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Improvement of aesthetic results of cavitation associating a therapeutic program with mechano-stimulation technique

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Introduction: Cavitation is a therapeutic method that uses non-invasive outpatient use of low-frequency ultrasound for the reduction of localized fat and cellulite. The mechanical massage technique is a patented technique exclusively delivered by a sophisticated equipment that uses independant rollers exerting a positive pressure associated with the application of negative pressure to the skin and subcutaneous tissue. This therapy is officially recognized in the treatment of edematous conditions and cellulite. Its ability to reduce the appearance of cellulite, thanks to better distribution of subcutaneous fat, lead us to combine the use of this technique with cavitation to improve cosmetic results.

Study objective: to verify if the mechanical massage technique is able to modify the results obtained with cavitation in middle-aged women.

Materials & Methods: 40 women aged between 35 and 52 years with adiposity and / or localized cellulite at the trochanter, exterior, front and back of thighs, inner knees, buttocks, abdomen and hips were divided into 2 groups A and B. Group A consisted of 10 women aged between 36 and 48 years who have carried out a series of 8 sessions of cavitation. Group B consisted of 30 women aged between 35 and 52 years who have alternated sessions of cavitation with mechanical massage to the following scheme: after each session of cavitation was performed a lymphatic drainage session with mechanical massage and at the end of the cavitation program, the patients underwent mechanical massage treatments twice a week for 10 sessions and once a week for another 10 sessions. The clinical evaluations included digital photography, cellulite grade, body weight and measurements of body circumference in 6 anatomical sites.

Risults: Both groups showed significant differences in the degree of cellulite before and after treatment. All patients showed a significant circumference loss in all the treated areas. Both groups had significant weight loss. Group B showed significantly better results than group A and in particular with regard to the remodeling and the diameter circumference of the different body locations when compared before treatment.

Conclusions: As reported in the literature, our study confirmed that cavitation provides a viable alternative for those who can not or do not want to, deal with a liposuction procedure for the treatment of localized adiposity and cellulite and who prefer a noninvasive, painless, safe, comfortable and effective technique. The association with another complementary technique such as mechano-stimulation, which is convenient and well tolerated, significantly improves the results obtained by reshaping the body with an important action on the skin tightening, body circumferences, degree of cellulite which concern so many women.

Bibliography:

- Tülin Güleç A. **Treatment of cellulite with LPG endermologie.** *Int J Dermat* 2009, **48:** 265–70.
- Coleman KM, Coleman WP 3rd, Benchetrit A. **Non-invasive, external ultrasonic lipolysis.** *Semin Cutan Med Surg* 2009; 28: 263-7.
- Christ C, Brenke R, Sattler G, Siems W, Novak P, Daser A. **Improvement in skin elasticity in the treatment of cellulite and connective tissue weakness by means of extracorporeal pulse activation therapy.** *Aesthet Surg J* 2008; 28: 538–44.
- Ersek RA, Mann GE 2nd, Salisbury S, *et al*. **Noninvasive mechanical body contouring: a preliminary clinical outcome study.** *Aesthetic Plast Surg* 1997; **21**: 61–7.
- Chang P, Wiseman J, Jacoby T, *et al*. **Noninvasive mechanical body contouring: (Endermologie) a one-year clinical outcome study update.** *Aesthetic Plast Surg* 1998; **22**: 145–53.