



LASERS

COMPARATIVE STUDY OF MICRONEEDLING VS FRACTIONAL CO₂ IN MANAGEMENT OF POST ACNE SCARS

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Objective: To assess and compare the efficacy of fractional CO₂ laser versus microneedling with respect to reduction of acne scars after treatment and also compare their side effect profile

Methodology: A total of 60 patients of post acne scars were enrolled. Patients were randomly allocated into two groups of thirty patients each in which one group was treated with microneedling and other with fractional CO₂ every 4 weeks for a period of 24 weeks. Response to treatment was assessed every 4 weeks. Final evaluation was done at 04 weeks after completion of therapy according to improvement in objective scoring as per quantitative global acne scarring classification.

Results: In microneedling group, 20% patients achieved 0-25% improvement in point score (Satisfactory response), 73.33% achieved 26-50% improvement (Good response) and 6.66% achieved 51-75% improvement (Very good response). Baseline mean objective score reduced from 26.9 ± 2.2 at baseline to 17.6 ± 1.6 . This difference was found highly significant (p value = 0.001). The reduction in the mean objective scores was found to be 34.5%.

In fractional CO₂ laser group, 20% patients achieved 0-25% improvement in point score (Satisfactory response), 76.6% achieved 26-50% improvement (Good response) and 3.33% achieved 51-75% improvement (Very good response). The baseline mean objective score reduced from 26.5 ± 2.2 to 17.4 ± 1.6 . This difference was found to be highly significant ($p = 0.001$). The percentage reduction in mean objective scores was found to be 34.3%. The difference in percentage reduction in mean objective score between microneedling and fractional CO₂ laser was not found statistically significant

Conclusion: On comparing both modalities were found equally efficacious

