death in a wide range of bacterial types including MRSA, VRE and Pseudomonas.[6-9]

Post-MIST® Therapy

Outcomes: After 26 MIST® Therapy treatments over 8 weeks the **wound closed completely.** The patient was able to return home independently with his limb intact.

The costs and cost savings depicted in this case study are illustrative only and represent the types of costs that may be incurred by a health care institution. They will vary for each institution, care setting, patient type, treatment course, etc., but provide an outline for consideration and discussion.

Potential Cost Savings †

MIST® Deep Healing Energy

Average Cost of Care for Diabetic Foot Ulcer: $13,017 Annually[3] **$182,238**

No Wound Closure

Time → 14 Years

Average Cost of Amputation[10]: $84,544

MIST® Therapy and Standard Care: $3,844*

*Wound completely closed and amputation avoided***

8 Weeks

The addition of MIST® Therapy to the treatment of a non-healing diabetic foot ulcer results in significant cost savings. Not only did this wound heal after 14 years of standard wound care failed, but an amputation was avoided.

* Cost was determined using $565/week ($60 canisters, $36 for dressings, $469 rental) for negative pressure wound therapy (NPWT) and enzymatic debridement ($36) for 4 weeks (assumes 3 dressing changes per week) and $180/week was added for MIST® Therapy ($60 each for applicators/rental) for 8 weeks. Cost of extended care and infection treatment not included in this analysis.

** Results with MIST® Therapy are not necessarily representative of and may vary with each patient.

† This economic analysis is based upon empirical evidence and has not been derived from a formal cost effectiveness study.

For more case stories related to this topic and others, please contact your local Celleration representative or call (952) 224-8700.

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Please see full package insert for additional information on indications, contraindications, warnings, precautions, and side effects.

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