

# The Use of Nano-Fractional Radiofrequency Treatments (Venus Viva) on the Appearance of Acne Scars

## **Purpose:**

Acne scarring is psychologically distressing and cosmetically difficult to treat. <sup>1,2</sup> The difficulty lies in the variation in the types of acne scars and the irregular pigmentation that often accompanies them. <sup>3</sup> Common treatments for acne scars such as surgery, subcision, deep peels, and ablative lasers can be painful and result in scarring and irregular pigmentation. Fractional radiofrequency treatments (FRF) are innovative technologies that transmit a current into the skin that generates micro-thermal wounds and deep dermal heating, both of which stimulate the body to heal and produce collagen. In turn, an improvement in skin texture, scarring, wrinkles and pigmentation is seen. <sup>4</sup> Additionally, since FRF produces less thermal damage than other devices such as lasers, fewer side effects are seen and darker skin types can be treated with little risks. <sup>5</sup>

## Design:

The purpose of this study was to assess the efficacy and safety of a novel nano-fractional RF device for the treatment of acne scars. Five patients were treated at settings of 230-250V and 10-20 msec with 1-2 passes to the full face and multiple passes over the acne scars. Topical anesthetic (20% benzocaine, 6% lidocaine, 4% tetracaine) was applied for 45 minutes prior to each procedure to limit procedural pain. Post-treatment all patients were given 10 mg of loratadine and ice packs were applied for 10 minutes.

#### **Results summary:**

Improvement was noted for all types of acne scarring, with greatest improvement with boxcar and rolling scars. Mild side effects such as redness and swelling were seen in all patients immediately post procedure and effects resolved within 1-3 days without sequelae. No other complications were seen and all patients showed clinical improvement.

### **Conclusion:**

Nano-fractional RF therapy is an innovative and safe modality for the treatment of acne scarring and is appropriate for those desiring treatments with minimal downtime or those with darker skin types who cannot undergo other more invasive options.

#### **References:**

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- **4.** Kaminaka C, Uede M, Nakamura Y, Furukawa F, Yamamoto Y. Histological studies of facial acne and atrophic acne scars treated with a bipolar fractional radiofrequency system. *The Journal of dermatology*. 2014;41(5):435-438.
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