Long-term reliability of fractioned CO_2 laser as a treatment for vulvovaginal atrophy (VVA) symptoms

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- Annalisa Pieralli,
- Claudia Bianchi,
- Manuela Longinotti,
- Serena Corioni,
- Noemi Auzzi,
- Angelamaria Becorpi,
- Maria Grazia Fallani,
- Giuseppe Cariti &
- Felice Petraglia

An Erratum to this article was published on 27 September 2017

This article has been updated

Abstract

Purpose

The aim of this study was to evaluate long-term effects of the fractional CO_2 laser for the treatment of vulvovaginal atrophy (VVA) symptoms.

Methods

Women presenting with VVA symptoms and meeting inclusion criterion were enrolled to fractioned CO_2 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.

Conclusion

Long-term data showed that the improvement of vaginal health may continue up to 24 months after fractional CO_2 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.

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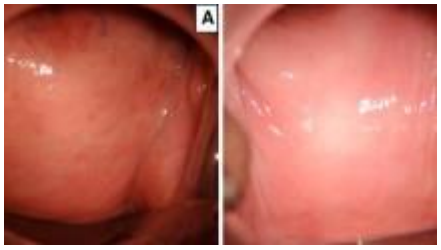

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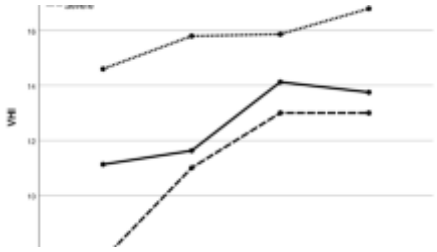

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Article 23 January 2024

Change history

- **27 September 2017**

In original publication, the Fig. 1 was incorrect. The correct figure has been given below.

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Author information

Authors and Affiliations

1. **Section of Oncological Gynecology, Department of Woman and Child Health, Careggi University Hospital, Largo Brambilla 3, 50134, Florence, Italy**

Annalisa Pieralli, Claudia Bianchi, Manuela Longinotti, Serena Corioni, Noemi Auzzi, Angelamaria Becorpi, Maria Grazia Fallani, Giuseppe Cariti & Felice Petraglia

Contributions

Protocol/project development: AP, MGF. Data collection or management: SC, ML, AB. Data analysis: CB, NA, AP. Manuscript writing/editing: AP, CB. Administrative technical support/supervision: FP, GC.

Corresponding author

Correspondence to Annalisa Pieralli.

Ethics declarations

Conflict of interest

The authors declare that they have no conflict of interest.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study. The ethical approval and the informed consent have been specified above in the manuscript text.

Additional information

An erratum to this article is available at https://doi.org/10.1007/s00404-017-4538-y.

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- Spontaneous menopause
- Follow-up