



LASERS

A COMPARITIVE STUDY OF FRACTIONAL CO₂ LASER AND COMBINATION OF FRACTIONAL CO₂ LASER WITH AUTOLOGOUS PLATELET RICH PLASMA IN POST ACNE SCARS

Sujana Lakkireddygar⁽¹⁾

*Institute Of Applied Cosmetology And Dermatology, Department Of Dermatology,
Hyderabad, Telangana⁽¹⁾*

Introduction: Therapeutic approach to treat acne scars(AS) varies with type of scar. Targeted and innovative techniques and protocols are increasingly used in AS with an aim to achieve best results with minimal side effects presenting considerable challenge to dermatologists. However with advent of Fractional carbon dioxide(FCO₂) laser and Platelet rich plasma(PRP) therapy, new avenues can be explored. PRP provides various growth factors, aiding in quick wound healing.

Objective: To evaluate the efficacy of FCO₂ laser and in combination with PRP in treating post acne scars.

Materials and method: Eighty patients having various grades of AS were counselled and randomly assigned into 2 groups, 40 in each after obtaining informed consent and ethical clearance. Each patient underwent 6 sessions at 1month interval from December 2016 to November 2017 in a tertiary care center, South India. Group A were treated by FCO₂ and Group B with FCO₂ laser and intradermal PRP prepared using patients own blood. Results are presented in proportions and percentages.

Results: In group A, % reduction of scar score at the end of 6 sessions was 17.92% and in group B, % reduction was 32.88% by objective assessment. In group B, 25% patients rated excellent i.e 6% improvement and in group A, 5% patients rated excellent by subjective assessment. Group B showed a mean of 5.48 days downtime and Group A showed 7.05 days. Side effects were minimal in Group B, post inflammatory hyperpigmentation being the most common side effect.

Conclusion: FCO₂+PRP showed better results than FCO₂ alone, providing new treatment algorithm for AS.

