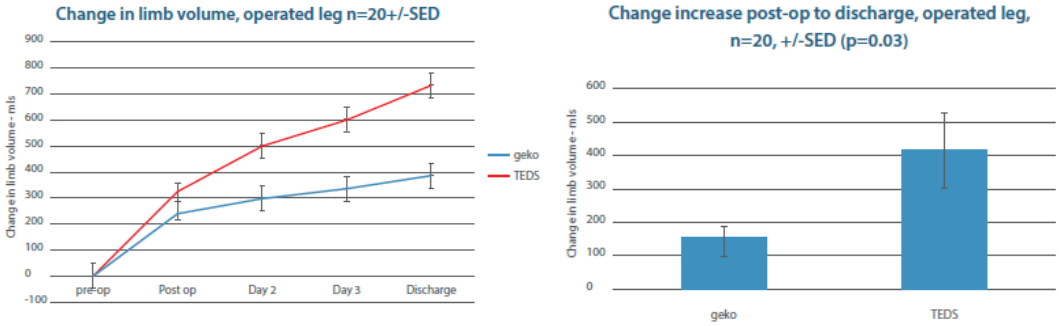
geko™
circulation support

Post-operative oedema reduction

Providing increased blood circulation for the treatment and reduction of oedema

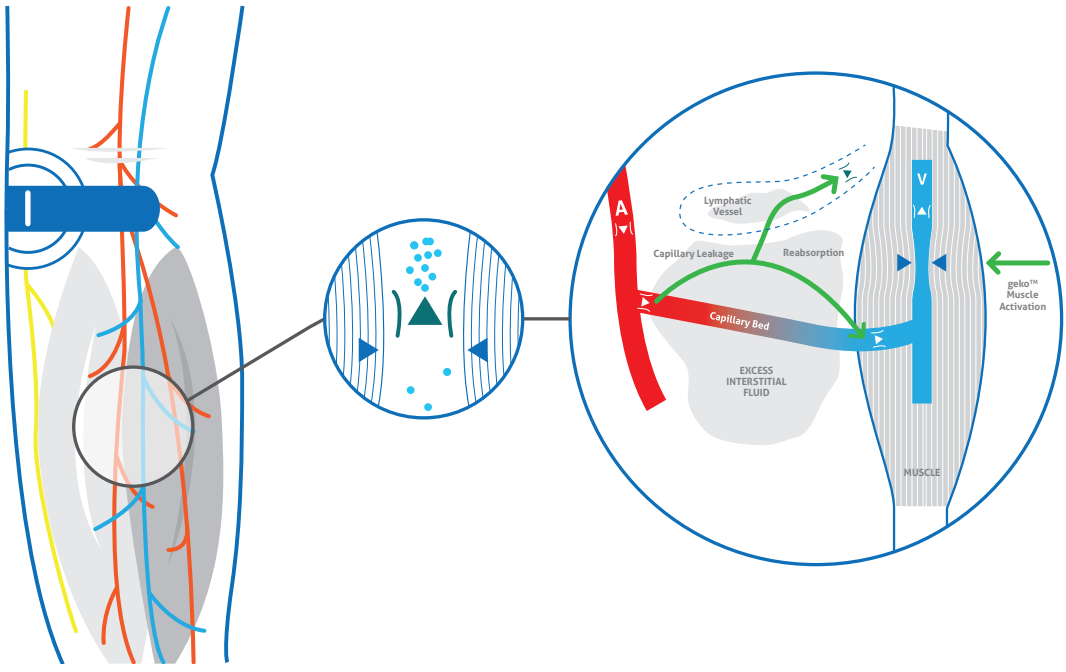
The geko™ is a battery powered, disposable neuromuscular electrostimulation device. The size of a wrist-watch and worn at the knee, the geko™ device gently stimulates the common peroneal nerve activating the calf and foot muscle pumps resulting in increased blood flow and the reduction of oedema[1]. The increase in blood flow is equal to 60%[2] of walking without a patient having to move[2].

An RCT comparing the effect of the geko™ device and TED stockings on post-operative oedema in Total Hip Replacement patients[1]



Results: The geko™ device was worn post-operatively to discharge for 24 hours per day. The results indicate that the geko™ device is more effective than TED stockings at preventing the build-up of post-operative oedema.

The geko™ device accelerates the reduction of oedema[1]



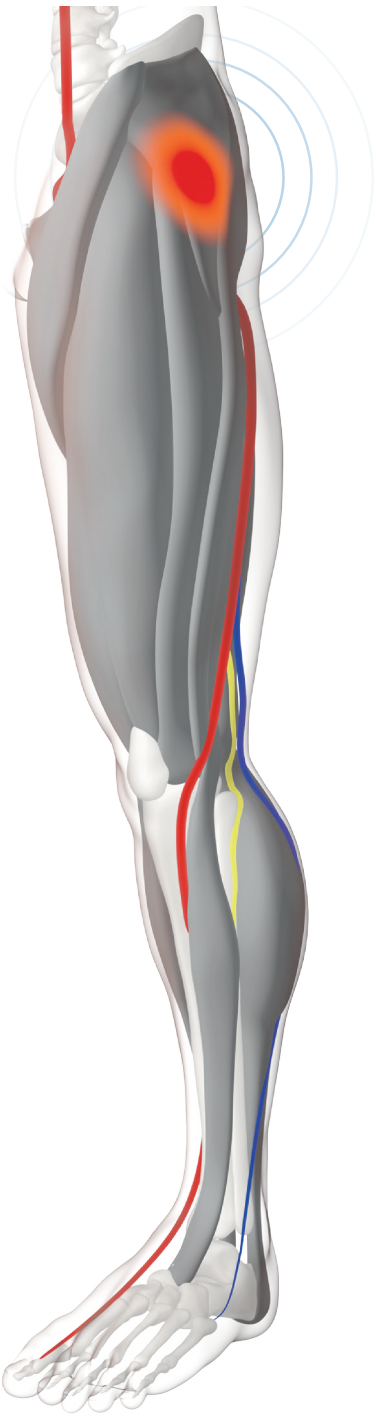


Figure 1 - image modified for illustrative purposes[3]

References

1. Wainwright TW, Immins T, Middleton RG, Poster Physiotherapy UK, October 2014, Birmingham.
2. Tucker A, Maass A, Bain D, Chen LH, Azzam M, Dawson H, et al. Augmentation of venous, arterial and microvascular blood supply in the leg by isometric neuromuscular stimulation via the peroneal nerve. The International journal of angiology: official publication of the International College of Angiology, Inc. 2010 Spring; 19(1):e31-7.
3. Klabunde, RE (2014). Cardiovascular Physiology Concepts. Available at: http://cvphysiology.com/Microcirculation/M010 [Accessed 21 Feb. 2018].