## Multidisciplinary CO<sub>2</sub> Option

## Opens New Frontier of Therapeutic Indications



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## By Simone Parenti, DEKA

Combing the DOT scanner and bi-polar radiofrequency (RF) feature, the SmartXide $^2$  multidisciplinary CO $_2$  laser platform from DEKA (Firenze, Italy), has transformed the approach of laser medicine by safely and effectively treating a variety of indications, providing incredible skin tightening and rejuvenation results.

According to Paolo Bonan, M.D., a professor at the University of Florence, Italy, "the simultaneous use of bi-polar RF with CO<sub>2</sub> achieves even better outcomes than fractional alone. With the SmartXide<sup>2</sup>, we are able to non-invasively stimulate the targeted areas to effectively address a wide-range of indications."

The proven effectiveness and flexibility of the new Pulse Shape Design (PSD®) technology provides users with pulses in any shape, specific for each individual treatment and indication. With the advent of SmartXide², the range of Super Pulses, Ultra Pulses and Hyper Pulses are now outdated, opening up a new frontier for  $CO_2$  lasers. The newest DEKA Pulse allows control in specific layers of the dermis, while the High Pulse delivers ablation with minimal thermal damage, protecting the skin from unwanted heat and stimulating the basal layer without any associated risks.

Having vast experience with different skin types and patients, Dr. Bonan, "observed how SmartXide<sup>2</sup> treats all skin types with the proper pulse wave form. This not only simplifies treatment, it ensures safety and efficacious results. The drastic reduction in downtime, intraoperative and post-operative pain, and the great skin tightening leave our patients happy and satisfied."

Even many types of hypertrophic and atrophic scars, "including striae and acne scars can be easily treated in a reasonable number of sessions, and patients love it," Dr. Bonan continued. "With the ability to select the appropriate pulse for a specific application, we can fully care for our patients, treating a range of popular medical and aesthetic indications."

"The majority of dermatological lesions require particular care, especially in regards to the vaporization and coagulation phases, in order to achieve perfect re-epithelization without any signs of scarring," explained Nicola Zerbinati, M.D., a professor at the University of Insubria (Varese, Italy). Smartxide<sup>2</sup> allows ease of use and safety, without the complications and thermal damage common among other popular devices."

In Professor Zerbinati's experience, "the DOT/RF scanner is a great boost to the overall cosmetic outcomes achieved with the synergistic CO<sub>2</sub>/RF energy. It improves skin tightening, but also promotes a faster healing of lesions for patients of every skin type."

Additionally, an intelligently integrated Plug & Play feature allows clinicians to simply add scanning accessories at will. This user-friendly function makes SmartXide<sup>2</sup> a multidisciplinary device suitable for a variety of uses including dermatologic and aesthetic medicine; ear, nose and throat (ENT); dental applications; and gynecologic indications, including Vulvo-Vaginal Laser Reshaping (V<sup>2</sup>LR).

Along these lines, the MonaLisa Touch<sup>TM</sup> procedure focuses on vaginal atrophy, transforming the industry as a first in the market. Treatment restores physiological and mechanical conditions in a patient's vaginal mucosa.

According to Alice Prethima Michael, M.D., an aesthetic physician and cosmetic surgeon in Kuala Lumpur, Malaysia, the progressive decrease of hormone production in a woman causes vaginal atrophy to occur. All the various symptoms associated with these atrophic changes significantly affect the quality of sexual relations, as well as the patient's overall quality of life and health. "MonaLisa Touch is surely beneficial for vaginal tissues and acts as a biostimulator to restore the physiology typical of a younger age."

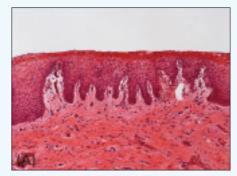
Appropriate patients for MonaLisa Touch include women experiencing pre- and post-menopause, post-cancer, or other causes of vaginal atrophy. "In my experience MonaLisa Touch serves as a complement to hormone replacement therapy for vaginal dryness, dyspareunia and related sexual dysfunctions, as well as a small amount of incontinence, bleeding, odor and other natural aging effects," Dr. Prethima Michael emphasized. "However, it ultimately intends to be a valid alternative to it."

Massimo Mariani, M.D., a gynecologist in Florence, Italy, supported these sentiments. "MonaLisa Touch is an innovative method achieving extreme satisfaction in 80% of patients after the first session. As a matter of fact, all of the patients treated declared improvements in restored lubrication, reestablished sensitivity and a decrease in the typical symptoms associated with vaginal atrophy."

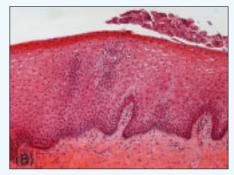
Dr. Mariani also explained that treatment, "does not produce any side effects or adverse reactions. Though the clinical outcomes vary between patients, nobody reported any negative effects since beginning therapy."

"MonaLisa Touch is an extremely safe procedure to effectively turn back a woman's biological clock," Dr. Zerbinati shared. "The flexible treatment parameters make it painless, extremely safe and enable patients to immediately return to their daily lifestyles without any downtime. It is also a great treatment for women who have vulvar and perineal discoloration, lack of tone, breeches to the vaginal outlet, or labioplasty needs," he added. "Patients who have undergone this procedure can expect immediate tightening of the vagina, as well as increased lubrication. After a course of two to three treatments, results can last for 12 months or longer."

## Section of the Vaginal Mucosa Stained with Haematoxylin and Eosin



Vaginal mucosa at baseline shows thinner epithelium and presence of papillae. Image indicates vaginal atrophy at an early stage.



One month after one MonaLisa Touch Tx shows improved trophism of epithelial cells with thickening of the epithelium, shedding of numerous surface cells and large aggregates of glycogen in the innermost part of the intermediate layer.

Images courtesy of Prof. A. Calligaro, University of Pavia (Italy)

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