



LASERS

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

M Romagnoli⁽¹⁾ - G Bolciolu⁽²⁾ - A De Pasquale⁽³⁾ - R Greco⁽⁴⁾ - V La Malfa⁽²⁾ - G Listro⁽⁵⁾ - F Negosanti⁽⁶⁾ - Vf Pedrelli⁽⁷⁾ - P Peng⁽⁸⁾ - N Zerbinati⁽⁹⁾ - M Tretti Clementoni⁽⁷⁾

Istituto Biomedical Spa, Dermatology And Laser Unit, Genova, Italy⁽¹⁾ - Poliambulatorio Dermalaser, Dermatology And Laser Unit, Ferrara, Italy⁽²⁾ - San Vincenzo Hospital, Plastic Surgery Department, Taormina, Italy⁽³⁾ - Gravina Hospital, General, Oncology And Breast Surgery Department, Caltagirone, Italy⁽⁴⁾ - Centro Dermatologico Listro, Laser Unit, Palermo, Italy⁽⁵⁾ - Centro Dermatologico, Laser Unit, Bologna, Italy⁽⁶⁾ - Laserplast, Laser Unit, Milano, Italy⁽⁷⁾ - P-skin Professional Clinic, Dermatology And Laser Unit, Kaohsiung, Taiwan⁽⁸⁾ - University Of Insubria, Department Of Surgical And Morphological Sciences, Varese, Italy⁽⁹⁾

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 1064nm 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 1064nm 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: Fractional picosecond treatment is an effective and safe treatment for acne scars, and might be an alternative for patients with moderate acne scars.

