

FRACTIONAL PICO LASER TREATMENTS OF MODERATE ATROPHIC ACNE SCARS: A NEW APPROACH

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Background: Acne scarring is a common disfiguring sequela of acne vulgaris which can lead to serious psychosocial problems and have a negative effect on patients' quality of life. Different modalities have been used to treat atrophic acne scars including punch excision, dermabrasion, chemical peels, fillers, and traditional ablative and non-ablative lasers, each with varying degrees of success and adverse reactions. Fractional picosecond procedures have been recently proposed as a new different way to treat these kind of scars.

Objective: To evaluate the safety and clinical effectiveness of a new 1064 nm fractional picosecond laser for the treatment of facial acne scars.

Materials and Methods: 22 patients with moderate facial atrophic acne scars were enrolled in this multi-center, prospective study. All of them received 3 sessions of a double pass full face treatment at 8 weeks intervals using a fractional picosecond 1064 device with an energy up to 0,8 J/cm². Blinded evaluation of digital images by three physician evaluators comparing pre- and 6-month post-treatment images measured efficacy using the ECCA grading scale and the IGA scale. Downtime as well as eventual long lasting sequelae have been recorded.



Results: All patients concluded the study. There was a significant improvement in acne scars. The average score of ECCA scale was reduced from 227 to 80. The majority of patients (60%) presented a moderate to marked improvement.

The average lasting of the post procedure erythema was of 2 days. Minimal scabs have been observed in all patients up to two days after each treatment. No long lasting adverse events as hyper- or hypopigmentations have been recorded.

Conclusions: Non ablative fractional Picosecond 1064 nm Nd:YAG laser is an effective and safe treatment, and might be an alternative for patients with moderate acne scars. Minimal downtime, mild pain without any adverse effect in caucasian and asiatic skin types are the main features and advantages of this new treatment. Further studies on more patients are needed to confirm these results.



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