Lasering USA Introduces Novel Non-Ablative CO₂ Laser Vaginal Rejuvenation Device

By Arturo Menchaca, M.D., F.A.C.S., F.A.C.O.G.

Non-invasive vaginal rejuvenation is now a well-established and popular procedure to treat a variety of vulvovaginal disorders, improve sexual gratification and enhance the aesthetic appearance of the external female genitalia. This rejuvenation is accomplished via neocollagenesis, neovascularization and possibly neoneurogenesis. While other $\rm CO_2$ laser devices on the market use ablative fractional resurfacing, Lasering USA (San Ramon, Calif.) recently launched a new, non-ablative/non-fractional $\rm CO_2$ laser-based device for feminine rejuvenation called V-Lase*, which uses their patented chopped CW technology.

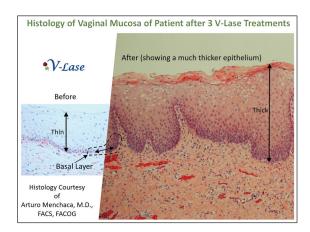
Gentle heat from the non-ablative laser beam creates mild thermal damage to the mucosal lining and underlying tissues of the vaginal canal and vulva. This will remodel (shrink and tighten) existing collagen and induce fibroblasts to undergo mitosis and replicate, thus creating new collagen, elastin, reticular fibers and glycosaminoglycans (GAGs) in the extracellular matrix. All of this activity will thicken, tighten and make the vaginal walls more elastic and pliable over time (reducing the vaginal canal diameter for better sensation during intercourse). It will also create new superficial blood vessels that not only provide better oxygenation and nutrition to the tissue, but also increases vaginal transudate, which helps restore vaginal moisture and pH balance. This will decrease vaginal itching and burning, reduce symptoms of painful intercourse, lower the risk of vaginal infections, strengthen the pelvic floor to improve symptoms of stress urinary incontinence (SUI) and increase neurogenesis, which improves G-spot nerve sensitivity to heighten sexual gratification.

V-Lase offers many benefits over ablative modalities. Since it does not invade the surface tissue there is no risk of worsening or initiating an infection. There is no bruising and no production of discharge, therefore there is no downtime from sexual activity, exercise (including swimming), or the use of tampons if treatment is performed in proximity of a menstrual cycle.



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Dr. Menchaca is fellowship trained in female pelvic medicine and reconstruction surgery. He has been using the CO_2 laser for medical, surgical and cosmetic procedure since 1983. Dr. Menchaca has performed thousands of pelvic reconstructions with native tissue, graft and synthetic mesh and is the director of Female Pelvic Medicine & Reconstructive Surgery at Paris Community Hospital in Paris, Ill. Dr. Menchaca has lectured extensively on pelvic reconstruction and trained hundreds of surgeons on his techniques in the operating suite.







Before and after three V-Lase treatments Photos courtesy of Otakar Tesar, M.D.

DISORDER ~	AGE	PATIENT#	IMPROVEMENT X3	IMPROVEMENT X1
POP (Pelvic Order Prolapse)	67	1	100%	
	63	2	100%	
	73	3	85%	
	80	4	100%	
	63	5	100%	
	65	6	100%	
	63	7	100%	
	55	8	100%	
Dyspareunia	67	9	75%	
	55	10	50%	
Lichen Schlerosis	80	11	100%	
	47	12	100%	
Mixed UI OAB>SUI	68	13	50%	
	77	14	80%	
SUI (Stress Urinary Incont.)	27	15		20%

Study demographics included a total of 15 patients ranging in age from 27 to 80 years old. Clinical symptomatic benefits ranged from 20% (after only one treatment) to as high as 100% (after three treatments).

Source: Lasering USA

Human papillomavirus (HPV) is the most common sexually transmitted infection in the U.S. There are over 100 types, some of which can lead to numerous forms of cancer. It is estimated that up to 80% of all females will contract HPV at some point during their life. When using an ablative CO_2 laser for vaginal rejuvenation on a patient who is currently infected with HPV there is an elevated risk of spreading or worsening the infection in that patient, as well as a risk of HPV contamination to the medical practitioner and/or support staff assisting in the procedure. Furthermore, ablative CO_2 lasers create a smoke plume, which is a natural consequence of ablation. As a non-ablative system V-Lase does not require the use (or added expense) of a smoke evacuator.

Other benefits of non-ablative vaginal rejuvenation include no need for topical anesthetic due to less patient discomfort during treatment, and the low intensity of non-ablative CO_2 laser light does not require shaving of the external genitalia when treating the vulva. Also, the V-Lase device has no consumables as the probe, insertion ring and external handpiece can be steam sterilized.