

# The Enhanced Microdermabrasion Treatment: Combined Use of Botox® and the DiamondSkin® Crystal-Free System

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## Background

During the past five years, the use of crystal-free microdermabrasion for treating facial lesions has expanded considerably. During this time, the treatment of vascular anomalies and dyschromia has increased by many physicians. The crystal-free microdermabrasion procedure by the DiamondSkin, Vibraderm, or DiamondTome (NewApeel) can effectively remove by up to 25% telangiectasias, rosacea, spider nevi, and other vascular lesions as well as pigmented solar damage and diffuse dyschromia.

Further studies indicate that the DiamondSkin's deeper penetrating coarse and extra coarse wands have resulted in an increase in collagen in the dermis and a subsequent "smoothing" of fine lines and wrinkles. However, the dynamic furrows associated with wrinkles in the brow, forehead, periocular regions and perioral areas have been very difficult to eliminate with microdermabrasion alone.

On the other hand, the use of Allergan Inc.'s Botox (Botulinum Toxin Type A) to temporarily relax the muscles responsible for creating the above mentioned dynamic wrinkles has become the most common and effective procedure for immediate improvement of these deep facial furrows. Botox injections can also be used to temporarily lift or tighten areas of the face and neck to again yield an immediate result. Although the effect is temporary, lasting 3-4 months, patients generally approve of the results. Over time, the results last longer and fewer units are required to achieve the same results. The procedure yields dramatic results with no down time and creates a more youthful and relaxed appearance. Combining DiamondSkin microdermabrasion treatments with Botox injections seems to produce a better result for the patient than either treatment alone. More and more patients are opting for a combined approach for the facial treatment regime. When photographs are compared side-by-side, patients with either the DiamondSkin microdermabrasion alone (or other microdermabrasion treatments) or Botox injections alone always agree that the combined treatment results are better than the results of either procedure on its own.

## Protocol

To date, no evidence has been presented that shows any particular sequence of treatments to be more successful than another treatment sequence. Most physicians are utilizing the following protocol. The initial treatment session consists of Botox injections to the glabella, forehead and crows feet. The immediate effects are maximized within the first two weeks after treatment and the results become most obvious to the patient at this time. Accordingly, the first DiamondSkin treatment is planned two weeks after the Botox treatment. The sequence of DiamondSkin treatments is mostly dependent on the primary targets to be treated. If the patient's problem is primarily vascular, then the coarse or extra-coarse handpieces are used to treat the primary problem.

Rosacea or other small vessel diseases may be treated with longer (2-4 week) intervals between treatments. If the patient's problem is primarily pigmentary, then the medium or coarse handpieces are used to treat the problem. For pigmented lesions, the treatment intervals are commonly 3-4 weeks. This interval will permit a complete exfoliation of the treated pigmented lesions and reduction of any post-treatment erythema and edema. Subsequent treatments for pigmented lesions may be necessary if some of the original pigmentation remains. The total number of treatments required will vary from patient to patient. Vascular lesions usually require 7 to 8 treatments while pigmented lesions usually require 4 to 5 treatments.

## Summary

A sequential treatment protocol of Botox and DiamondSkin treatments provides an enhanced effect of both procedures. The series of DiamondSkin treatments produces additional collagen, which complements the Botox effect, and the Botox effects improve the appearance of dynamic wrinkles. Patient satisfaction and overall acceptance of this combined therapy has prompted many physicians, who until recently only performed one treatment or the other, to add the complementary procedure to their cosmetic practices.