

The effect of fractional CO₂ laser treatment on the symptoms of pelvic floor dysfunctions: Pelvic Floor Distress Inventory-20 Questionnaire

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Abstract

Background and Objectives

To assess the improvement on pelvic floor distress (PFD)-related urogenital symptoms using validated questionnaires after intravaginal CO₂ laser treatment.

Study Design/Materials and Methods

Forty postmenopausal women with genitourinary symptoms of menopause (GSM) were enrolled into this prospective cohort study and underwent vaginal laser treatment using MonaLisa Touch® fractional CO₂ laser system. Patients received three vaginal laser treatments with 360° probe 4 weeks apart. A three-component Pelvic Floor Distress Inventory (PFDI-20) validated questionnaire was filled out by each patient before each session and 4 weeks after the final treatment. Wilcoxon rank sum test was used to compare the before and after treatment scores.

Results

Pelvic Organ Prolapse Distress Inventory (POPDI-6) scores were not significantly different after the first treatment compared with baseline (mean ± standard deviation [SD], 21 ± 18 vs. 17 ± 15, P=0.44). However, each subsequent treatment resulted in further, statistically significant improvement in symptom scores (14 ± 15, P=0.03 and 13 ± 13, P=0.01, after the second and third treatments, respectively). Similarly, Urinary Distress Inventory (UDI-6) scores were not significantly different after the first laser treatment (mean ± SD, 36 ± 25 vs. 29 ± 23, P=0.36). After the second and third treatments there were significant improvement in the standardized scores (24 ± 20, P=0.03 and 22 ± 21, P=0.01). Colorectal-Anal Distress Inventory (CRADI-8) scores did not change significantly after three laser treatments.

Conclusions

Three sessions of microablative fractional CO₂ vaginal laser treatment significantly improves patient reported urinary and pelvic organ prolapse symptoms.