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Microablative fractional CO₂ laser for the genitourinary syndrome of menopause: up to 12-month results

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Abstract

Objectives

The aim of this study is to assess the efficacy of microablative fractional CO₂ laser therapy for genitourinary syndrome of menopause (GSM) management, when three, four, or five laser therapies were applied in a follow-up period of 12 months.

Methods

Retrospective study evaluating GSM symptoms at baseline, and 1, 3, 6, and 12 months after last laser therapy. Visual analog scale, International Consultation on Incontinence Questionnaires- Female Urinary Tract Symptoms, International Consultation on Incontinence Questionnaires-Urinary Incontinence Short Form, Urogenital Distress Inventory-6, and Female Sexual Function Index were used for assessment of GSM symptoms' intensity or bothering and parameters of sexual function.

Results

Overall, 94 women were included (35, 35, and 24 received three, four, and five therapies, respectively). All GSM symptoms improved statistically significantly. Intensity of dyspareunia and dryness decreased from 9 (5-10) (median [minimum-maximum]) and 8 (0-10) at baseline to 0 (0-6) and 0 (0-8), 1 month after last laser therapy (all $P < 0.001$), respectively. FSFI and frequency of sexual intercourse increased from 10.8 (2-26.9) and 1 (0-8) at baseline to 27.8 (15.2-35.4) and 4 (2-8) 1 month after last laser therapy (all $P < 0.001$), respectively. The positive laser effect remained unchanged throughout the 12 months of follow-up. The same pattern was followed for symptom-free rates. Four or five laser therapies may be superior in lowering the intensity of GSM symptoms in comparison to three laser therapies, in short and long-term follow-up. Differences between four and five laser therapies were not found.

Conclusions

Laser therapy may provide significant improvement and/or absence of GSM symptoms up to 12 months follow-up, irrespectively to the number of laser therapies applied. Symptoms intensity 1 month after last laser therapy may be indicative of GSM symptoms intensity at 12 months. One month after third laser therapy is the critical time to decide whether treatment extension should be offered.