

Long-term reliability of fractioned CO₂ laser as a treatment for vulvovaginal atrophy (VVA) symptoms

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Abstract

Purpose

The aim of this study was to evaluate long-term effects of the fractional CO₂ laser for the treatment of vulvovaginal atrophy (VVA) symptoms.

Methods

Women presenting with VVA symptoms and meeting inclusion criterion were enrolled to fractioned CO₂ laser therapy. Patient's satisfaction was measured on five-point Likert scale at 4 weeks and 6, 12, 18, 24 months after treatment by interview and clinical examination for vaginal livability.

Results

184 patients constituted the final study group: 128 women were spontaneous menopause and 56 were oncological menopause. 117 women were nulliparous and 36 had previous hysterectomy. 95.4% (172/184) of the patients declared that they were satisfied or very satisfied with the procedure at 4 weeks after treatment. At 6 months 92% (170/184) patients were satisfied; at 12 months 72% (118/162) were satisfied; at 18 months 63% (60/94) were satisfied; at 24 months 25% (4/16) of patients answered they were still satisfied. We observed a decline in patient's satisfaction between 18 and 24 months after laser therapy. Data showed that the time interval from onset of menopause was a statistically significant factor ($p < 0.05$) for treatment satisfaction in oncological group.

Conclusions

Long-term data showed that the improvement of vaginal health may continue up to 24 months after fractional CO₂ laser treatment although between 18 and 24 months benefits decline, and approximately 80% of women decide to start a new treatment cycle of laser applications.