



LASERS

EVALUATION OF THE SAFETY AND EFFICACY OF RADIOFREQUENCY TECHNOLOGY COMBINED WITH DYNAMIC MUSCLE ACTIVATION FOR THE TREATMENT OF FACIAL WRINKLES AND SKIN TIGHTENING

Michael H. Gold⁽¹⁾ - Brynne Thompson⁽¹⁾ - Julie Biron⁽¹⁾

Tennessee Clinical Research Center, Research, Nashville, United States⁽¹⁾

Introduction: Non-invasive, energy-based, aesthetic treatments are increasingly popular. Different technologies are presently available to rejuvenate skin, including therapeutic ultrasound, lasers, intense pulsed light (IPL) and radiofrequency (RF).

Objective: The aim of this study was to evaluate the safety and efficacy of RF technology combined with Dynamic Muscle Activation (DMA) for wrinkles improvement and facial skin tightening, as well as patient tolerance.

Materials and Methods: Single center, prospective, open label clinical trial. Eleven participants (mean age, 43.36±4.18; Fitzpatrick skin type II-IV, 10 females and one male) with Fitzpatrick wrinkle classification score of 3-6 were treated with RF combined with DMA technology. The participants underwent 6 treatments at 1-week intervals and follow up visits 1 and 3 months following the last treatment. Efficacy of treatment was evaluated using the Fitzpatrick Elastosis and Wrinkles scale (FES) and the Global Aesthetic Improvement (GAI) Scale assessed by the investigator as compared to baseline. Tolerance was evaluated by the visual analogue scale (VAS). Skin safety was evaluated during and after the treatments as well as at the follow up visits.

Results: Three months after the last treatment, significant improvement in facial wrinkle and skin tightness was noted. FES scores decreased significantly from 4.636 ± 0.881 to 2.272 ± 0.445 (p<0.0001). According to the GAI, all the patient had an improvement in fine lines & wrinkles as well as in skin tightness; 18.18% (2/11) of participants were much improved and 81.82% (9/11) were improved.

The discomfort during the treatment was minimal with a mean Vas pain score of 0.63 with no prolonged erythema and Edema at the treatment area. No adverse events or downtime was recorded.

Conclusion: RF combined with DMA was found to be an effective, safe and painless method





for the treatment of wrinkle and skin tightening without any downtime.

