



EndyMed 3DEEP Technology - Clinically Proven Results

EndyMed is proud of our commitment to clinically validate our claims that our 3DEEP™ technology provides superior results. Below is the clinical study and poster that were published in 2016, new additions to our extensive list of publications that prove that 3DEEP™ provides the best in RF treatments.

TREATMENT OF ACNE SCARS ON DARKER SKIN TYPES USING A NONINSULATED SMOOTH MOTION, ELECTRONICALLY CONTROLLED RF MICRONEEDLES TREATMENT SYSTEM

David Pudukadan, MBBS, MD

BACKGROUND:

Noninvasive technologies for treating acne scars use radiofrequency (RF) emitting microneedles for both mechanical disruption of fibrotic strands and heat-mediated collagen remodeling.

OBJECTIVE:

Efficacy and safety evaluation of electronically controlled noninsulated RF microneedling system on acne scars in patients with dark skin.

METHODS:

Nineteen patients, 24 to 51 years old, skin types III to V, with acne scars were enrolled in the study. Each patient had 3 treatment sessions at monthly intervals using a multisource RF treatment platform with a microneedle RF applicator. Efficacy was evaluated by the Goodman and Barron's Global Qualitative Acne Scarring System.

RESULTS:

No bleeding points occurred during treatments. Posttreatment erythema was observed immediately after the treatment and lasted up to 10 hours after the treatment. Improvement of at least 1 acne scar grade was noted in 11 of 19 patients (57.9%) after 1 month and in 9 of 9 patients (100%) after 3 months.

CONCLUSION:

The tested noninsulated electronically controlled RF microneedles were found to be safe and efficient in the treatment of atrophic acne scars in skin types III to V with minimal pain or downtime.

Poster presented by Dr. David Pudukadan at the 2016 EADV Congress in Vienna.

Using the ENDYMED PRO and our RF Fractional Resurfacing technology, Dr. Pudukadan's study showed significant improvement in his subjects, with minimal treatment downtime.

SIGNIFICANT REDUCTION IN DYSCHROMIA AFTER MULTISOURCE RADIOFREQUENCY FRACTIONAL SKIN RESURFACING TREATMENTS IN SKIN TYPE V

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Background and objectives

Facial Dyschromia are a common concern especially among women and persons of color. Dyschromia can cause psychological and emotional distress and can effect the patients' quality of life. In this preliminary study, we evaluated, for the first time, the safety and efficacy of "color blind" ablative fractional RF resurfacing for the treatment facial dyschromias in skin type V patients.

Materials and Methods

Five patients, with a mean age of 33.6 years, with face and neck hyper pigmentation, were treated with ablative fractional RF resurfacing. The treatment included 3 treatment sessions with 2 weeks interval. Forehead, Cheeks and Neck areas were treated with high parameters (30msX6V). 2 weeks after 3 treatments, Melanin and color homogeneity were compared to baseline. Patients and physician satisfaction was assessed after the treatments.

Results

Patients experienced mild pain during the treatment and minor downtime including transient erythema that lasted a few hours. Micro crusts were visible for up to 5 days. Beneficial epidermal effects were noted as early as 1 week after the first treatment. Physician assessment of face and neck pigmentation, 2 weeks after 3 treatments, showed improvement of 70% compared to baseline. Patient satisfaction was similar (70% completely satisfied). Majority of patients would recommend this treatment to friends (65% definite yes).

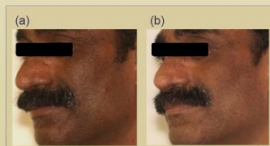


Fig 1: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 2 sessions

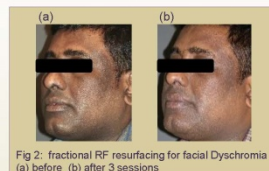


Fig 2: fractional RF resurfacing for facial Dyschromia (a) before (b) after 3 sessions

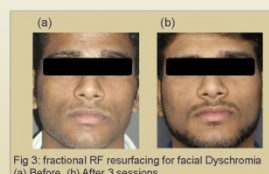


Fig 3: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 3 sessions

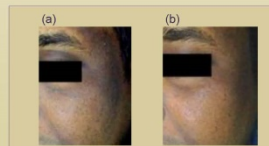


Fig 4: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 1 session

Conclusions

This pilot study is the first evidence for a possible clinical solution to Dyschromia for dark skinned patients, using ablative fractional RF treatment.

The results show significant improvement in skin condition with minimal downtime.

Ablative treatments with RF technology allows removal of the micro zones of the epidermis without damaging the dermal epidermal junction. At the same time, this system provides deep volumetric heating effecting the underlying collagen and promoting neocollagenesis.

Although fractional lasers are commonly used for skin resurfacing, the risks in dark skin treatments are significant.

In fractional RF treatments, pain and downtime can be managed and reduced using potent numbing cream with higher concentrations of active anesthetic substances.

Further studies are required to investigate the mechanism and safety of these treatments.