

The role of the geko™, a portable electrical stimulation device, in assisted healing of an intractable mixed arterio-venous leg ulcer.

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Background

A 90 year old female with a longstanding diagnosis of mixed venous and arterial peripheral arterial disease presented with a large ulcer in her right ankle gaiter area. The ulcer had previously been treated with vacuum therapy, compression bandaging and honey dressings. She was twice admitted to hospital to receive intravenous antibiotics to treat related ulcer infections. Compression bandaging was poorly tolerated at home and had to be discontinued due to clinical progression of peripheral arterial disease.

geko™ therapy

The geko™ device was used 24 hours a day, for 14 days.

Results

Upon clinical assessment in vascular clinic, ulcer characteristics were more favourable, with active granulation tissue and a significant improvement in depth of ulcer. Wound size decreased in both longitudinal (14cm to 10.5cm) and transverse (7cm to 4.5cm) dimensions.

The right leg mixed arterial ulcer previously treated for over 6 months, demonstrated active granulation and decrease in size after only 2 weeks of treatment with the geko™ device. An allergic reaction (simple rash) to the adhesive caused discontinuation of use of the device, but the wound continued to heal with simple dressings. The rash resolved spontaneously.



Right ankle before geko treatment



Right ankle ulcer after treatment

Conclusion

A mixed venous and arterial ulcer, previously resistant to medical therapy, showed significant healing with 2 weeks of geko™ therapy. geko™ therapy was discontinued but healing continues with simple dressings.

