



POWER SHAPE 2™

Présentation de la NOUVELLE innovation.
Système puissant de remodelage du corps à triple
intégration

Sommaire

- I. Qu'est-ce que Powershape2 ?
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 - Analyse de la littérature sur la radiofréquence
 - Technologie du vacuum
 - Technologie du rouleau
 - Affichage de l'interface graphique
- IV. Avantages
- V. Spécifications
- VI. Résultat clinique

I. What is Powershape2



Vacuum

Circulation sanguine et drainage lymphatique

RF

Rajeunissement de la peau et amélioration de la cellulite

Low Level Laser

Réduction de la couche de graisse

Confortable, efficace, non invasif !

La nouvelle génération de traitements de remodelage du corps et de raffermissement de la peau. PowerShape2 offre de multiples applications de traitement équipées des technologies esthétiques les plus convoitées de l'industrie et des traitements esthétiques les plus recherchés.

Qu'il s'agisse d'une simple amélioration des zones à problèmes ou d'une transformation complète du corps, nous pouvons vous aider à vous sentir au mieux de votre forme.

II. Structure

Corps

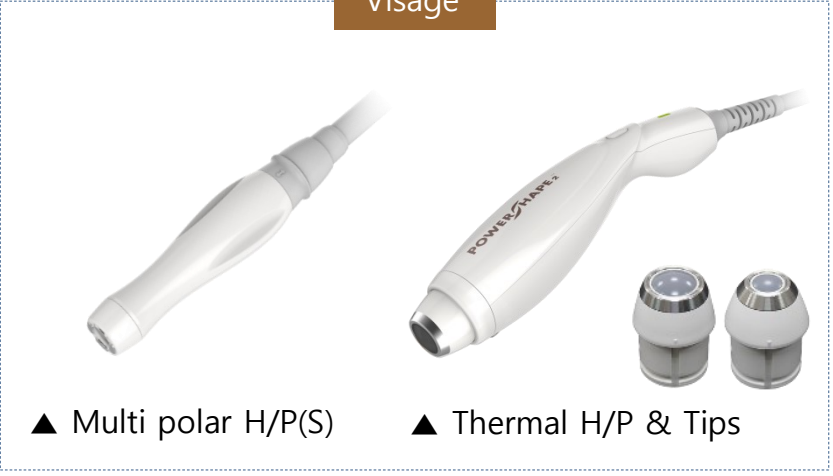


▲ Roll H/P

▲ Multi polar H/P(L)

▲ Multi polar H/P(M)

Visage



▲ Multi polar H/P(S)

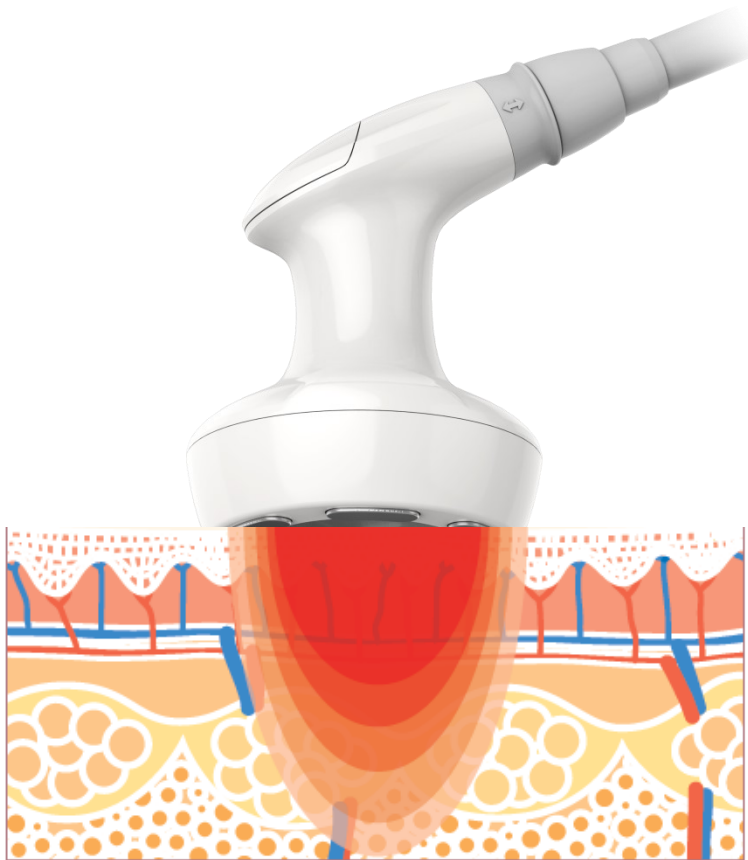
▲ Thermal H/P & Tips



▲ Tiroir



2MHz Radio Fréquence



- PowerShape2 maintient un signal RF à courant alternatif de 2 MHz.
- La rencontre de l'énergie radiofréquence (RF) avec l'impédance du tissu génère de la chaleur. Lorsque le derme riche en collagène est chauffé à plus de 60°C, il se dénature immédiatement et les fibrilles se contractent et s'épaississent. On pense que la cascade inflammatoire qui suit la réaction à la chaleur initiale entraîne la formation de nouveau collagène, ce qui donne à la peau une apparence plus ferme, plus tendue et plus jeune.

Analyse de la littérature sur la RF

"Impact des radiofréquences sans contact induisant l'apoptose sur la température de la surface de la peau humaine et de la couche sous-cutanée, ainsi que sur l'histologie porcine : Une étude pilote"

Original Article
 Med Laser 2016, 6(1):09-23
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Impact of Contactless Apoptosis-Inducing RF on Temperature of Human Skin Surface and Subcutaneous Layer as well as Porcine Histology: A Pilot Study

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Background and Objectives
 Radiofrequency (RF) technology has been developed as a noninvasive method to reduce subcutaneous abdominal fat. The aim of this study was to measure the changes of human skin surface temperature and human subcutaneous fat layer temperature, as well as to evaluate the histologic change in porcine adipocytes during and after treatment with contactless apoptosis-inducing RF device.

Materials and Methods
 A single pig was treated with RF device for 30 minutes at maximum power of 200 Watts. The skin was biopsied and evaluated immediately after the therapy. A female human volunteer was also treated with RF device for 45 minutes. The temperatures of the skin surface and subcutaneous fat layer were measured during the therapy.

Results
 Skin biopsy specimens from the pig revealed changes in the adipocyte shape and size. Many of the adipocytes had shrunken, with a few showing condensed chromatin and fragmented nuclei, reflecting signs of adipocyte apoptosis. In the human volunteer, subcutaneous fat layer maintained a temperature of 43-45°C, while the skin surface temperature did not reach 43°C during the treatment.

Conclusion
 The contactless selective RF device achieved the ideal temperature for fat reduction in subcutaneous fat layer during the treatment, while maintaining skin surface temperature below the threshold of heat-induced pain for humans. Apoptosis of subcutaneous adipocytes was confirmed in porcine skin. Further clinical trials are necessary to evaluate the efficacy and safety.

Key words
 Radiofrequency; Subcutaneous abdominal fat; Adipocyte; Apoptosis

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Medical Lasers: Engineering, Basic Research and Clinical Application 29

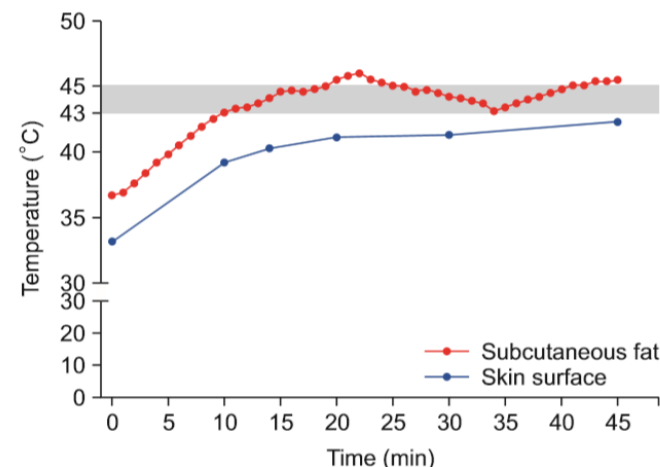
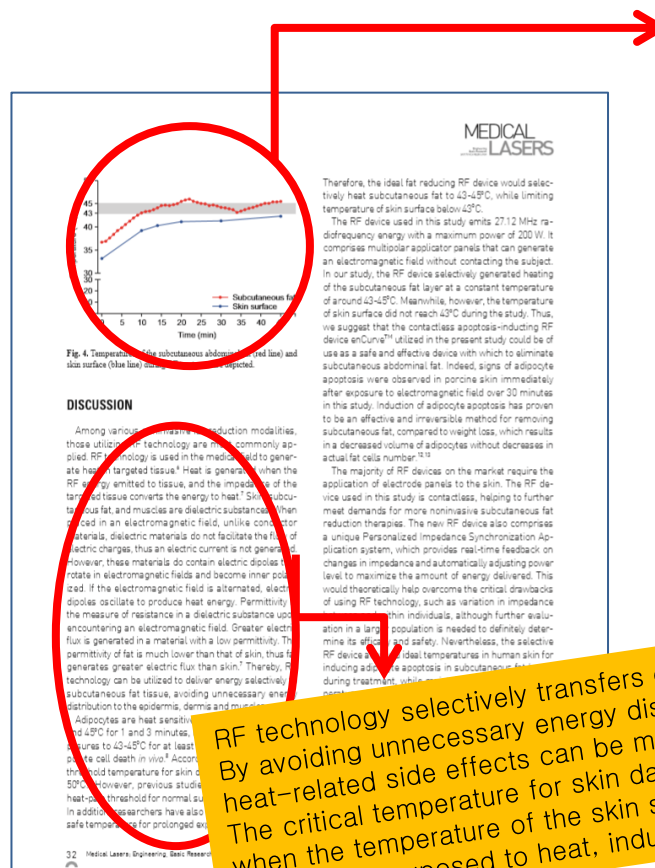


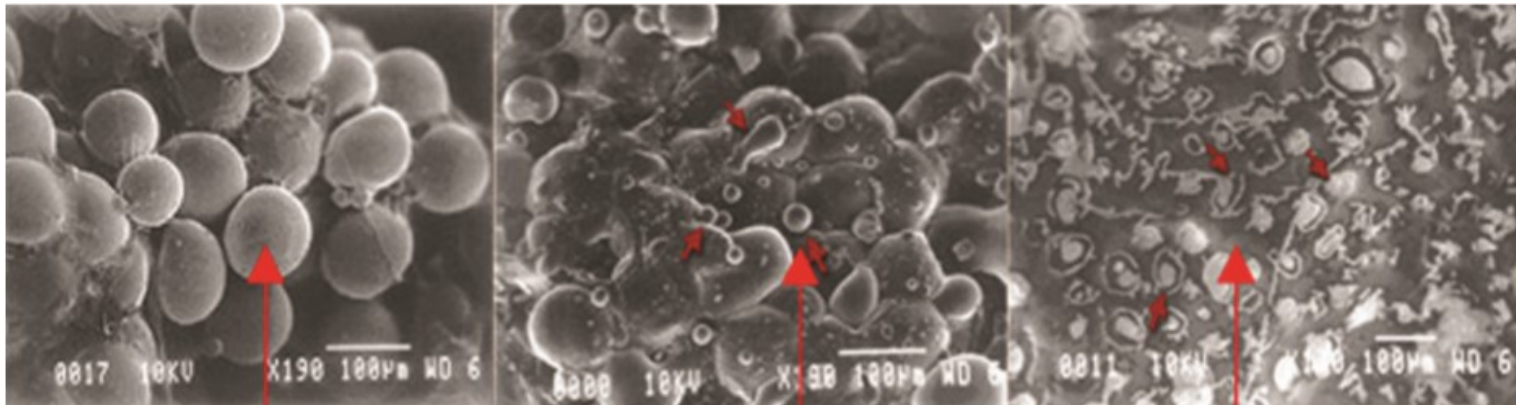
Fig. 4. Temperatures of the subcutaneous abdominal fat tissue (red line) and skin surface (blue line) during RF treatment are depicted.

RF technology selectively transfers energy to the subcutaneous fat tissue. By avoiding unnecessary energy distribution to the epidermis, dermis, and muscles, heat-related side effects can be minimized. The critical temperature for skin damage is about 50 degrees, that is, when the temperature of the skin surface is raised to no higher than 50 degrees, fat cells are exposed to heat, inducing cell death of adipocytes in the body.

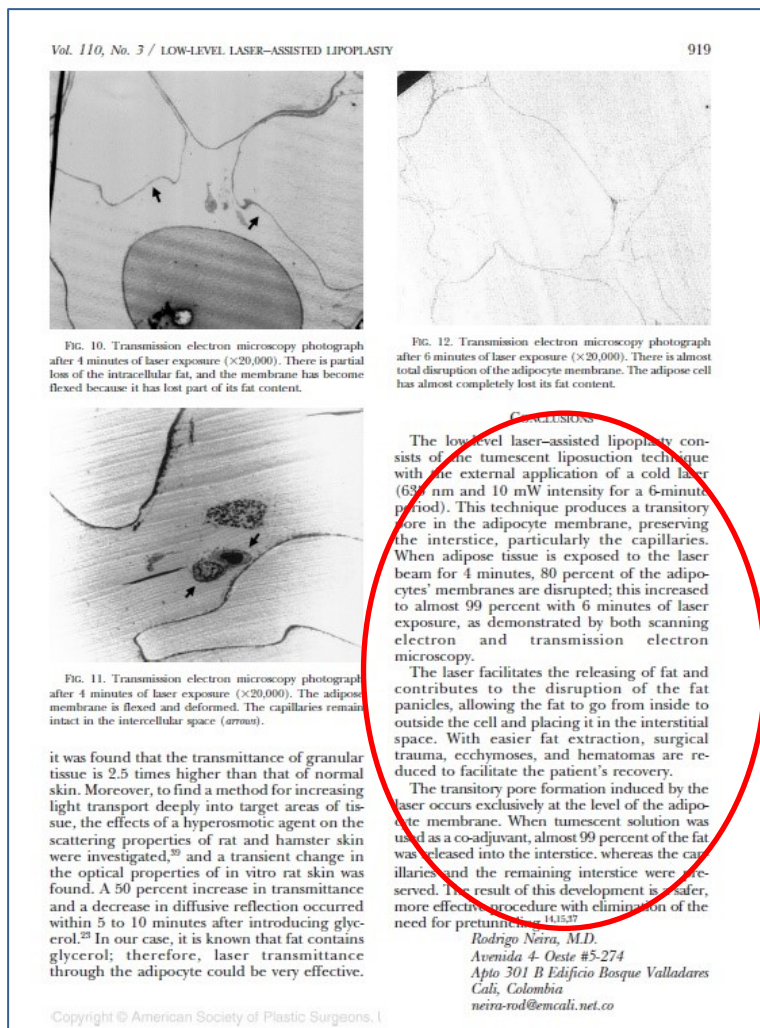
658nm Laser de bas niveau

- PowerShape2 irradie à une longueur d'onde de 658nm du laser de bas niveau.
- Lorsque le laser rayonne dans le tissu adipeux, la photo-excitation de la cytochrome- c- oxydase dans l'adipocyte hypertrophique produit du Ca^+ et du H^+ . Cela contribue à créer un pore transitoire dans l'adipocyte et accélère la séparation des triglycérides en morceaux. Les lipides brisés sont facilement libérés dans l'espace interstitiel et traités par les voies physiologiques et métaboliques naturelles de l'organisme.
- Il est efficace pour réduire la circonférence corporelle globale des régions spécifiquement traitées, et il a également été démontré qu'il réduisait l'œdème.

Thérapie au laser de bas niveau pour la réduction de la couche de graisse : A Comprehensive Review (2013)



Analyse de la littérature sur le laser de faible niveau

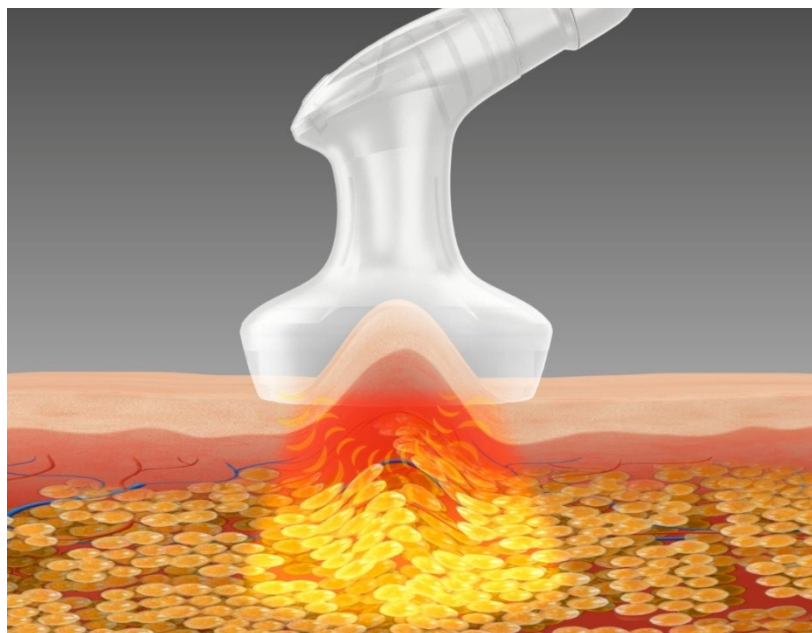


Conclusion :

1. Low-frequency laser causes the production of pores in the membrane of adipocytes
2. It facilitates fat to be liquefied and then to be excreted from the body

* Thérapie au laser de bas niveau pour la réduction de la couche de graisse : A Comprehensive Review (2013)

Technologie du Vacuum

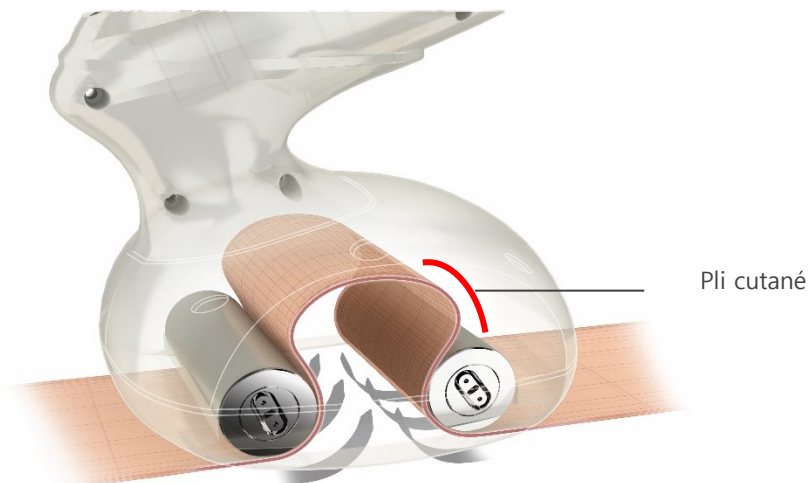


- PowerShape2 s'enorgueillit de sa technologie assistée par le vide couplée à diverses impulsions dynamiques.
- L'aspirateur soulève, plie et comprime la peau pour augmenter la circulation sanguine locale et stimuler le drainage lymphatique.
- Facilite l'activité des fibroblastes, favorise la vasodilatation et la diffusion de l'oxygène.
- Permet une distribution précise de l'énergie.
- 4 types d'impulsions dynamiques



Technologie des rouleaux

- Pour le remodelage du corps et l'amélioration de la cellulite.
- La pièce à main motorisée bipolaire à rouleau assisté par le vide permet de cibler précisément l'énergie laser et RF là où elle peut avoir un effet maximal..
- Facile à utiliser.
- 4 types d'impulsions dynamiques.



Bipolar RF

Bouton de direction (avant/arrière)



Revue de la littérature

Lasers in Surgery and Medicine 41:791–798 (2009)

Improvement in Arm and Post-Partum Abdominal and Flank Subcutaneous Fat Deposits and Skin Laxity Using a Bipolar Radiofrequency, Infrared, Vacuum and Mechanical Massage Device

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Background and Objectives: Skin laxity of the body is a growing cosmetic concern. Laxity can result from chronological or photoaging and changes in body dimensions during pregnancy or weight loss. The end result is loose, sagging skin, and localized fat deposits. Liposuction and abdominoplasty or brachioplasty are established approaches to these issues. Patient desire for alternatives to surgical correction has spawned the development of non-invasive body contouring devices. The combination of infrared light (IR), bipolar radiofrequency (RF), vacuum and mechanical massage (Velashape, Syneron Medical Ltd, Israel) has demonstrated efficacy in improving skin appearance and circumference of the thighs [Goldberg et al., *Derm Surg* 2008; 34:204–209; Fisher et al., *Derm Surg* 2005; 31:1237–1241; Arnoezky and Aksan, *J Am Acad Orthop Surg* 2000; 8:305–313; Alster and Tanzi, *J Cosmetic Laser Therapy* 2005; 7:81–85; Wanitphakdeedecha and Manuskiatt, *J Cosmet Dermatol* 2006; 5:284–288; Noo-theti et al., *Lasers Surg Med* 2006; 38: 908–912], but only anecdotal evidence has supported its use on other anatomic locations. This study was designed to evaluate the efficacy and safety of Velashape on additional body sites and more rigorously examine the technology's impact on upper arm as well as abdominal and flank circumference.

Study Design and Methods: Subjects were 28–70 years old, skin types I–V. Nineteen subjects underwent 5 weekly treatments of the upper arms, and 10 subjects underwent 4 weekly treatments of the abdomen and flanks. Treatments were performed using Velashape. Circumference measurements, photographs, and subject weights were performed prior to treatment and at 1- and 3-month follow-ups. Subjects were asked to record their treatment satisfaction level.

Results: Change in arm circumference, at the 5th treatment was statistically significant with a mean loss of 0.625 cm. At 1- and 3-month follow-ups, mean loss was 0.71 and 0.597 cm respectively. Reduction of abdominal circumference at 3rd treatment was statistically significant with a 1.25 cm mean loss. At 1- and 3-month follow-ups, average loss was 1.43 and 1.82 cm respectively.

Conclusions: This study demonstrates with statistical significance, sustainable reduction in circumference and

improvement in appearance of arms and abdomen following treatment with Velashape. *Lasers Surg Med*. 41:791–798, 2009. © 2009 Wiley-Liss, Inc.

Key words: Velashape, circumferential reduction, body contouring, skin laxity, tightening

INTRODUCTION

Tissue laxity and localized subcutaneous fat deposits on the body are increasingly common complaints amongst our cosmetic patients. Chronological aging, photo-aging or substantial changes in body dimensions experienced during pregnancy or weight loss can all contribute to the formation of lax skin and localized fat. The most popular cosmetic procedures for addressing body contouring and tightening are surgical in nature with just under 500,000 cases of liposuction and abdominoplasty or brachioplasty reported as being performed in 2007 [1,2]. While surgical correction undoubtedly produces the most definitive results, it also requires significant recovery time for patients and carries inherent risks. These factors, along with today's cosmetic patients' active lifestyles and desire for results with minimal potential sequelae, have spawned the development of many new non-invasive body contouring devices to mitigate skin laxity and reduce body circumference.

Non-invasive tissue tightening and circumference reduction are postulated to result from the application of energy to the skin surface producing heat in the dermal and subcutaneous tissues with subsequent induction of collagen denaturation and neocollagenesis. These heat-stimulated effects were originally noted with ablative laser resurfacing [3,4]. Non-invasive technologies have evolved over time to induce the same tightening effects [5–10].

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DOI 10.1002/lsm.20872

TABLE 4. Abdomen and Flank Circumference Measurements Data

Variable	Subjects	Mean	SD	Minimum	Maximum
Baseline	10	84.750	3.7212	81.000	94.000
Treatment 3	10	83.500	3.6209	79.500	91.500
Treatment 4	10	83.580	3.8032	77.800	91.000
1-month follow-up	10	83.320	3.5795	78.000	90.200
3-month follow-up	6	83.333	4.8132	75.500	90.500

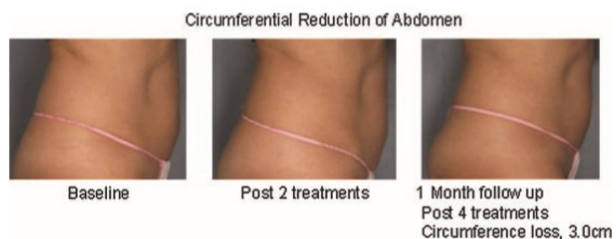


Fig. 3. Progression of circumferential loss of abdomen circumference after four treatments.

La réduction de la circonférence abdominale a été maintenue pendant 3 mois après 4 traitements.

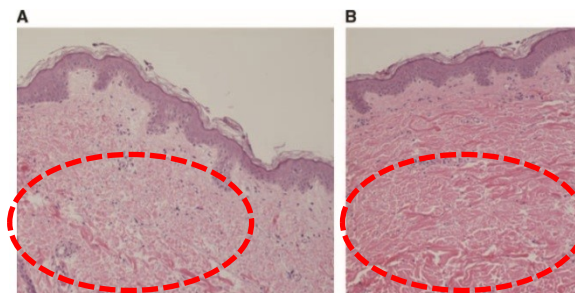


Fig. 8. Hematoxylin and eosin staining. A: Non-treated site on upper arm. B: Histologic results at 1-month follow-up after five treatments in same subject. Results demonstrate increased cellular components of the extracellular matrix in the papillary dermis. There is also increased composition of collagen fibers leading to increased density of the papillary dermis and the deeper reticular dermis with more organized with collagen bundles.

Tous les cas montrent une augmentation des composants cellulaires de la matrice extracellulaire du derme papillaire, probablement des fibroblastes, ainsi qu'une augmentation de la composition des fibres de collagène.

Revue de la littérature

Report

Treatment of cellulite with LPG endermologie

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Masters in Aesthetic and Anti-aging Medicine,
Paris, on October 2005.

Reprints are not requested.

Abstract

Background LPG endermologie is a FDA-approved massage system in use worldwide for cellulite treatment that lacks clinical study.

Objective To determine the efficacy and safety of LPG endermologie in treating cellulite.

Methods Thirty-three healthy women (cellulite grades, 1–3 based on the 4-stage Nurnberger–Muller scale) had LPG treatments twice weekly for a total of 15 sessions. Clinical evaluation was performed by digital photography for cellulite grade assessment, and perimetric measurements of eight body sites for the evaluation of body contours.

Results Significant differences were found regarding mean cellulite grades before and after treatment. However, improved cellulite appearance occurred in only 5 women (15%). All patients showed a significant circumference loss at every measured body site. Weight losers had significantly greater loss of total and average body circumference than weight gainers.

Limitations Relatively small sample size and lack of more-objective methods for assessing treatment success.

Conclusion LPG endermologie is a well-tolerated and effective method for reducing the diameter of body circumference, however, it is mildly effective in reducing the cellulite grade and so, improving its orange-peel appearance.

L'endermologie permet d'améliorer l'apparence et de réduire la cellulite.

Body area	Before treatment (mean ± SD, cm)	After treatment (mean ± SD, cm)	Mean loss (mean ± SD, cm)	P
Arm	28.7 ± 3.1	27.4 ± 3	1.2 ± 1.3	< 0.001
Breast	80.1 ± 8.4	76.6 ± 8.3	3.3 ± 2.3	< 0.001
Waist	78.6 ± 10.6	75.9 ± 10.1	2.7 ± 2.4	< 0.001
Hip	104.1 ± 9.1	100.3 ± 7.7	3.8 ± 2.7	< 0.001
Subgluteal	97.3 ± 7.3	93.5 ± 6.2	3.7 ± 3.5	< 0.001
Thigh	50.7 ± 6.1	48.4 ± 5.4	2.2 ± 1.9	< 0.001
Knee	37.3 ± 4.1	36.0 ± 3.8	1.3 ± 1.3	< 0.001
Calf	36.2 ± 3.7	35.1 ± 3.6	1.1 ± 0.9	< 0.001

Il a été confirmé que la circonférence de la région après la thérapie d'endermologie a été significativement réduite

Revue de la littérature

Lasers Med Sci (2014) 29:1627–1631
DOI 10.1007/s10103-014-1564-x

ORIGINAL ARTICLE

Reduction in adipose tissue volume using a new high-power radiofrequency technology combined with infrared light and mechanical manipulation for body contouring

Maurice A. Adatto · Robyn M. Adatto-Neilson · Grietje Morren

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© The Author(s) 2014. This article is published with open access at Springerlink.com

Abstract A growing patient demand for a youthful skin appearance with a favorable body shape has led to the recent development of new noninvasive body contouring techniques. We have previously demonstrated that the combination of bipolar radiofrequency (RF) and optical energies with tissue manipulation is an efficient reshaping modality. Here, we investigated the efficacy and safety of a new high-power version of this combined technology, in terms of adipose tissue reduction and skin tightening. Thirty-five patients received one treatment per week over 6 weeks to their abdomen/flank, buttock, or thigh areas and were followed up to 3 months post completion of the treatment protocol. This new device has an increased power in the bipolar RF, as this parameter appears to be the most important energy modality for volume reduction. Patient circumferences were measured and comparisons of baseline and post treatment outcomes were made. Diagnostic ultrasound (US) measurements were performed in 12 patients to evaluate the reduction in adipose tissue volume, and a cutometer device was used to assess improvements in skin tightening. We observed a gradual decline in patient circumferences from baseline to post six treatments. The overall body shaping effect was accompanied with improvement in skin tightening and was clearly noticeable in the comparison of the before and after treatment clinical photographs. These findings correlated with measurements of adipose tissue volume and skin firmness/elasticity using diagnostic US and cutometer, respectively. The thickness of the fat layer showed on average a 29 % reduction between baseline and the 1-month follow up. The average reduction in the

circumference of the abdomen/flanks, buttocks, and thighs from baseline to the 3-month follow-up was 1.4, 0.5, and 1.2 cm, respectively, and 93 % of study participants demonstrated a 1–60 % change in fat layer thickness. Patients subjectively described comfort and satisfaction from treatment, and 97 % of them were satisfied with the results at the follow-up visit. The application of high-power RF energy combined with infrared (IR), mechanical massage, and vacuum appears to be an effective modality for the reduction in circumferences of the abdomen/flank, buttock and thigh regions, and the improvement of skin appearance. The present study performed with a new device suggests that the underlying mechanism of action is reduction in the subcutaneous adipose tissue volume and intensification of dermal matrix density.

Keywords VelaShape II · Circumferential reduction · Body contouring · Skin tightening

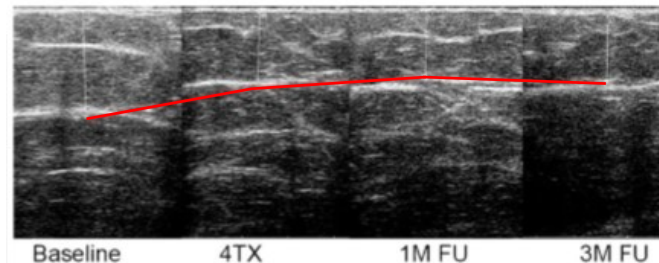
Introduction

Localized subcutaneous fat deposits and tissue laxity are of growing concern among cosmetic patients, the contributing factors of which include chronological aging, photoaging, as well as changes in body dimensions due to pregnancy and significant weight loss. The most popular body contouring approaches used to improve the cosmesis of subcutaneous fat deposits and skin laxity are surgical and include liposuction, abdominoplasty, and thigh lifts, among other procedures. However, in tandem with cosmetic patients' desire for a favorable body shape is their increasing demand for noninvasive treatment approaches that are painless, safe, and require little to no downtime. This increasing demand has led to the rapid growth and development of noninvasive, nonsurgical treatment techniques. Although surgical techniques can result in the most pronounced outcomes in respect to improved body

Table 1 Circumference 3 months after end of treatments

	Delta circ. thigh	Delta circ. abdomen	Delta circ. buttock
Mean	1.209375	1.428125	0.475468
S.E.M.	0.8339692	0.362374	0.195029
SD	3.3358766	2.049899	0.729733
Variance	11.128073	4.202087	0.532511
Coef. var.	2.7583476	1.435378	1.534768
Minimum	-1.5	-3.5	-0.5
Maximum	13	6	2
Sum	19.35	45.7	6.656557
N	16	32	14
P value (Wilcoxon signed rank test for single group median)	0.1504513	0.000365	0.044603
P value (Kruskal-Wallis test)	0.1267881158		

Trois mois après la fin de l'intervention, il a été confirmé que la réduction significative de la circonférence des cuisses, de l'abdomen et des fesses était maintenue.



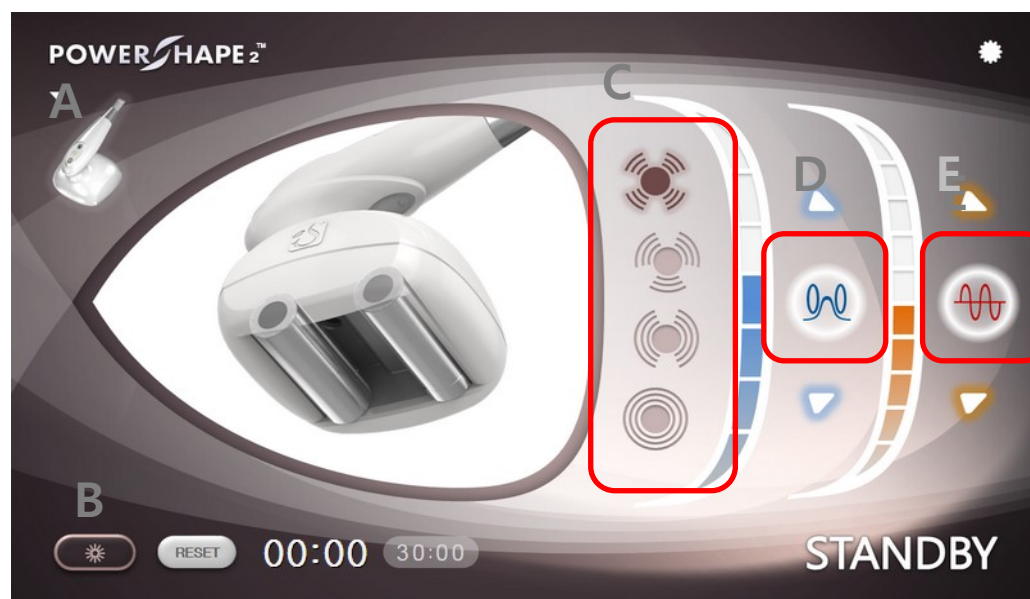
La mesure de l'épaisseur de la graisse abdominale par échographie abdominale après quatre traitements a confirmé le maintien de la réduction de l'épaisseur de la graisse sous-cutanée pendant trois mois.

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Affichage de l'interface graphique

- A Sélection poignée
- B LED On/Off
- C Mode de pulsation
- D Niveau vacuum
- E Niveau RF



IV. Avantages

RF + Vacuum

Intégration de la technologie des soins du corps. Disponible pour des procédures efficaces d'amincissement du corps

Pièce à main variable

Possibilité d'application sur le visage et le corps. Efficacité maximale.

Pièce à main à rouleau auto-motorisée

Opération rapide sur de grandes surfaces. Amélioration de la cellulite et remodelage du corps

10.1" Écran tactile

L'interface utilisateur conviviale et l'écran tactile facilitent les opérations chirurgicales.

Sûr et hygiénique

L'installation de l'huile usée à l'intérieur de la machine permet un nettoyage facile lorsque l'huile usée s'accumule sur le filtre à huile usée. Hygiène améliorée grâce au filtre jetable de la pièce à main.

Protocole efficace

Maximiser l'effet du traitement en fournissant un protocole détaillé pour chaque pièce à main et chaque zone de traitement.

V. Spécifications

Type	Radio fréquence, Vacuum, LAser bas niveau
Alimentation	AC110~220V
Fréquence	50 / 60Hz
Panneau de contrôle	10.2 Écran tactile couleur
Dimension(L x L x H)	414 x 523 x 1,230(mm)
Poids	60kg(NET)

Résultat clinique

VI. Résultat clinique

**Avant****Après****F / 30****4 Séances**

VI. Résultat clinique



Avant

F / 23



Après

6 Séances

VI. Résultat clinique



Avant

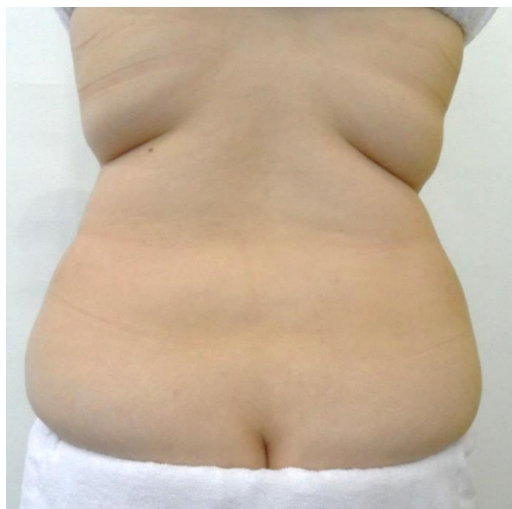
F / 29



Après

4 Séances

VII. Résultat clinique



Avant

F/20s



Après

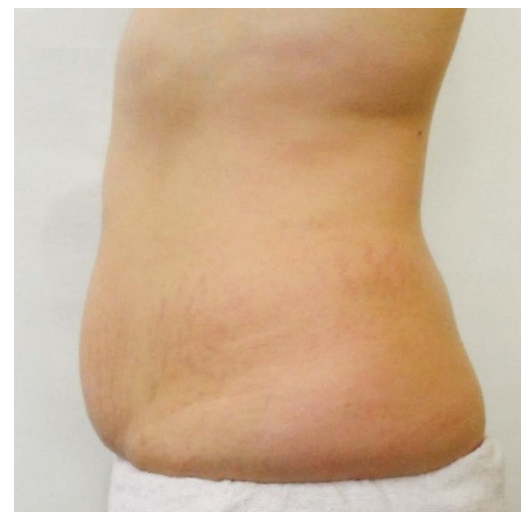
6 Séances

VII. Résultat clinique



Avant

F/20s



Après

4 Séances

VII. Résultat clinique



Avant

F/40s



Après

Cavi+Power 2 10 Séances

VII. Résultat clinique



Avant

F/30s



Après

6 Séances

Soutra

A large, stylized red graphic element that partially encircles the word 'Soutra'. It consists of a thick red line forming a large circle on the right side, with a swoosh-like tail extending downwards and to the left from the bottom of the circle.