



## Non-Ablative V-Lase® Vaginal Treatment System from LASERING USA Delivers Safe, Effective Results

*The only non-ablative CO<sub>2</sub> laser for vaginal therapy offers same histologic outcomes as ablative CO<sub>2</sub> and RF modalities, but without adverse events*

Non-invasive vaginal therapy is well-established for the nonsurgical treatment of vaginal indications using different energy-based modalities, most commonly lasers (CO<sub>2</sub> or Erbium) or radiofrequency (RF)-based systems. Upon failure of conservative therapy such as lubricants, hormone replacement medications or Kegel exercises, these energy-based modalities are increasingly used to improve symptoms of genitourinary syndrome of menopause (GSM) through histologic mechanisms that reactivate muscle, mucosal cells and the collagen.<sup>1</sup>

Also known as vulvovaginal atrophy (VVA), urogenital atrophy or atrophic vaginitis, GSM is defined as a collection of signs and symptoms involving changes to the vulva, vagina, urethra and bladder, including narrowing or loosening of the vaginal canal, dryness, burning and irritation, poor lubrication, loss of erotic sensation, dyspareunia, and urinary symptoms of urgency, dysuria and recurrent urinary tract infection.<sup>2</sup> GSM results from decreased estrogen levels in the urogenital tissues and can occur at any time in a woman's life cycle, although it is most common in postmenopausal women, when it reportedly affects up to 50% of midlife and older women.<sup>3</sup>

Arturo Menchaca, M.D., FACS, FACOG, has more than 35 years' experience using CO<sub>2</sub> lasers for medical, surgical and cosmetic procedures. He understands that ablative, fractional, energy-based lasers carry notable risks and adverse events that can negatively impact vaginal treatment outcomes – and pose a health risk to treating physicians. Dr. Menchaca, who serves as Director of Female Pelvic Medicine & Reconstructive Surgery & Minimally Invasive Gynecological Surgery at Paris Community



Hospital in Paris, Illinois, said the most important aspect of the V-Lase® system is that it is non-ablative.

“Most other systems or companies promote ablation, which means that you burn and destroy tissue,” observed Dr. Menchaca. “Treatment columns penetrate deep into the tissue by burning the tissue. With V-Lase, you don't destroy or vaporize tissue.”

FDA-cleared for coagulation of soft tissue in gynecology, the V-Lase system from LASERING USA is a high-quality, non-ablative, CO<sub>2</sub> laser that is safe, effective and specifically designed for GYN applications. Based on his experience, Dr. Menchaca described three important aspects of vaginal treatment that he is highly focused on: not burning the tissue; the recovery period; and risk of infection.

“About 40% of the female population has HPV, so when you burn vaginal tissue and breathe in the smoke plume, the physician may end up with HPV warts in the nose or throat,” explained Dr. Menchaca. “That's why non-ablative technology is so important.”

There is also no recovery time with the non-ablative V-Lase treatment compared to ablative technologies.

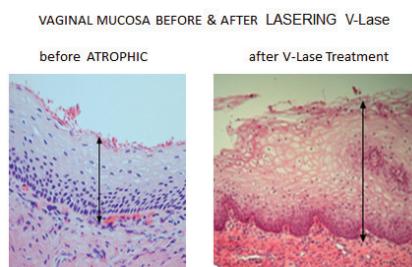
“If you burn the tissue, you have downtime. You must wait several days to take a bath or to have intercourse, because now you have to wait for openings in the tissue to close back up,” noted Dr. Menchaca. “Furthermore, with fractional ablation, if you have an infection in the vagina, there is the possibility that it can penetrate through the openings you have made by burning the tissue, then you end up with secondary inflammation and infection.”

To determine if non-ablative CO<sub>2</sub> laser therapy was as effective as ablative lasers and RF, Dr. Menchaca recently conducted a histologic study on 16 patients, including: 6 with pelvic organ prolapse reconstruction, 3 with dyspareunia, 3 with mixed urinary incontinence, 2 with chronic UTI's and 1 with lichen sclerosis.

"I chose non-ablative CO<sub>2</sub> laser technology for my trial because many consider it the gold standard for facial treatment, with excellent tightening and neocollagenesis," said Dr. Menchaca. "And I chose the V-Lase therapy in particular because of its high-quality delivery system and the fact that it has won multiple awards at aesthetic conferences for facial treatment. Because of this, it is a natural progression to consider this modality for vaginal therapy."

Results of the study, presented at the 2017 American Society for Laser Medicine and Surgery (ASLMS), demonstrated equivalent histologic outcomes.

"With the histology study, I proved that V-Lase offers the same outcome as ablative lasers and RF, but without burning or overheating," said Dr. Menchaca. "And function usually follows histology, meaning if you induce fibroblast replication, you will create collagen and elastin with increased vasculature and moisture."



Histology Courtesy of  
Arturo Menchaca, M.D., FACS, FACOG

The gentle heat from the non-ablative V-Lase laser beam creates mild thermal damage to the mucosal lining and underlying tissues in the vaginal canal and vulva. This remodels existing collagen and induces fibroblasts to replicate, thus creating new collagen, elastin,

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reticular fibers and glycosaminoglycans in the extracellular matrix – all of which thickens, tightens and makes the vaginal walls more elastic and pliable over time and intercourse more pleasurable.

"With V-Lase, every patient I have treated has benefited, plus I can reassure patients it's safe because I am not doing any burning," emphasized Dr. Menchaca. "I don't reach the temperatures the other lasers reach in order to heat and destroy tissue. I deliver just enough heat to reactivate and initiate fibroblast activity, so there is no destruction of any tissue."

Many of Dr. Menchaca's patients have large pelvic floor defects and uterine prolapse, which, if repaired with their native tissue, have up to a 60% recurrence rate.

"I cannot give them estrogen due to a history of blood clots, thromboembolisms, a stroke, heart attack or breast cancer," said Dr. Menchaca. "But with V-Lase, I can generate new collagen – especially in patients where I am going to use mesh to augment the procedure. So, before I perform reconstructive pelvic surgery, I will apply CO<sub>2</sub> laser treatments to generate healthier tissue. By the time I get into surgery, I have healthy, thick, well-vascularized and collagenated mucosa tissue to work with."

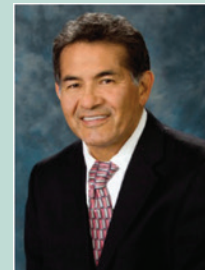
Dr. Menchaca is conducting further studies to establish the durability and potential neurogenesis associated with V-Lase vaginal therapy.

The only non-ablative CO<sub>2</sub> laser for vaginal therapy, V-Lase from LASERING USA uses a patented

Chopped CW (continuous wave) beam delivery system with no consumable costs. Gentle heat is delivered in a safe, painless, 15-minute treatment for various gynecological applications with no smoke plume, no downtime and no risk of initiating an infection or worsening an existing infection. The product can also be used for a number of other ablative and non-ablative medical applications in ENT, dermatology and dentistry. To learn more about the safety and efficacy of V-Lase, visit <https://v-lase.com>.

## References:

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Dr. Menchaca is fellowship trained in Female Pelvic Medicine and Reconstruction surgery. He has been using the CO<sub>2</sub> laser for medical, surgical and cosmetic procedure since 1983. He has performed thousands of pelvic reconstructions with native tissue, graft and synthetic mesh. Dr. Menchaca has lectured extensively on pelvic reconstruction and taught 100s of surgeons on his techniques in the operating suite.