INTRODUCTION

Patient demand for non-invasive skin firming treatments has grown as more patients desire firmer, more youthful skin but with no downtime or interruption of their daily activities. Recent innovations in tissue heating devices combined with increased physician expertise have resulted in more comfortable and effective skin firming treatments. Patients can now choose non-invasive skin firming treatments over more invasive surgical options. Although not a substitute for surgical facelifts or tummy tucks, non-invasive skin firming treatments can produce moderate but noticeable results in lax skin on the face and body. Skin firming is one of the fastest growing segments of the aesthetic market, with a projected rapid procedure volume increase to approximately 2 million in 2012.

Currently there are many non-ablative skin firming devices available utilizing either radiofrequency or infrared energy to heat the dermis and stimulate the fibroblasts to increase collagen production. Radiofrequency skin firming devices often cause significant discomfort during treatment and can produce inconsistent results. Treatments performed with the infrared skin firming devices, including Sciton’s SkinTyte II, are comfortable and tend to produce more predictable results.

Sciton’s new SkinTyte II delivers infrared energy via broadband light to deposit heat in the dermis of the skin, triggering collagen remodeling which over time results in firmer skin. Early SkinTyte techniques and protocols concentrated heat in one area. Patient discomfort often prevented delivery of the proper amount of energy to the treated area. Multiple passes were necessary to effectively heat the treatment zone which made for a long procedure time. No accurate objective method existed to determine when the treatment endpoint was reached. All of these factors made it difficult to produce consistent, reproducible results with the initial static SkinTyte protocol.

These obstacles encouraged a team to develop a modified treatment technique that would be more tolerable for patients to obtain greater treatment results. Another goal was to reduce the treatment time without reducing the effectiveness of the treatment. In this paper,
I will share two clinical cases that demonstrate the consistent results obtained utilizing the “Motion” Technique with Sciton’s SkinTyte II on both the face and the body.

**TECHNIQUE**

A patient consultation and physical evaluation were performed with careful attention to patient concerns and expectations. Patients understand that this non-surgical treatment is not a substitute for a surgical facelift or body lift. For best results, a series of three to six treatments are recommended to be performed at two to four week intervals.

Treated areas were cleansed. Pretreatment photographs were performed in a dedicated photo room prior to each treatment session with the patient in standard positions including front, bilateral 90˚, and bilateral 45˚ views.

No pre-operative medication or numbing cream was utilized. After the patient was positioned, a thin layer of room temperature gel was applied to the treatment area. An infrared thermometer was utilized to monitor the skin surface temperature throughout the treatment. The SkinTyte II filter was inserted into the BBL handpiece and the Smoothie Adapter™ was positioned to cover the sides and edges of the crystal.

Treatment settings were a range of energy 10-14 Watts/cm² with crystal temperature set to 30 °C. No post cooling was used so that a more accurate epidermal temperature measurement could be obtained. Utilizing the Motion Technique, a typical square treatment zone of approximately 6 cm x 6 cm on the body or 5 cm x 5 cm on the face was treated until an epidermal temperature of 40 to 42 °C per treatment zone was achieved. Occasionally a 6 cm diameter circular treatment pattern was utilized on the face or body. Typically three to four treatment cycles consisting of 15 seconds each were required to achieve the target epidermal temperature. In some instances, it was necessary to discontinue treatment in a particular zone prior to the target temperature being achieved due to patient discomfort. In these instances, the area was treated with an additional one or two treatment cycles after the next adjacent area was treated. Epidermal skin temperature was measured with the infrared thermometer in the center of the treatment zone after each treatment cycle of 15 seconds and whenever the patient noted some discomfort.

**CASE STUDIES**

**Case 1**

The patient is a 55 year old, Gravida 2 Para 2 Fitzpatrick Type III female treated for abdominal laxity following abdominal liposuction performed six months prior to this treatment. She received one treatment to her upper and lower abdomen utilizing the Motion Technique
delivered to a 6 cm diameter circular treatment area. The left side of the abdomen was treated with the 800ST filter at 10 Watts/cm² at 30 °C temperature until an external temperature of 42 °C was achieved. This required three passes. No post cooling was used.

The right side of the abdomen was treated in a similar fashion as described above utilizing the 695ST filter at 13 Watts/cm². Two to three passes were required to achieve an external temperature of 42 °C as measured by the infrared thermometer.

Patient and physician noticed immediate smoothing of the skin in the treated area on the day of the treatment with greater improvement noted over the next several months. The follow-up photo demonstrates: an overall improvement in laxity as well as smoothing of the dimpled cellulite appearance of the abdomen.

Case 2

The patient is a 36 year old Fitzpatrick Type II woman who wanted firmer, younger looking skin. She received five SkinTyte II treatments to her face and submentum at two to four week intervals utilizing the Smoothie Adapter and the SkinTyte II filters 590ST and 695ST. A thin layer of room temperature gel was applied. The epidermal skin temperature was monitored throughout the treatment with an infrared thermometer. Treatments 1, 2, 4 and 5 were performed with the Motion Technique, 695ST filter at 13 Watts/cm² at 30 °C with no post cooling. Three to four passes were made until an epidermal temperature of 40 to 42 °C per treatment area was achieved. Perioral and periorbital areas were treated with the 590ST filter using a stationary technique with the small square Finesse Adapter™ (1.5 cm x 1.5 cm). Four adjacent 2.5 cm² areas were treated with one pulse each utilizing 10 Watts/cm² for a total of 4 passes.

Treatment number 3 was performed utilizing the same technique as above but instead the 590ST filter was used for the entire treatment, and 19 Watts/cm² to the face and submental area. The perioral and periorbital areas were treated in the same manner for treatment number 3 as in treatments 1, 2, 4, and 5 as described previously.

Both patient and physician noticed an improvement in the tone and light reflection of the skin in the periorbital and upper cheek regions.
DISCUSSION AND SUMMARY

Performing Sciton’s SkinTyte II with Motion Technique provides a safe, comfortable treatment experience for my patients while producing excellent, reproducible results on both the face and body. The addition of optimized filters has increased treatment results while further reducing treatment time. The addition of this new technological enhancement to Sciton’s SkinTyte II will further increase treatment results making Sciton the logical choice for both physicians and patients.

The SkinTyte II filters are tailored for specific skin types to maximize the speed and efficacy of treatment: 590ST for skin types I-III, 695ST for IV-VI, and 800ST for I-VI. This white paper mentions the use of the 695ST filter for various skin types, as I was testing the optimized filters for all skin types, I-VI. We found that 590ST is best for lighter skin types and 695ST is preferred for darker skin types.

REFERENCES