

Interferential current: a new treatment for lubrication and dyspareunia complaints in women with premature ovarian failure using hormone therapy

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Women with Premature Ovarian Insufficiency (POI) often have sexual complaints, such as less lubrication and dyspareunia, despite using systemic hormonal therapy (HT). Objective: To evaluate the treatment for sexual dysfunction with Interferential current (IC) compared to topical estrogen cream (E) in women with POI using HT. Methods: A randomized controlled study was carried out on patients who filled out a sexual function questionnaire (FSFI) then divided into two groups (IC, E). The data was compared between groups using chi-square and Mann-Whitney test for categoric and numeric variables, respectively. The McNemar test and the Wilcoxon test were used for the categoric and numeric variables, respectively for comparison between pre and post intervention. Significance level was 5% ($p < 0.05$). Patients – Initially, 80 women were interviewed and 35 included; 30 sexually active POI women, using HT completed the treatment. Intervention – The women were randomly assigned into two groups: IC group with electrical stimulation of the pelvic floor, in a total of 8 sessions of 20 minutes each for a month. Electrodes were placed on over the vulvar lips. The E group used topical vaginal estrogen creme daily for four weeks, 0.5 mg/day. Main outcome measures – There was an improvement in lubrication and dyspareunia and in the total score of sexual function for both treatments. Results – Women submitted to IC ($n=20$) and E ($n=10$) were respectively 38.7 ± 5.9 and 34.5 ± 6.5 years old ($p=0.1$), had used systemic HT for 8.3 ± 8.6 and 4.2 ± 5.8 years ($p=0.08$) and had a 21.4 ± 6.3 and 25.3 ± 7.5 ($p=0.98$) pre-intervention total FSFI score. There was no significant difference between the pre and post intervention total FSFI score for the E group, however there was an improvement in lubrication (3.8 ± 1.8 and 4.8 ± 1.3 , respectively, $p=0.0008$) and dyspareunia (3.8 ± 2.1 and 5.0 ± 1.4 , $p=0.03$). Comparing pre and post intervention for the IC group, there was improvement in the FSFI (21.4 ± 6.3 and 25.8 ± 6.3 , $p=0.0004$), lubrication (3.7 ± 1.4 and 4.5 ± 1.4 , $p=0.01$), dyspareunia (3.6 ± 1.6 and 4.6 ± 1.3 , $p=0.005$), satisfaction (4.1 ± 1.5 and 4.8 ± 1.1 , $p=0.02$) and orgasm (3.5 ± 1.6 and 4.4 ± 1.4 , $p=0.01$). Conclusion: In women with POI using HT, the treatment with interferential current has proven to be effective in the improvement of lubrication and dyspareunia, as well as global FSFI score, with superior results to those obtained through conventional treatment with topical estrogen.

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