Background: As public knowledge of the efficacy of minimally invasive cosmetic procedures has increased, public demand has followed. Cosmetic procedures using laser and other physical treatment modalities have become an integral part of current dermatology practice and residency education. Several studies have addressed the frequency of laser training amongst dermatology residency programs in the United States; however, the plans for future use of this training have not been explored.

Study Design/Materials and Method: A 25-item survey was sent to current dermatology residents in the United States through the Association of Professors of Dermatology listserv and Program Coordinator listserv.

Results: Fifty residents responded to the survey. The majority of respondents (76.6%) believe that cosmetic laser will be used in their future practice while many (19.6%) are undecided. Only 4.0% of respondents indicated they do not plan on using cosmetic laser. Vascular (94.4%) and hair-removal (75.0%) are the most common lasers that residents plan to use. The minority of respondents indicated that physicians will be the only providers providing cosmetic laser treatments (27.3%) while the remainder see a mix of physicians (62.7%), mid-levels (43.8%), RNs (21.3%) and laser technicans (30.3%) operating laser. If non-physician providers were providing laser services, hair removal was the most commonly performed procedure (40.0%). Current residents also expect to frequently provide treatment with microneedling (93.7%), chemical peels (90.0%), dermabrasion (61.9%), liposuction (67.8%), and sclerotherapy (89.0%). Few residents have participated in industry sponsored training events (22.9%) or industry sponsored informational events (28.6%).

Conclusion: The majority of residents believe they will be providing cosmetic laser treatments in the future with a significant majority seeing a mix of physicians and non-physician providers operating lasers. Nearly all residents expect to provide cosmetic procedures using other physical treatment modalities. Interestingly, relatively few residents have engaged in industry sponsored training or informational events.

SAFETY AND EFFICACY OF A 1060 nm DIODE LASER WITH A PETITE MASK (10.49 cm²) FOR THE REMOVAL OF SUBMENTAL FAT

Bruce E. Katz, Lawrence S. Bass, Roy G. Geronemus
Juva Skin & Laser Center, Manhattan, NY; Bass Plastic Surgery, New York, NY; Laser & Skin Surgery Center New York, New York, NY

Background: Non-invasive fat reduction is an efficacious option for body contouring of the flanks, abdomen, thighs, back, and submental area. In this study, we examined a non-invasive laser treatment for fat reduction in the submental area using a petite mask (10.49 cm²).

Study Design/Materials and Method: 61 subjects enrolled at 3 study centers and received up to two treatments with a 1060 nm laser on the submental area with a petite mask. All subjects were requested to maintain their standard diet and exercise routine throughout the course of the study. Adverse events were assessed at all subject visits in addition to phone calls as necessary. Subject satisfaction was recorded at the end of the study. Weight was recorded at each subject visit. High resolution 2D photography was taken before treatment and 12 weeks post final treatment, and three blinded evaluators were asked to choose the post-treatment photo from a randomized pre and post-treatment sets.

Results: Of the 61 subjects treated, 58 returned for the 12 week post-final treatment follow-up. Post-treatment photos were correctly identified 91% of the time across all subjects. 91% of subjects were satisfied with their results (slightly satisfied, satisfied, extremely satisfied). A majority of adverse events were mild (78.9%) in nature and transient. The most common events were swelling and tenderness which lasted less than 6 and 9 days respectively on average. Subjects reported an average treatment pain of 3.4/10.

Conclusion: The use of a non-invasive 1060nm diode laser with a petite mask is an effective and safe method for fat reduction in the submental area.

SAFETY AND EFFICACY OF A TOPICAL CREAM CONSISTING OF HIGHLY SELECTIVE GROWTH FACTORS WITHIN A SILICON CREAM MATRIX FOR POST ABLATIVE CO2 PROCEDURES

Robin Kikuchi, Christopher L. Zoumalan
Christopher Zoumalan, MD FACS, Beverly Hills, CA; Keck School of Medicine, University of Southern California, Los Angeles, CA

Background: SK2017B is a topical silicone cream matrix that incorporates highly selective growth factors. In a recent multicenter, head-to-head study, it was shown to be safe and more effective than silicone cream in the healing of post-procedural scars. We hypothesize that the use of SK2017B in post ablative CO2 patients will be safe and effective for healing.

REVERSED ENDOMETRIOSIS; IMPROVE ACCURACY AND EFFICIENCY IN COLD LASER THERAPY WITH THE NOGIER PULSE/ VASCULAR AUTONOMIC SIGNAL

Dave C. Maybee
Clear Path Holistic Health, Antigonish, Nova Scotia, Canada

Introduction/Oversight: Patient is a 32-year-old female and following an ectopic miscarriage, was diagnosed with endometriosis, multiple obstructing fibroids and secondary infertility. The MD attempted a dye test 4 times and although she could see blue dye in the uterus, there was no dye being expelled from the tubes on either side. The patient came to me first on May 16, 2015 and we had 6 treatments together before she had a second dye test.

Analysis: Clinical use of cold laser usually necessitates an estimate of how many Joules each area needs and an educated guess as to where exactly to point the diode. The Vascular Autonomic Signal, aka Nogier Pulse is a pulse reading technique that accurately shows the practitioner when there is a change in the patient’s autonomic nervous system.

Discussion: When the laser is placed over an area which does not need treatment, there is no VAS response. However when the laser is reaching the affected area, the VAS response can be felt that instant. Holding the laser on this area, the VAS response will continue until the area no longer needs treatment, at which point the ANS will return to normal and the VAS response will stop. This informs the practitioner very clearly where the treatment is needed and when it has completed. The treatments were a combination of Auricular Medicine and low level laser therapy applied directly to the affected.