

Treatment Alone and with 30% Glycolic Acid Peel”

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A randomized clinical trial with blinded grading was performed for skin types IV, V and VI with approximately equal distribution of Asian, African-American and Hispanic ethnic ancestry. A split face study was conducted with both sides receiving positive pressure salt abrasion device (Salt-A-Peel™, Med-Aesthetic Solutions, Inc.) and one side receiving additional treatment with 30% glycolic acid gel peel (MD Formulations) immediately post microdermabrasion. Six treatments were performed at weekly intervals with grading one-week post final treatment.

Blinded photo grading, profilometry, elasticity, chromometer and moisture meter were among the data collected.

Adverse effects were few, but some patients apparently experienced a few very localized unseen abrasions, which then developed fine crusts after the peel. The microdermabrasion was then adjusted to a less aggressive protocol (fewer passes and/or reduced PSI), which appeared to resolve this problem. Both of these areas developed mild hyperpigmentation, which was resolving but not totally gone at the end of the study. No other significant adverse effects were observed.

Results showed significant improvement in skin smoothness and fine lines and wrinkles on the combined microdermabrasion and peel side compared to the microdermabrasion side alone. Increased skin elasticity was also observed with the combined microdermabrasion and peel, but the *microdermabrasion* alone also improved these parameters. Chromometer data indicated a small increase in redness after the combination treatment but not after the microdermabrasion alone (this redness was unable to be perceived by the photo graders and was clinically insignificant). Overall, the addition of a 30% glycolic peel immediately after positive pressure microdermabrasion produced greater improvement than microdermabrasion alone and was generally well tolerated even in darker ethnic skin individuals. However, the increased risk of hyperpigmentation in some ethnic skin populations is of concern, if microdermabrasion is not performed in a uniform manner. Thus both technique and handpiece/particle flow design are important issues. Treating at 2-3 week intervals rather than the weekly treatments selected in this study design is advised.



Ethnic Study

Top: Pre-treatment
Bottom: Post-treatment
Microdermabrasion

Top: Pre-treatment
Bottom: Post-treatment
Microdermabrasion and Peel



Ethnic Study

Top: Pre-treatment

Bottom: Post-treatment

Microdermabrasion

Top: Pre-treatment

Bottom: Post-treatment

Microdermabrasion and Peel