

Wound Congress 2017: A Comparative Evaluation Of Microneedling Alone Versus Combined Subcision And Microneedling In Post Acne Scars_Krishna Deb Barman_Maulana Azad Medical College, India Krishna Deb Barman, Anuj Tenani and Kabir Sardana

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Aim: Various surgical procedures are available for management of acne scars and they can be combined with variable success. As micro needling targets superficial boxcar scars while subcision targets primarily rolling scars, it can be assumed that a combination of the two would give better results. Since no data available about the efficacy of micro needling alone vs microneedling with subcision in management of post acne scarring, this study was performed to compare the efficacy of both the procedures. **Material and Methods:** A total of 40 patients with post acne scars were included in the study and were alternately recruited into two groups; Group-A (Microneedling) and Group-B (Combined Microneedling and Subcision) and the procedures were performed under aseptic precaution. All cases were followed on monthly intervals. The improvement was evaluated on VAS by both physician and patient accordingly. Appropriate statistics were used to analyze the results. **Results:** Out of 40 patients age ranging from 18-44 years with a mean of 25.80 years, 37 patients completed the study. Majority (60%) were in the age of 20-30 years and the ratio (M:F) was equal. The mean number of rolling acne scars in Group-A decreased by 8.6% as compared to 27.9% in Group-B. There was a significant statistical difference. The mean number of icepick scars in Group-A decreased by 4.9% as compared to 18.25% in Group-B. The mean number of boxcar scars in Group-A decreased by 2.91% as compared to 18.32%

in Group-B and a statistical significant difference was achieved between baseline and 6th visit ($p=0.048$). The mean number of total acne scars decreased by 4.83% and 19.65% respectively in group A & B over a 6 months periods. However, there was no significant statistical difference. No significant adverse effects were noted in any of the patients, except postinflammatory hyperpigmentation in one patient. The findings indicate that both microneedling and combination of microneedling with subcision produce good results. But combination gives faster and superior results when compared to microneedling alone in treating rolling and boxcar scars.

As the demand for less-invasive, highly effective cosmetic procedures for acne scarring increases, the present combination of treatment for acne scars has shown efficacy not only in Grade 2 but also in more severe Grades 4 and 3 acne scars. Rolling and boxcar scars showed more improvement compared to icepick scars. This addition was well-tolerated in Fitzpatrick Skin Types III, IV, and V with no failure rates. There was a high level of patient satisfaction with minimal downtime. Further studies with long-term follow-up are needed to confirm the results of our present study. Due to a paucity of minimally invasive multimodality therapy studies addressing acne scarring in dark skin, this present study might encourage safer treatment of severe acne scarring with minimally invasive multimodality approaches.