Multisource radiofrequency for fractional skin resurfacing: Significant improvement treating acne scars, skin rejuvenation and stretch marks

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Background & Objective: Acne scars are one of the most difficult disorders to treat in aesthetic dermatology. The most common treatments used are dermabrasion systems, deep laser, chemical peels and microsurgery. These treatments are frequently associated with prolonged downtime, discomfort, pain and considerable side effects. Changes in skin texture, appearance of wrinkles, decrease in skin laxity and color changes are the main characteristics of aging skin. Dermatologists and plastic surgeons look for treatments that provide both epidermal resurfacing for the improvement of skin texture and collagen remodeling in the dermis to reduce wrinkles and skin laxity. Radiofrequency (RF) is non-ionizing electromagnetic radiation used in medicine for nearly 100 years. In contrast to most lasers that target specific chromophores, RF is chromophore-independent and has deeper penetration to the dermis and hypodermis as compared to light based technologies. The use of RF devices for skin resurfacing has similar efficacy however with less downtime, pain and adverse effects, especially when treating dark skin types. The latest generation of multisource RF systems which use six independent RF generators simultaneously, have been shown to provide deeper penetration with less surface heating and discomfort. The Fractional Skin Resurfacing (FSR) technology provides unique ability to treat the epidermis and dermis simultaneously, fractional micro-ablation for skin texture at the epidermal layer and significant volumetric heating up to 2.9 mm for collagen remodeling at the dermal layer.

Study Design & Methods: 20 patients enrolled in this study. All subjects were treated with the fractional skin resurfacing hand piece (FSR hand piece, Endymed PRO, ENDYMED Medical Ltd, Caesarea, Israel). Treatment areas were cheeks, forehead, thighs, chest and upper arms. Treatment protocol includes 4-5 treatments with one moth interval. All patients were photographed before the first treatment and after the last treatment at a standard distance and illumination.

Results: None of the patients had reported any pain during the treatments. No adverse events were reported during and after the treatments. B&A photos show improvement in acne scars, stretch marks and skin texture. Subjective and objective questionnaires showed high treatment satisfaction.

Conclusions: The current study evaluates the efficacy and safety of a fractional skin resurfacing hand piece. The evaluated indications were acne scars, stretch marks and skin texture. The findings show that the treatments are safe and effective with high satisfaction rate.

Biography
Atul Kathed has trained in Clinical Dermatology & Cosmetology and over the last 15 years has dedicated his focus to Cosmetic Medicine working full time in same. He is passionate about his work and believes that everyone has natural beauty potential, and that it is the duty of the treating physician to release this potential and 'hyper beautify' everyone within the process of facial rejuvenation. This can be achieved non-surgically using a combination of therapies in a comprehensive 'pan facial' approach.

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