AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

A NOVEL FRACTIONAL RADIO-FREQUENCY TECHNOLOGY FOR THE TREATMENT OF KERATOSIS PILARIS: A PILOT STUDY

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Introduction: Keratosis pilaris (KP) is a common keratinization disorder. Topical treatments are widely applied but with limited effects. Fractional radio-frequency (RF) technology has been introduced into cosmetic disorders but there are not many studies on the efficacy of RF treatments for KP.

Objectives: To evaluate the efficacy of fractional radio-frequency for the treatment of KP.

Materials and methods: Twelve patients with untreated KP on the upper outer arms and legs were enrolled in a randomized clinical trial. Three sessions of RF treatment were delivered once every month. One arm (or leg) was treated with RF at fluence of 70-85 J/cm2, 1 cm2 spot size and one pass, while the contralateral side served as control. Two dermatologists' clinical evaluations and patients' satisfaction were assessed between before treatment (base-line) and 12 weeks after the last treatment.

Results: Eleven of twelve patients completed the study. Ten patients (90.9%) showed more than grade 2 (>25%) improvement in texture in KP lesions. Five patients (45.45%) showed more than 50% improvement in KP pigmentation and erythema. Eleven of twelve participants were satisfied (>25% of the Patients' self assessment) with the procedure. No significant adverse effect was observed.

Conclusions: Fractional radio-frequency technology has been shown safe, effective and well-tolerated to improve KP in Chinese patients. It might be a new treatment option for the patients with recalcitrant KP.

Key words: Keratosis pilaris, Fractional radio-frequency