

A New and Novel Treatment for Women Suffering from Genitourinary Syndrome of Menopause



Dr. Karram



Dr. Sokol



Dr. Salvatore

Genitourinary syndrome of menopause is the new terminology utilized to describe symptoms that occur secondary to vulvovaginal atrophy in the genitourinary tract. The vaginal symptoms commonly associated with this condition include vaginal or vulvar dryness, discharge, itching, and dyspareunia.

While the prevalence of genitourinary syndrome of menopause is unknown, it is fully appreciated that the majority of women with these significant quality-of-life symptoms do not seek medical attention. The prevalence estimates note that approximately half of postmenopausal women in the US report these atrophy-related symptoms as well as a significant negative effect on quality-of-life.

Currently, the most common therapy that has been utilized for these symptoms has been the administration of estrogen. Another currently available therapy specifically for moderate to severe dyspareunia in postmenopausal women is ospemifene, which is an estrogen agonist and antagonist.

Non-estrogen water-based or silicone-

based vaginal lubricants and moisturizers have also been utilized to alleviate vaginal symptoms related to menopause.

DEKA (Calenzano, Italy) developed the SmartXide2 laser system for what has been termed the "MonaLisa Touch"™ treatment. This fractional CO₂ laser is capable of supplying energy with a specific pulse derived from experience in dermatology, taking into account the peculiarities of the vaginal mucosa. It improves the state of the epithelium by restoring epithelial cell trophism. The vaginal dryness that occurs with atrophy is due to poor blood flow as well as the reduced activity of the fibroblasts in the deeper tissue. The SmartXide2 laser addresses this symptom by stimulating blood outflow through the capillaries that supply blood to the vaginal epithelium which will increase lubrication. The high presence of water molecules results in a higher permeability, allowing easier transport of metabolites and nutrients from capillaries to tissue as well as the drainage of waste products from tissues to blood and lymph vessels. The laser also helps restore the pH of the vagina which can be increased from atrophy's loss of cell glycogen. With the restoration of trophism, glycogen levels increase which favors the colonization of vaginal lactobacilli as well as vaginal acidity thus decreasing the pH. This also most likely contributes to defense mechanisms for resisting urinary tract infection.

To date, over 2,000 women in Italy and over 5,000 women worldwide with genitourinary syndrome of menopause have been treated with the DEKA SmartXide2 laser system (fractional CO₂ laser therapy) and multiple peer-reviewed publications have documented its efficacy and safety.

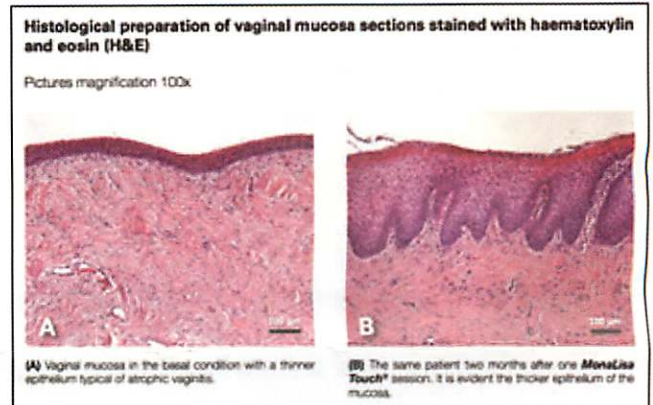


Figure 2

Recently published histology data noted significant changes one month after fractional CO₂ laser treatment that included a much thicker epithelium with wide columns of large epithelial cells rich in glycogen. (See Figures 1 & 2.)

In conclusion, preliminary data on the use of the DEKA SmartXide2 fractionated CO₂ microablative laser to treat symptoms associated with genitourinary syndrome of menopause suggest that the therapy is feasible, efficacious and safe in the short term. If these findings are confirmed by larger, long-term well-controlled studies, this will be an additional *safe and effective treatment for this very common and distressing disorder*. Such a therapy would be very well received by women in whom hormone therapy is either contraindicated, ineffective or poorly tolerated.

Mickey Karram, M.D., is Director of the Fellowship Program, Department of Female Pelvic Medicine & Reconstructive Surgery at The Christ Hospital, and Professor of Obstetrics/Gynecology and Urology at the University of Cincinnati in Cincinnati, Ohio.

Eric R. Sokol, M.D., is Associate Professor of Obstetrics and Gynecology, Associate Professor of Urology, by Courtesy, Co-Chief, Urogynecology and Pelvic Reconstructive Surgery at Stanford University School of Medicine in Palo Alto, California.

Stefano Salvatore is Associate Professor of Obstetrics and Gynecology and head of the Urogynaecology Unit at the San Raffaele Hospital, University of Milan, Italy.

Drs. Karram and Salvatore are consultants for DEKA.

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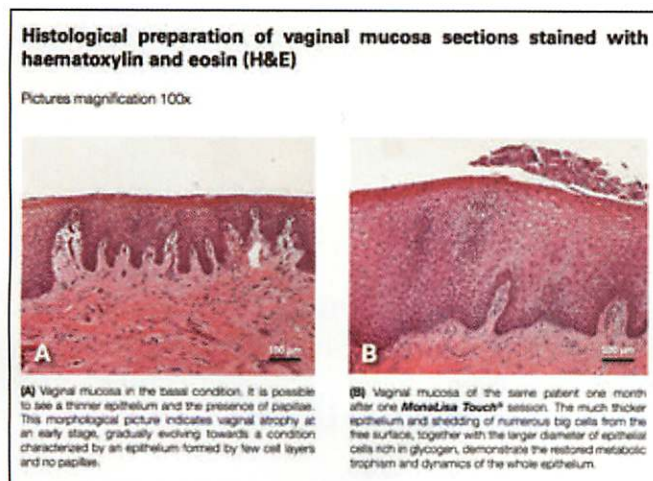


Figure 1