

# 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 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 (30msX6W). 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).

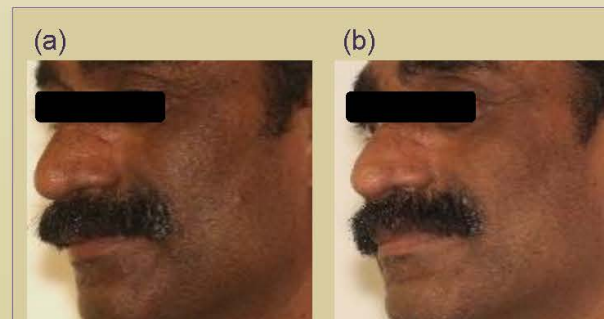


Fig 1: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 2 sessions



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

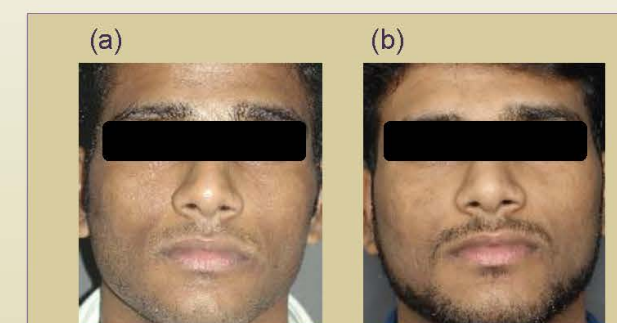


Fig 3: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 3 sessions

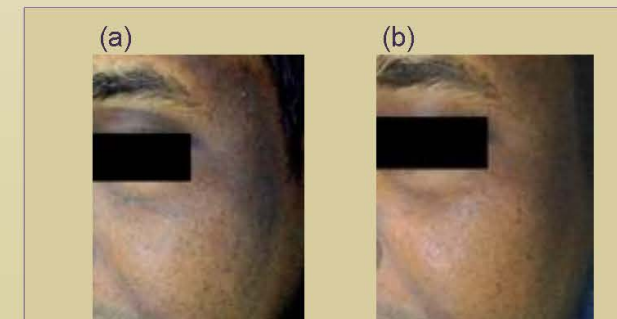


Fig 4: fractional RF resurfacing for facial Dyschromia (a) Before (b) After 1 session

## 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.