Sciton STAX: Combination Treatments for Winning Results

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The majority of aesthetic patients present with a primary concern, however further discussion often reveals a number of secondary issues amenable to therapy with lights and lasers. The following case demonstrates the potential to improve a wide range of concerns when multiple modalities are used in a single session.

PATIENT SELECTION

This 74 year old Fitzpatrick skin type II patient found by her board-certified dermatologist to have extensive actinic keratoses (AK's). She was initially treated with Imiquimod, however after 4 weeks of therapy returned to her dermatologist as she found the side effects of the medication unacceptable. This dermatologist was comfortable with the Sciton laser therapies offered by our clinic and suggested we evaluate her.

On presentation the patient had multiple remaining areas consistent with actinic keratoses and also post-treatment inflammatory changes. She was concerned about lasting negative aesthetic changes, including hypopigmentation. We reassured her that this was unlikely. Although an ideal full field resurfacing candidate, the patient only had time for 7 days of social downtime.

TREATMENT METHOD

The referring dermatologist agreed that a plan combining BBL® HERO™, ClearSilk® 1064 nm laser, TRL™ (tunable resurfacing laser), and hybrid fractional HALO® laser was appropriate and to reevaluate the patient 3-6 months post-treatment. At that time, options would include a second treatment, biopsies of concerning lesions or no further treatment as appropriate. The patient agreed with this plan.

When the patient was made aware that treatment could improve other aesthetic issues, she reported interest in improvement of hyperpigmentation. Some lesions were consistent with solar lentigines and some with flat and near-flat seborrheic keratoses (SK's). She had mild to moderate rosacea with flushing and visible telangiectasias. She was also bothered by enlargement of pores, fine lines and deeper rhytids, especially in the glabella and perioral area and laxity, especially in the periorbital region. Given these concerns and the social downtime limitations, we proposed a combined BroadBand light and laser treatment session as discussed with her dermatologist.

PRE-TREATMENT

The patient was advised to avoid the sun for one week prior to and after treatment. She had discontinued use of imiquimod for over 1 month.

One hour prior to treatment, the patient applied a compounded topical anesthetic cream containing benzocaine/lidocaine/tetracaine/phenylephrine/clobetasol 20/7/7/0.25/0.04% over the entire face, including the eyelids. She also took 600 mg ibuprofen, 1 mg lorazepam and 5mg hydrocodone/500 mg acetaminophen to reduce discomfort. The patient completed all medical consents prior to taking analgesics/sedation and had a driver to and from the office. On arrival the patient's topical anesthetic was thoroughly cleaned and appropriate medical photography was performed. During treatment her analgesia was supplemented with inhalational nitrous oxide/oxygen using the ProNox™ system.

TREATMENT

The patient's treatment consisted in order of the following:

BBL HERO: Two base passes over the entire face with the exception of tissue within the bony orbit and brows. The 515 nm filter was used with settings of 7 J/cm2, 3 ms, 25 °C cooling. Two additional passes were made with the same settings and

the 15 mm square adapter in the perioral and nasal areas. An additional pass was made using the 11mm round adapter 515 nm filter and settings of 15 J/cm2, 15 ms, 20 °C cooling in non-HERO mode to individual lentigines.

A final pass was performed with the 15 mm square adapter in areas of redness and telangectasias using the 560 nm filter and settings of 15 J/cm2, 15 ms, 20 °C cooling in non-HERO mode.

ClearSilk: Following BBL HERO, all ultrasound gel was cleansed and the patient was treated with ClearSilk 1064 nm laser therapy using settings of 8 J / 0.5 ms / 8 Hz. Treatment was maintained to bring each approximately 5x7 cm area of skin to a goal temperature of 40-42 °C and hold it at temperature as tolerated. This was repeated over the entire face twice and a third pass over the perioral area. The eyebrows and periorbital area within the bony orbit was excluded from treatment and cannot be treated with this modality.

TRL: This was performed using the 2940 nm TRL single spot handpiece with settings of 25 µm depth and 3-4 Hz or a rate where the operator feels comfortable controlling the depth. Individual flat seborrheic keretoses, some areas of actinic keratoses and a few single lesions of sebaceous hyperplasia were treated. The patient had one seborrheic keratosis within the left bony orbit and a laser ocular shield (Oculplastik™) was placed prior to treatment. The TRL handpiece was changed to the full size scanner with a line pattern. Using the length function to adjust the treatment line, individual rhytids, particularly in the glabellar and perioral region were treated to a depth of 50 µm. A single 50 µm line was placed immediately outside the white roll of the lip to encourage rollout and address rhytids that crossed the vermillion border. It is important that patients treated with this step understand that they may have 4-6 weeks with a greater degree of erythema in these areas.

HALO: HALO was performed over the entire face, including the brows, hairline and eyelids.

The first treated zone was the eyelids, the bounds of which were defined superiorly by the brow, inferiorly and laterally by the bony margin, and medially by the middle of the nose. Prior to treatment, the eyes were anesthetized with proparacaine and laser safe eyeshields (Oculoplastik) were placed. Following protocols available and detailed in the author's webinar on HALO for eyes, the area for each orbit was arbitrarily set at 100cm2 and settings of 2940 nm and 1470 nm at 325 µm, 30% were used with a goal of 700J/orbit being delivered. Immediately following completion of treatment of the periorbital and nasal skin the eye shields were removed. This is recommended as it improves patient comfort and in some patients swelling can make this more difficult if delayed.

The remainder of the face was treated with settings of 350 µm, 30%, 30 µm/Max. It is important that the upper cheek treatment does not overlap tissue already designated and treated as periorbital skin. The patient tolerated the procedure well and was cooled with a cool towel and the Zimmer™ chiller.

POST TREATMENT

Post treatment care consisted of twice daily cleansing with a neutral cleanser and application of a vegetable based shortening as a non-petroleum based water barrier favored by the author. The patient used Systane™ lubricating drops as needed for eye irritation, particularly once peeling had started. The patient was followed with daily photographic and phone follow up with no issues except a single comedone on her chin which was drained in the office on day 7. Following desquamation the patient gradually advanced to a neutral moisturizer and sunscreen for the remainder of her healing. The patient followed up with her dermatologist at 4 months and no evidence of actinic damage requiring further intervention was found. She was seen in follow up in our office and pictures were obtained at 6 months. At this time the patient was exceptionally satisfied and plans were made for maintenance facial treatments and a similar treatment to her neck, chest, hands and forearms was scheduled.

DISCUSSION/CONCLUSIONS

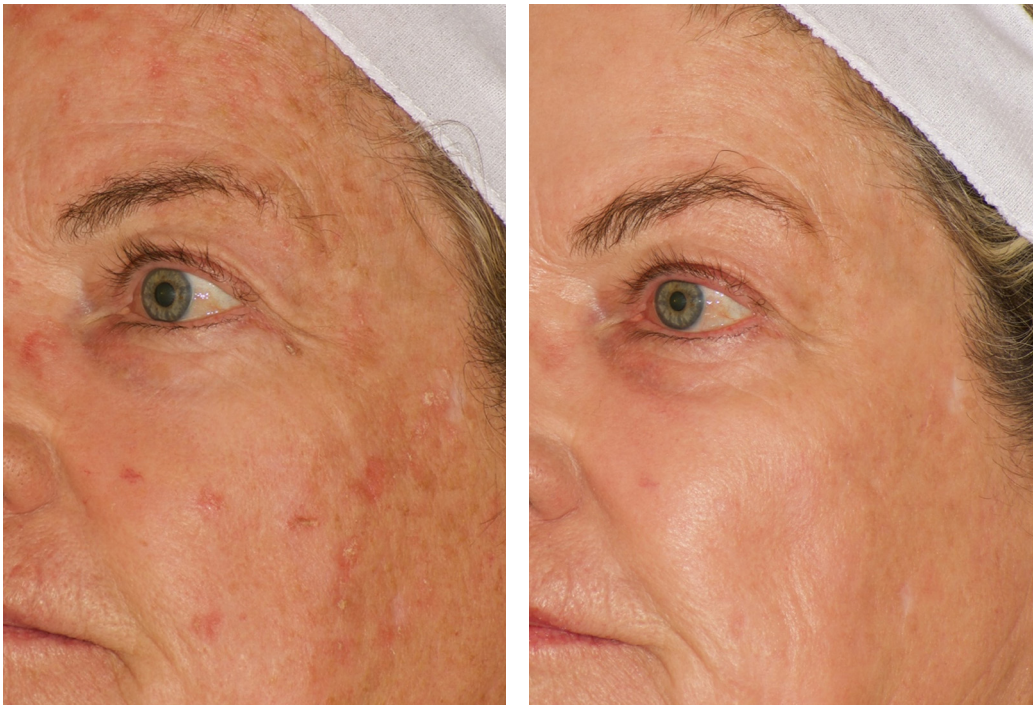
A few pearls from this patient's case include the range of concerns which can be addressed when several Sciton platform modules are used in concert. In our experience, most patients initially verbalize a single or very few issues, and are unaware of and interested in the opportunity to address additional issues in the same session.

One pitfall which can result in disappointed patients is that BBL-resistant hyperpigmentation is often a result of flat seborrheic keratosis and not solar lentigines. These lesions require resurfacing.

For offices not staffed by a board-certified dermatologist, it is up to the practitioner to decide their level of comfort in treating actinic damage and potential carcinomas. This office has been fortunate enough to develop a relationship with a board-certified dermatologist who trusts the quality of laser and work of the office and is also familiar with literature demonstrating benefits to actinic damage with hybrid fractional lasers (Ortiz, 2018) and full field resurfacing.

Although this patient would have received an outstanding result from full field TRL resurfacing, it would not have been appropriate with her social plans and would have resulted in an unhappy patient. In our experience, it is better to be explicit about expected downtime and stay within the patient's parameters, even if that means a smaller treatment. This is more likely to result in a long-term, trusting relationship. In our experience, we find that our older patients, especially those over 70 years of age can be somewhat slower to heal. Other medications and medical conditions which can slow healing should also be considered when setting patient expectations for recovery.

Results



Before and 6 months After 1 ScitonStaX treatment

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2600-003-40 Rev. A