

Fractional CO2 Laser Improves Vaginal Health After Menopause

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NEW YORK (Reuters Health) - Fractional CO2 laser therapy is more effective than intravaginal promestriene or vaginal lubricant for improving vaginal health in women with genitourinary syndrome of menopause (GSM), researchers from Brazil report.

"The most interesting aspect for us was the significant improvement of the vaginal maturation and the Vaginal Health Index (VHI) score after the laser treatment, congruous or superior to the intravaginal promestriene results," said Dr. Lucia Costa-Paiva from

Faculty of Medical Sciences, State University of Campinas-UNICAMP Campinas, in Sao Paulo.

"Several studies have demonstrated the efficacy of the vaginal laser in these parameters, but not comparing it to vaginal estrogen therapy, considered the gold standard treatment for GSM," she told Reuters Health by email.

Current GSM treatments are associated with relapses and low compliance rates. Laser technology presents another option for treating GSM, but long-term efficacy and safety data and comparative studies are scarce and the devices are not yet approved in the U.S.

Dr. Costa-Paiva and colleagues compared intravaginal fractional CO2 laser therapy (three sessions performed at 30-day intervals), vaginal cream containing the estrogen promestriene (administered three times weekly), and water-based vaginal lubricant (applied with sexual activity) in their randomized study of 72 women with GSM.

At week 14, the total VHI score had improved to a significantly greater extent in the laser therapy group than in either the promestriene or lubricant groups, as had each of the components of the VHI (elasticity, fluid volume, pH, moisture, and epithelial integrity), the team reports in *Menopause*, online June 24.

After treatment, there was also an overall improvement in vaginal maturation that was significantly greater in the laser group than in the other groups.

Although there were some improvements in the Female Sexual Function Index (FSFI), they were mostly not statistically significant and did not differ significantly among the treatment groups.

"We consider it important to emphasize that the female sexual function is complex and multifactorial aspect, that includes not only vaginal condition, making the indication of the laser therapy only to sexual function improvement not adequate," Dr. Costa-Paiva said.

"These results show that, for those women who prefer a more practical and comfortable treatment and also those with contraindication to the hormonal treatment, the laser therapy can provide beneficial results (similar to those with) current treatments," he said.

"Nonetheless, more randomized studies, with long-term follow-up and adequate sample sizes are needed to provide sufficient evidence for incorporating this technology as routine clinical practice."

Dr. Angamuthu S. Arun from Rockingham Women's Health Center, in Baldvis, Australia, who recently reviewed laser therapy as a treatment for GSM, told Reuters Health by email, "This short-term study suggests that this can be tried in difficult cases of GSM refractory to vaginal hormonal therapy."

He said it could be especially useful for "breast-cancer survivors where women are reluctant to use vaginal estrogen cream."

"This is a single-center study which may result in bias," Dr. Arun said. "Hence, long-term multicenter randomized controlled trials are still needed to (assess) the effectiveness of laser treatment on GSM. The U.S. Food and Drug Administration (FDA) has still not listed laser for GSM treatment yet."

In a safety communication released on July 30, 2018, the FDA cautioned healthcare providers: "Be aware that the safety and effectiveness of energy-based devices to perform vaginal 'rejuvenation' or cosmetic vaginal procedures has not been established. Understand that the FDA has not cleared or approved any energy-based medical device for vaginal 'rejuvenation' or vaginal cosmetic procedures, or for the treatment of vaginal symptoms related to menopause, urinary incontinence, or sexual function."

The study had no funding and the researchers report no conflicts of interest.

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