Treatment of Morganella morganii-Associated Non-healing Diabetic Foot Ulcer With Vaporox: A Case Report

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Abstract

Diabetic foot ulcers represent a significant complication of diabetes mellitus, characterized by mechanical changes of bony architecture often leading to chronic wounds with increased risk of infection and impaired healing. Morganella morganii, a Gram-negative bacterium, is one of the pathogens found in infected diabetic foot ulcers. It is a human gastrointestinal commensal organism that may cause widespread deadly infections. This report discusses the case of a 76-year-old male with diabetes mellitus who presented with M. morganii diabetic foot ulcer to an in-patient rehabilitation facility. Despite conventional wound care and antibiotic therapy, the ulcer failed to improve. The management approach for this patient consisted of a rehabilitation modality called Vaporox (Vaporox Inc., Denver, CO), a machine that combines ultrasonic mist and concentrated oxygen to accelerate revascularization and healing. This case highlights the potential efficacy of Vaporox as an adjunctive therapy for the management of diabetic foot ulcers, particularly those complicated by pathogens, such as M. morganii.



The Next Generation of Advanced Wound Care

Background



Patient Information

- Age: 76
- Gender: Male
- Wound Type: Diabetic Foot Ulcer
- Wound Duration: 6 months prior to Vaporox Therapy

Previous Treatments Tried

- Topical and oral antibiotics
- Offloading
- Regular debridement
- Collagen-based dressings

Comorbidities

- Type 2 Diabetes
- Hypertension
- Peripheral Artery Disease
- Chronic Kidney Disease (Stage 3)

"Vaporox has proven a good tool for wound healing! I like that it is easy to use in a Rehab setting. It has a great potential for wound recovery"

-Dr. Zhi Yu

Dolphin Pointe Rehabilitation Center

"We were able to give this resident back his freedom and quality of life. Without Vaporox, this resident likely would have never been able to return to his assisted living facility."

-Joelle Schahfer, VP of Rehab

Year: 2022

Wagner 3, 10-month-old DFU, Closed in 10 Weeks



"We healed the wound completely. This was really a success story since he was able to transition to an assisted living facility (ALF) from skilled nursing. ALF refused to take him back because of the wound so when it was resolved, he was able to return to the community with more independence."

-Joan Keightly, Director of Rehab Dolphin Pointe Rehabilitation Center