

Case Study: An Evaluation of a Muscle Pump Activator (MPA) device

Cathy Burrows RN, BScN, MScCH (Wound Prevention & Care)



Aim

To evaluate the impact of the newest version of the geko™ wound therapy device.

Case History

- J.B. is a 77 year old non-diabetic
- 20 year history of recurrent venous leg ulcers (VLU)
- Visible atrophie blanche
- General good health
- Wears compression as tolerated (Tubular mesh stockinette)
- APBI's within normal range (Lt=1.0 Rt= 0.96)
- Pain 10/10, treated with gabapentin
- November 2019, presented to wound clinic with open VLU in the left medial malleolar area
- Over the course of 15 months did not respond to best practice and multiple treatment modalities

Procedure/Method

- March 2021, the patient was introduced to the newly launched geko™ device to evaluate its impact
- Consent was obtained
- The geko™ device was placed over the fibular head of the left limb, was worn 12 hours/day for seven days/week¹
- Stimulation of the common peroneal nerve, activated the calf and foot muscles pumps
- This action decreases edema and improves microcirculatory flux and pulsatility to the wound and periwound
- Patient's caregiver was able to apply the user friendly device

Implications/Applications

Using the geko™ wound therapy device in patients with VLU significantly improves wound healing outcomes, reduces the number of nursing visits, and improves quality of life². There was also significant cost saving seen. The wound was open for 15 months prior to the application of the geko™ device and was healed with 10 weeks of therapy.

Findings/Results

- July 2021- following a 10 week course of the geko™ wound therapy, wound closed
- Gabapentin discontinued
- Described an improved quality of life
- March 2022 - wound remained closed

1) March 8 2021



2) April 30 2021



3) June 21 2021



4) July 22 2021



References

1. [Geko User Information](#)
2. [Patients-Perspectives-of-Pain-Time-and-Hope-When-Living-with-Venous-Leg-Ulcers-and-Using-the-geko](#)