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Microablative fractional CO_2-laser therapy and the genitourinary syndrome of menopause: An observational study

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Abstract

Objective

This study aimed to assess the effect of the Microablative Fractional CO_2 Laser (CO_2-laser) therapy on vaginal pathophysiology and the symptoms of the Genitourinary Syndrome of Menopause (GSM).

Methods

Postmenopausal women with moderate to severe symptoms of GSM underwent three sessions of CO_2-laser therapy at monthly intervals. Participants were evaluated at baseline and 4 weeks after the last treatment.

Main Outcome Measures

The primary outcomes were Vaginal Maturation Value (VMV) and Vaginal Health Index Score (VHIS). Secondary outcomes included symptoms of GSM, Female Sexual Function Index (FSFI), International Consultation on Incontinence Questionnaire of Female Urinary Tract Symptoms (ICIQ-FLUTS) and Urinary Incontinence Short Form (ICIQ-UI SF), Urogenital Distress Inventory (UDI-6) and King's Health Questionnaire (KHQ).

Results

Fifty-three postmenopausal women completed this study. VMV, VHIS and FSFI increased significantly. Dyspareunia, dryness, burning, itching, dysuria, frequency, urgency, urgency incontinence, stress incontinence and scores on the ICIQ-FLUTS, ICIQ-UI SF, UDI-6 and KHQ decreased significantly. Factors predicting for which women the CO_2-laser therapy was more effective were not identified.

Conclusion

This study suggests that intravaginal CO_2-laser therapy for postmenopausal women with clinical signs and symptoms of GSM may be effective in improving both vaginal pathophysiology and reported symptoms.