

PubMed

Display Settings: Abstract



Lasers Surg Med. 2012 Oct;44(8):622-30. doi: 10.1002/lsm.22063. Epub 2012 Aug 16.

Evaluation of combined fractional radiofrequency and fractional laser treatment for acne scars in Asians.

Yeung CK¹, Chan NP, Shek SY, Chan HH.

Author information

Abstract

BACKGROUND AND OBJECTIVES: Fractionated radiofrequency (**RF**) induces deep dermal heating and leaves the epidermis less affected. We studied the efficacy and safety of bipolar **RF** and fractional diode laser followed by fractional **RF** in Asians with acne scars.

MATERIALS AND METHODS: Twenty-four patients (skin types III and IV) with acne scars received up to five treatments of combined fractional 915-nm laser and bipolar **RF** using a Matrix IR applicator (Syneron Medical Ltd, Yokneam, Israel) with fluence ranging from 50 to 70 J/cm², **RF** at 70-100 J/cm³, double passes followed by full-face bipolar fractional **RF** treatment using Matrix **RF** at energy ranging from 50 to 62 mJ/pin, at 4-week intervals. Changes in acne scars, skin texture, pore size, pigmentation irregularity, and complications were assessed up to 3 months post-treatment by standardized photographs obtained with Canfield Visia-CR system®. Subjective improvement and patient satisfaction were assessed by questionnaire.

RESULTS: Twenty patients (age 27.7 ± 8.4 years) completed the study. Modest but statistically significant improvement was noted in acne scars, with the mean grade decreased by 29% ($P < 0.001$), and 52% were rated with at least moderate objective global improvement at 3 months. Mean pain score was 2.6 on a scale of 0-4. There were also objective improvements in all secondary endpoints. Post-inflammatory hyperpigmentation (PIH) occurred mainly over bony areas in 6.5% of all treatments. Subjective improvement was moderate to significant for 36.8% of patients, and 63% reported being satisfied with the treatment results at 3 months despite considerable pain level.

CONCLUSION: Use of fractional laser with **RF** followed by fractional **RF** was shown to be safe and effective for acne scars with modest improvement and low PIH rate comparable to other **resurfacing** techniques in this Asian case series. Adequate pain control and reduced energy level when treating areas in close proximity to bone are advised. *Lasers Surg Med.* 44: 622-630, 2012. © 2012 Wiley Periodicals, Inc.

Copyright © 2012 Wiley Periodicals, Inc.

PMID: 22899398 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms

LinkOut - more resources

PubMed Commons

[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)