Scientific Study

Hydradermabrasion: An Innovative Modality For Non-Ablative Facial Rejuvenation

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HYDRADERMABRASION: AN INNOVATIVE MODALITY FOR NON-ABLATIVE FACIAL REJUVENATION Bruce M. Freedman, MD FACS, Plastic Surgery Associates of Northern Virginia, McLean Virginia

INTRODUCTION

Hydradermabrasion is a relatively new procedure that combines crystal free microdermabrasion, immediately followed by the pneumatic application of a rejuvenating serum with a spiral dual-purpose tip. This study analyzed the histological and clinical changes associated with Hydradermabrasion.

MATERIALS & METHODS

- 10 Female Volunteers
- Ages 34 56 (Average 42)
- Skin Phototypes I IV

TREATMENT PROTOCOL

- Facial Microdermabrasion Performed
- Antioxidant Rich Serum Applied Pneumatically
- 6 Treatments Performed at 7-10 Day Intervals
- Retinols, Hydroxy Acids Avoided During Study Period

CLINICAL DOCUMENTATION

- Digital Photographs Taken at Beginning of Study and 2 Weeks Following Last Treatment
- Patient Surveys Obtained 2 Weeks Following Last Treatment

TISSUE DOCUMENTATION

- Full Thickness Skin Biopsies Obtained at Beginning of Study and 2 Weeks Following Last Treatment
- Raman Scattering Spectroscopy Performed at Beginning of Study and 2 Weeks Following Last Treatment

EQUIPMENT USED

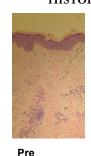
- HydraFacialTM Tower System (Edge Systems, Signal Hill, California)
- Antiox 6 SerumTM (Edge Systems, Signal Hill, California)
- Pharmanex BioPhotonic Scanner (Pharmanex, Provo, Utah)

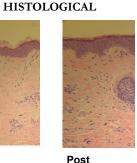
RESULTS

CLINCAL

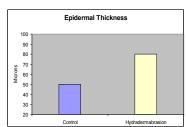


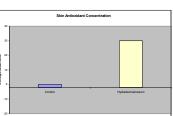






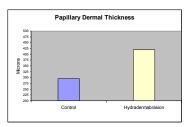
- Decreased Pore Size and Fine Lines
- Decreased Hyperpigmentation
- Improved Texture and Skin Tone

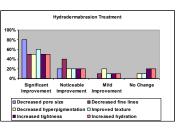




- Increased Epidermal Basal Layer Activity

- Collagen Hyalinization in Dermis
- Increased Fibroblast Population





CONCLUSION

Hydradermabrasion effectively and safely improves skin quality by increasing its thickness, repairing the dermal matrix and delivering beneficial antioxidants. Clinical improvements include better facial tone and texture, less dyschromia and fewer fine lines. The procedure is ideally suited for those desiring non-ablative facial rejuvenation with minimal recovery.