



Introducing the NEW Innovation.

Triple Integrated Powerful Body Contouring System

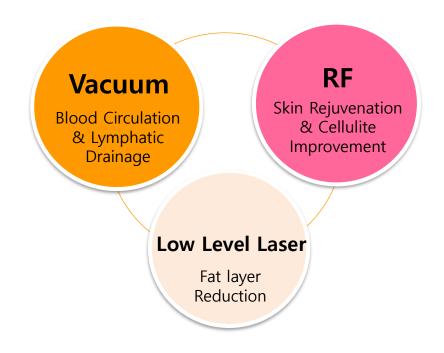
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I. What is Powershape2





Comfortable, Effective, Non-Invasive!

The new generation in body contouring & skin tightening treatments. PowerShape2 offers multiple treatment applications equipped with industry's most coveted aesthetic technologies & desired aesthetic treatments. From simple improvements in problem areas to major full-body transformation, we can help you look your very best.

II. Structure



2MHz Radio Frequency



- PowerShape2 maintains a 2 MHz alternating current RF signal.
- As Radiofrequency(RF) energy meets impedance in the tissue, heat is generated. As the collagen-rich dermis is heated above 60° C, it immediately denatures, and the fibrils contract and thicken. In following subsequent inflammatory cascade in response to the initial heat, the cascade is thought to result in new collagen formation leaving the skin looking firmer, tighter and more youthful.

Literature Review of RF

DISCUSSION

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schnology can be utilized to deliver energy selectively ubcutaneous fat tissue, avoiding unnecessary ener

ribution to the epidermis, dermis and m

Adipocytes are heat sensitived 45°C for 1 and 3 minutes,

32 Medical Lasers: Engineering, Sasic Resea

es to 43-45°C for at least a cell death in viva.⁸ Accord told temperature for skin of However, previous studie as threshold for normal su lition vesearchers have also

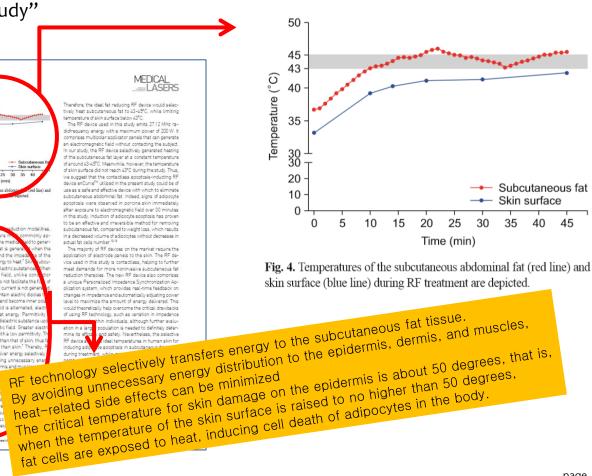
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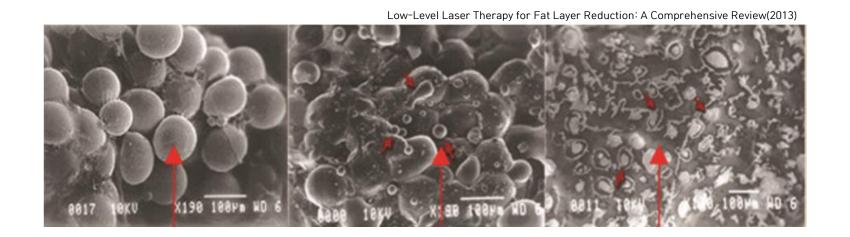
MEDICAL LASERS Original Article Med Laser 2016;5[1]:29-33 pISSN 2297-9300 - eISSN 2299-0224 Impact of Contactless Apoptosis-Inducing RF on Temperature of Human Skin Surface and Subcutaneous Layer as well as Porcine Histology: A Pilot Study Background and Objectives Radiofrequency (RF) technology has 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 ubcutaneous 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 bid revealed changes in the adipocyte shape and size. Many of the adipocytes had shrunken, with a few showing consensed 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 temperate below the threshold of heat-induced bein for humans. Apoptosis of subcutaneous adipocytes was confirmed in porcine skin. Further clinical trials are necessary to evaluate the efficacy Received June 15, 2016 Accepted June 17, 2016 Key words Radiofrequency; Subcutaneous abdominal fat; Adipocyte; Apoptosis Dee Suik Him Kangakin Sillim Dermetology Clinic, 229, Sillim-ro, Gwanak-gu, Secul 08759, Worse Tal. +92-2-972-9007 Fax: +92-2-972-6226 E-mail: k42220490@cmail.com O Yoman Society for Laser Medicine and Sumer This is an open access article distributed under the terms of the Creative Commons Attribution Nonrms of the Crastica Commons Attribution Non-ommercial License [http://crasticecommons.prg/ censes/by-not4]] which permits unrestricted non-ommercial use, distribution, and reproduction in any redium, provided the original work is properly cited. Medical Lasers: Engineering, Basic Research, and Olinical Application 29

"Impact of Contactless Apoptosis-Inducing RF on Temperature of Human Skin Surface and Subcutaneous Layer as well as Porcine Histology: A Pilot Study"



658nm Low Level Laser

- PowerShape2 irradiates 658nm wavelength of the low level laser.
- As the laser radiates into the fat tissue, photo excitation of cytochrome- c-oxidase within hypertrophic adipocyte causes Ca+ & H+. That helps to create transitory pore within the adipocyte & accelerate to separate triglycerides into pieces. Broken lipid easily release into the interstitial space and processed by the body's natural physiological and metabolic pathways.
- It is effective in reducing overall body circumference measurements of specifically treated regions, and also has shown to reduces the edema.



Literature Review of Low level laser

Vol. 110, No. 3 / LOW-LEVEL LASER-ASSISTED LIPOPLASTY

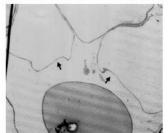


Fig. 10. Transmission electron microscopy photograph after 4 minutes of laser exposure (×20,000). There is partial loss of the intracellular fat, and the membrane has become flexed because it has lost part of its fat content.



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Fig. 12. Transmission electron microscopy photograph after 6 minutes of laser exposure (×20,000). There is almost total disruption of the adipocyte membrane. The adipose cell has almost completely lost its fat content.

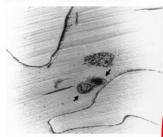


FIG. 11. Transmission electron microscopy photograp after 4 minutes of laser exposure (×20,000). The adipose membrane is flexed and deformed. The capillaries remai intact in the intercellular space (arrows).

it was found that the transmittance of granular tissue is 2.5 times higher than that of normal skin. Moreover, to find a method for increasing light transport deeply into target areas of tissue, the effects of a hyperosmotic agent on the scattering properties of rat and hamster skin were investigated,39 and a transient change in the optical properties of in vitro rat skin was found. A 50 percent increase in transmittance and a decrease in diffusive reflection occurred within 5 to 10 minutes after introducing glycerol.23 In our case, it is known that fat contains glycerol; therefore, laser transmittance through the adipocyte could be very effective.

ne tumescent liposuction technique he external application of a cold later nm and 10 mW intensity for a 6-minute riod). This technique produces a transitory ore in the adipocyte membrane, preserving the interstice, particularly the capillaries. When adipose tissue is exposed to the laser beam for 4 minutes, 80 percent of the adipocytes' membranes are disrupted; this increased to almost 99 percent with 6 minutes of laser exposure, as demonstrated by both scanning electron and transmission electron microscopy.

The laser facilitates the releasing of fat and contributes to the disruption of the fat panicles, allowing the fat to go from inside to outside the cell and placing it in the interstitial space. With easier fat extraction, surgical trauma, ecchymoses, and hematomas are reduced to facilitate the patient's recovery.

The transitory pore formation induced by the aser occurs exclusively at the level of the adipote membrane. When tumescent solution was used as a co-adjuvant, almost 99 percent of the fat was cleased into the interstice, whereas the car illaries and the remaining interstice were served. The result of this development is a safer, more effective procedure with elimination of the need for pretunnel 14,15,37

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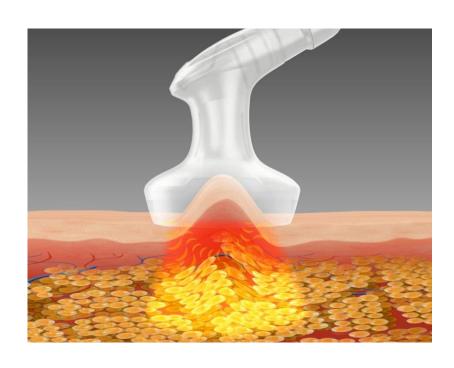
Conclusion:

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

^{*} Low-Level Laser Therapy for Fat Layer Reduction: A Comprehensive Review(2013)

Vacuum Technology



- PowerShape2 boasts off its vacuum-assisted technology coupled with various dynamic pulses.
- Vacuum lifts, folds and compresses the skin to increase local blood circulation & stimulates lymphatic drainage.
- Facilitates fibroblast activity & promotes vasodilation and diffuses oxygen.
- Enables precise delivery of energy.
- 4 kinds of dynamic pulses





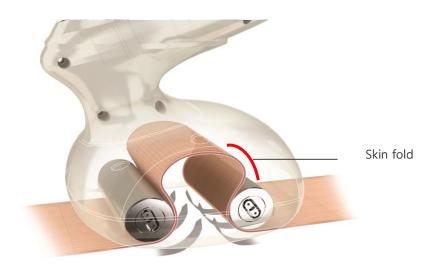




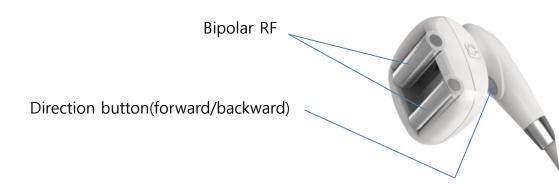


III. Technology

Roll Technology



- For Body Contouring & Cellulite Improvement.
- Bipolar vacuum-assisted motorized roll handpiece enables both Laser & RF energy precisely targeted where it can have maximum effect.
- Easy to operate.
- 4 kinds of dynamic pulses.



Literature Review

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

Lori Brightman, мр.,* Elliot Weiss, мр. Anne M. Chapas, мр. Julie Karen, мр. Elizabeth Hale, мр. Leonard Bernstein, мр. and Roy G. Geronemus, мр. Leonard Bernstein, мр. and Roy G. Geronemus, мр. Laser & Skin Surgery Center of New York, New York, New York, 10016

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 noninvasive 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; Arnoczky and Aksan, J Am Acad Orthop Surg 2000; 8:305-313; Alster and Tanzi, J Cosmetic Laser Therapy 2005; 7:81-85; Wanitphakdeedecha and Manuskiatti, J Cosmet Dermatol 2006; 5:284-288; Nootheti 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 5rd 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

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 collage denaturation and necollagenesis. 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].

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.

Abdominal circumference reduction was maintained for 3 months after 4 treatments

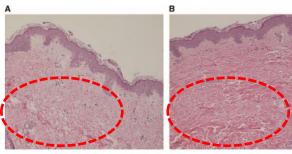


Fig. 8. Hematoxylin and ceain staining. A: Non-treated site on upper arm. B: Histologic results at 1-month follow-up after five treatments in same subject. Results demonstrate increased cellular components of the extracellular matrix in the papillary dermis. There is also increased composition of collagen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

All cases show increased cellular components of the extracellular matrix of the papillary dermis, likely fibroblasts, together with increased composition of collagen fibers

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DOI 10.1002/lsm.20872





Literature Review

Report

Treatment of cellulite with LPG endermologie

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Presented at Congress of the European 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

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.

Endermologie therapy can effectively improve appearance and reduce 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

It was confirmed that the circumference of the region after the endermologie therapy was significantly reduced

Literature Review

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

Received: 19 November 2013 / Accepted: 4 March 2014 / Published online: 1 April 2014 © 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

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G. Morren Private Practice, Leuven, Belgium 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

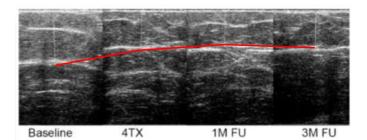
Introduction

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 noninvsive 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

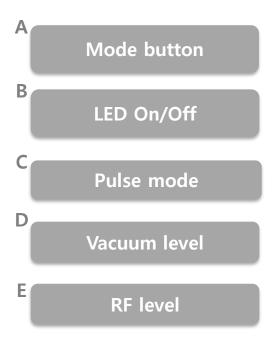
	Delta circ. thigh	Delta circ. abdomen	Delta circ. buttock
Mean	1.209375	1.428125	0.475468
S.E.M.	0.8339692	0.362374	0.195029
SD	3.3358766	2.049899	0.729733
Variance	11.128073	4.202087	0.532511
Coef. var.	2.7583476	1.435378	1.534768
Minimum	-1.5	-3.5	-0.5
Maximum	13	6	2
Sum	19.35	45.7	6.656557
N	16	32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

After 3 months from the completion of the procedure, it was confirmed that the significant reduction in thigh, abdomen, and buttock circumference was maintained



Abdominal fat thickness measurement by abdominal ultrasound after 4 times of treatment was confirmed to maintain subcutaneous fat thickness reduction for 3 months.

GUI Display





RF + Vacuum

Integration of body care Technology. Available for effective body slimming procedures.

Variable Handpiece

Possible to apply for both face and body. Performing with utmost efficiency.

Auto motorized Roll Handpiece

Quick operation on large areas.

Cellulite Improvement &

Body contouring

10.1" Touch Screen

User friendly UI design and touch screen, providing surgical convenience

Safe and hygienic

Waste oil installation inside the machine enables the cleaning easily when waste oil is accumulated on waste oil filter Improved hygiene with disposable hand-piece filter.

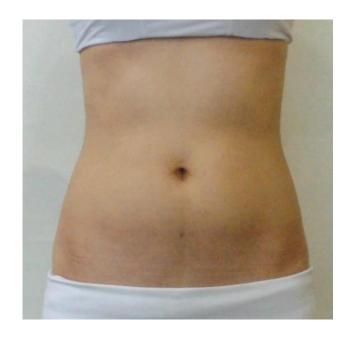
Effective Protocol

Maximize the effect of treatment by providing detailed Protocol for each hand-piece & each treatment area.

Туре	Radio frequency, Vacuum, Low level laser	
Power	AC110~220V	
Frequency	50 / 60Hz	
Control panel	10.2 inch Full color Touch Screen	
Dimension(W x D x H)	414 x 523 x 1,230(mm)	
Weight	60kg(NET)	

Clinical Result

Clinical Result







F / 30

After 4 times







F / 23

After 6times





Before

F / 29

After
4times

THANK YOU

FOR FURTHER INFORMATION, PLEASE CONTACT US AT es@esglobal.co.kr