

ENDERMOLOGIE FOR CELLULITE: MAINTENANCE TREATMENT INDUCES PERSISTENT EFFECT AND ADDITIONAL IMPROVEMENT

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Orange peel phenomenon, characterized by the dimply aspect of the cutaneous surface, affects 90% of the women with a predilection for 30-54 years old. This disorder is associated with dermo hypodermal and microvascular deteriorations. Either cellulite or anti-cellulite treatments can be evaluated using a combination of appropriate techniques such as sonography, histology, microdialysis, profilometric analysis in order to assess reliable data.

The LPG® Technique (called Endermologie® in Aesthetic field) is a non-invasive technique, consisting of a mobilization of the skin tissue between two rollers, creating a skin fold, stretching the underlying tissue and mobilizing the skin fold. Different points of main interest targeting cellulite physiopathology have already been outlined with this technique: better drainage of the superficial lymphatic and blood network^{1,2}, production of dense collagen bands running parallel to the skin surface³, stimulation of fibroblasts division^{4,5}. Clinical efficacy in cellulite and body contouring is also well documented^{6,7,8,9}. Cellu-M6®Keymodule is the latest generation of LPG® Technique and represents a more sophisticated means of skin mechanization. Using several high-tech means of investigation and reliable clinical measurements, a study has been conducted in order to precisely quantify the efficacy and durability of Endermologie® with this new device in the treatment of cellulite.

30 women from 23 to 54 years old with grade II cellulite and who agreed not to alter their nutritional habits and physical exercise during the total duration of the study, completed 16 sessions with Cellu M6®Keymodule (2 sessions per week, 35 minutes duration/session). At the end of the 16 sessions, patients were randomly allocated into 3 groups for 6 months maintenance treatment (0 session/month, 1 session/month or 2 sessions/month). Evaluation including circumference and cutaneous fold measurements, sonography 20MHz, image analysis of cutaneous prints, macrophotographies (x20), standardized photographs and self questionnaires, were carried out at W0 (before treatment), W4 (after 8 sessions) W8 (at the end of the 16 sessions) and every 2 months during the maintenance treatment.

Results showed a duration-dependent effect from W0 to W8 for all the parameters: significant decrease of circumference and cutaneous fold, smoothing of the dermis-hypodermis interface (observed under 20 MHz ultrasound), smoothing of cutaneous prints (dimpled surface), improvement of body contours accompanied by a high level of satisfaction amongst the patients with regard to the treatment itself (relaxation, wellness) and the level of efficacy on their cellulite.

Treatment of cellulite with Endermologie® using the Cellu-M6®Keymodule considerably modifies the skin structure: the significant improvement observed is determined principally by quantitative criteria which vary favourably during the 8 week initial treatment (2 sessions per week) with a threshold effect observed as early as 4 weeks: the improvement is correlated with the number of sessions, whatever the parameter. After follow-up for 6 months and compared to the effect obtained at the end of the 8 week initial treatment, there was an excellent sustained effect (almost 100%) in the group not receiving follow-up treatment, and an additional effect in the groups receiving 1 or 2 sessions per month respectively. Follow-up treatment with 2 sessions/month produces the greatest potentiation, with a further improvement on the results of the initial 16 sessions treatment (40 to 50% depending on the measured parameter).

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