ABSTRACT BOOK ABSTRACTS



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AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

## EFFECTS OF PIEZOELECTRIC SHOCKWAVES ON LOCALIZED ADIPOSITY

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Background: Shockwave therapy is a noninvasive technique aimed at reducing localized subcutaneous adipose tissue. This is possible because the mechanical waves reach the surface of the tissue, increasing blood and lymphatic flow, and generating unstable cavitation preserving unreached areas.

Objective: To investigate the effects of piezoelectric shock wave therapy on localized subcutaneous adiposity.

Materials and Methods: This is an experimental study in which 31 volunteers, women, aged between 19 and 35 years. Four treatment sessions were performed once a week with parameters of the piezoelectric shock wave (15 Hz, 0,6 mJ, 10 minutes, area 10cm2). The applications were performed on the left side, the infra umbilical region being made the dynamic application and the supra umbilical region the stationary application. The right side did not receive application, becoming the control side. The evaluation methods used were plicometry, perimetry, ultrasonography. Descriptive and inferential statistics were performed using SPSS 22.0. The normality of the data was observed by the Kolmogorov-Smirnov (KS) test. For the comparison between groups whose data were parametric, paired t-test was applied for intragroup comparisons.

Results: In the comparison between the application regions, it can be observed that the therapy by piezoelectric shock waves promoted a reduction of localized adiposity, both in the analysis of the plicometry and the ultrasonography, with p value < 0,01. It is observed that the stationary mode is more effective, but should be avoided by the adverse effects and pain generated.

Conclusions: The therapy by piezoelectric shock waves promoted a reduction of localized adiposity in the model and dose used in this study, both in the analysis of plicometry and of











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ultrasonography.



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