Aerolase® LightPod Neo®

Clinical Insights

Full Closure of Foot Ulcers Using a Novel 650-microsecond Pulsed Nd:YAG 1064nm Laser

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Background and Objective

Common modalities for wound healing often fail to achieve full closure of a wound; however, new laser therapy using a novel 650-microsecond pulsed Nd:YAG 1064nm laser (LightPod Neo, Aerolase, Tarrytown, NY) has previously demonstrated clinical success achieving closure in wound healing without making any contact to the wound. 1064nm laser energy has been clinically proven to stimulate the formation of new collagen in the dermis of the skin; the heat from a 1064nm laser is also theorized to stimulate bacterial destruction, Nitric Oxide production, and the wound healing cascade. A patient presented with ulcers on the distal areas of the feet, and was treated with the subject laser.

Materials and Methods

The ulcers were gently cleaned and debrided prior to treatment. The subject laser was set to a fluence of 18 j/cm^2 and 3 passes of laser pulses were applied across the entire ulcer and into the peripheral skin. A standard wound dressing was applied to the ulcer after treatment.

Results

The response to treatment was rapid. The patient reported no treatment discomfort at all. Both ulcers complete re-epithelialized in a short period of time. Patient satisfaction was very high. 10-month follow up was conducted on the ulcer that had been treated twice, and it was still fully closed with barely any visible evidence of where the ulcer had been located .

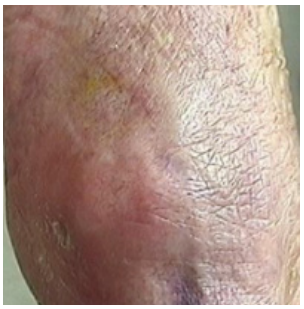
Results

Pictures were taken before each treatment and then again 5 months after the 2nd treatment. The patient tolerated each treatment well, as long as periodic cooling with ice packs was done. She reported no complications and only mild discomfort for a couple of hours post treatment. The patient was extremely satisfied with the results and reported that this was the only treatment that had any effect on the warts.

Before (Nov. 7, 2011)

9 Days After 2 Treatments

Before (May 5, 2012)



43 Days After 1 Treatment

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