Noble SHAPE

Noble SHAPE

Simultaneous fat and cellulite reduction!!

We will strive to become the best diet partner

to address various patterns of obesity development.

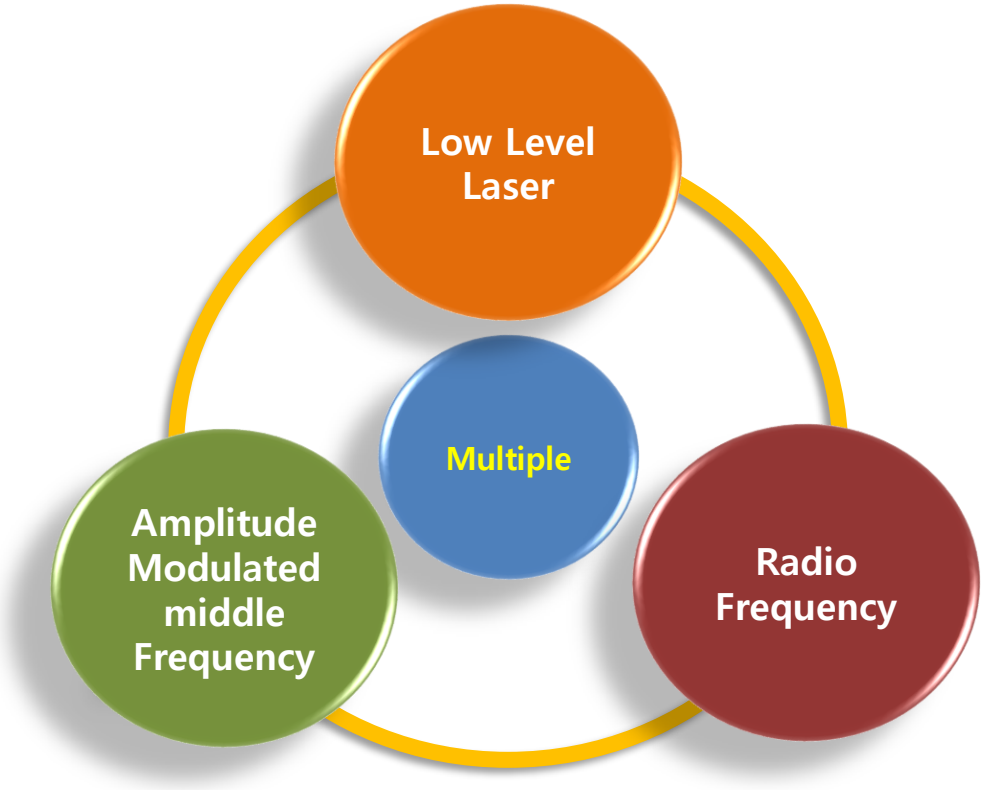
CONTENTS

Obesity Causes

Various Obesity Treatment Options

1. Diet
2. Exercise therapy
3. Medication
4. Usage of Injection (meso-theraphy, PPC)
5. Carboxy (CO2)
6. Ultrasonic lipolysis(Cavitation devices)
7. Laser Hypertonic Pharmachological Lypolysis (HPL)
8. Liposuction(EVA air, water-jet, micro-aire etc.)
9. Local Liposuction (Acuusculpt, vaser etc.)
10. Cryolipolysis(CoolShaping)
11. Non-invasive Radiofrequency Thermolipolysis (Vanquish, encurve etc.)

Noble Shape ?



- Divergent application of PAD
- 20-30 minutes taken for procedure
- Non-invasive procedure
- Real-time temperature sensing
- Lipocyte-dissolution and skin elasticity management
- Combination with other devices

Noble Shape ?

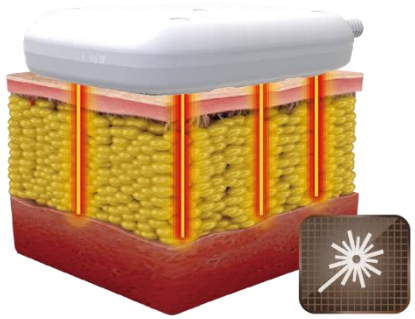
- Multiple mechanism
- Various PAD
- Auto program
- Temperature sensor

- Lipolysis
- Cellulite reduction
- Body shaping
- Lymph drainage
- Blood circulation
- Elasticity of skin
- Promote metabolism

No side effect & No down time

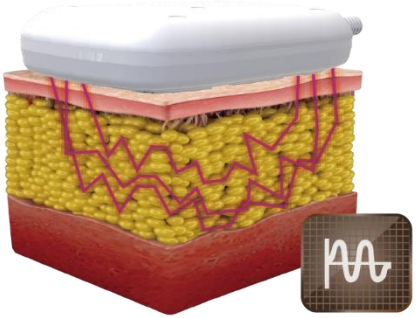
"Good result"

Multiple mechanism



LLD

(Low level laser)



AMF

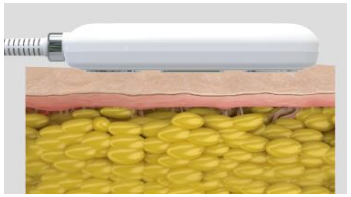
(Amplitude Modulated middle frequency)

RF

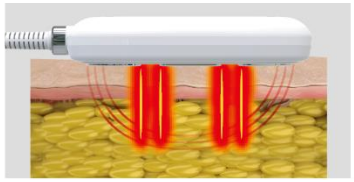
(Radio Frequency)

Noble Shape uses multiple technology to bring satisfactory treatment effects to any types of obesity.

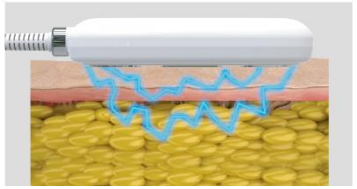
Multiple mechanism



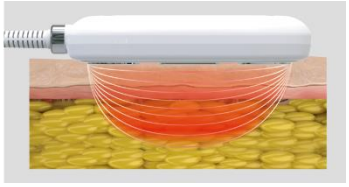
1 Attachment of solution-applied handpiece to the designed part



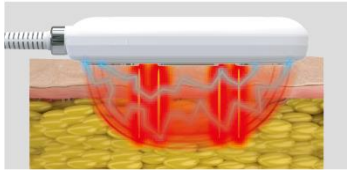
2 The electrical frequency is turned on to break down fat and cellulite arrays



3 Fat-heating and melting with LLL and bi-polar high frequency wavelength

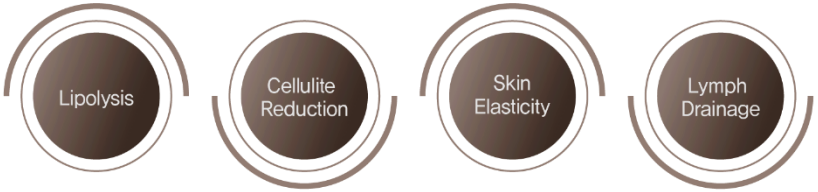


4 Operation of Noble shape

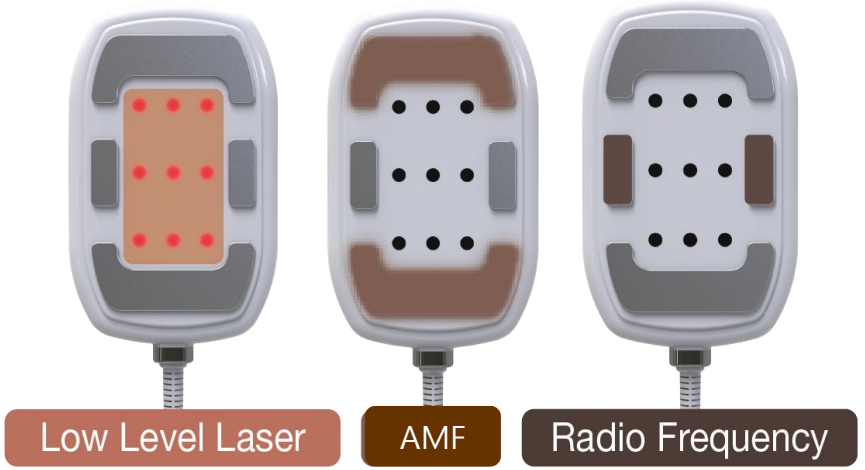


5 A step to maintain the temperature of the subcutaneous fat layer at ≥ 42 °C

Multiple mechanism



LLD + AMF + RF



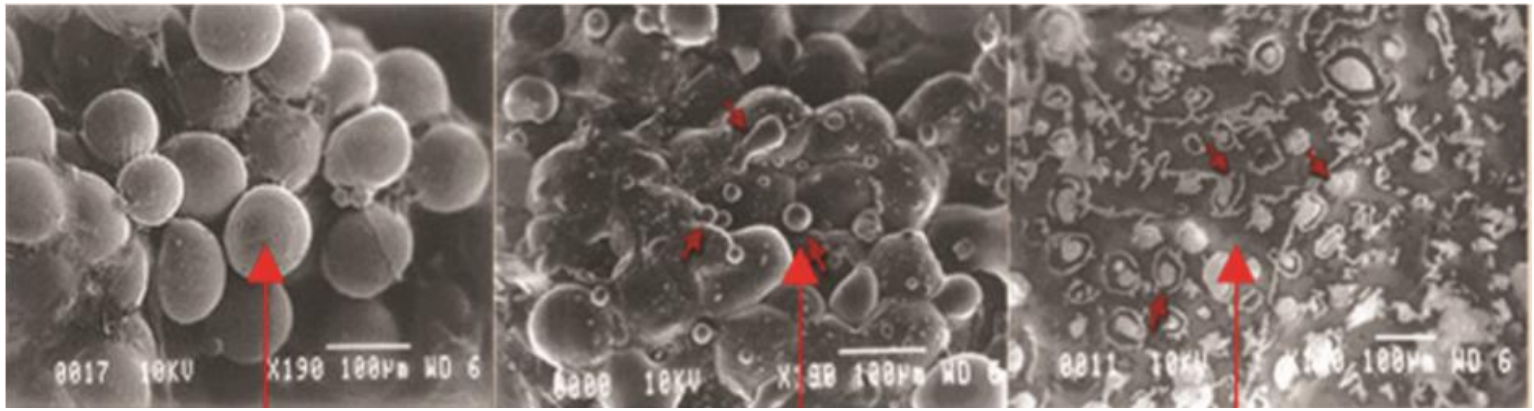
LLD - Low level laser

➢ Principle

- No heat generated
- Permeability to the subcutaneous fat layer without causing any damage
- Only light energy is transmitted to the inside of the body, promoting collagen remodeling and nerve regeneration
- Light energy causes the production of pores in the membrane of adipocytes to induce emulsification
- Liquefied fat is excreted from the body through metabolic processes

LLD - Low level laser

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



- Low level laser : 658nm, 100mw, acting on 5mm of the subcutaneous fat layer
- LLL causes the production of transient pores in the membrane of adipocytes, followed by the excretion of liquefied adipocytes from the body through the stroma

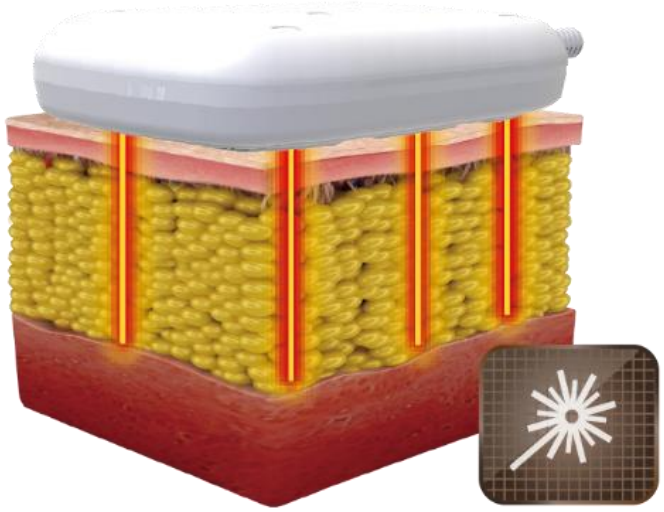
LLD - Low level laser

Large size PAD

- 658nm
- Maximum Power output 40mw X 9ea

Medium size PAD

- 658nm
- Maximum Power output 40mw X 6ea



LLD - Low level laser

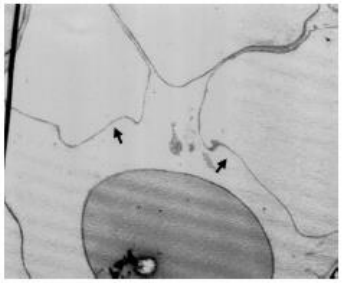


FIG. 10. Transmission electron microscopy photograph after 4 minutes of laser exposure (×20,000). There is partial loss of the intracellular fat, and the membrane has become flexed because it has lost part of its fat content.

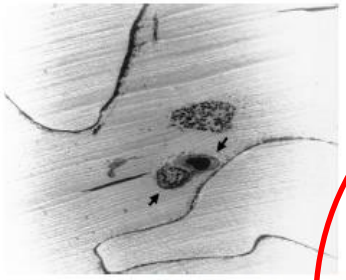


FIG. 11. Transmission electron microscopy photograph after 4 minutes of laser exposure (×20,000). The adipose membrane is flexed and deformed. The capillaries remain intact in the intercellular space (*arrows*).

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,[29] 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.

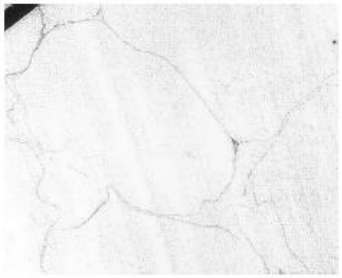


FIG. 12. Transmission electron microscopy photograph after 6 minutes of laser exposure (×20,000). There is almost total disruption of the adipocyte membrane. The adipose cell has almost completely lost its fat content.

CONCLUSIONS

The low-level laser–assisted lipoplasty consists of the tumescent liposuction technique with the external application of a cold laser (635 nm and 10 mW intensity for a 6-minute period). This technique produces a transitory pore 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 laser occurs exclusively at the level of the adipocyte membrane. When tumescent solution was used as a co-adjuvant, almost 99 percent of the fat was released into the interstice. whereas the capillaries and the remaining interstice were preserved. The result of this development is a safer, more effective procedure with elimination of the need for prethinneling.[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

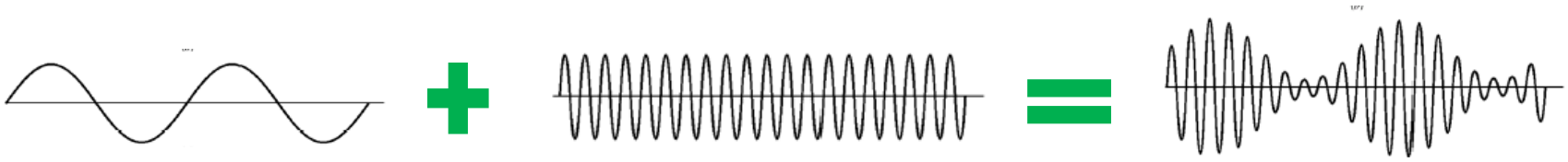
* 자료출처 : Low-Level Laser Therapy for Fat Layer Reduction: A Comprehensive Review(2013)

AMF – Amplitude Modulated Middle Frequency

➢ AMF ?

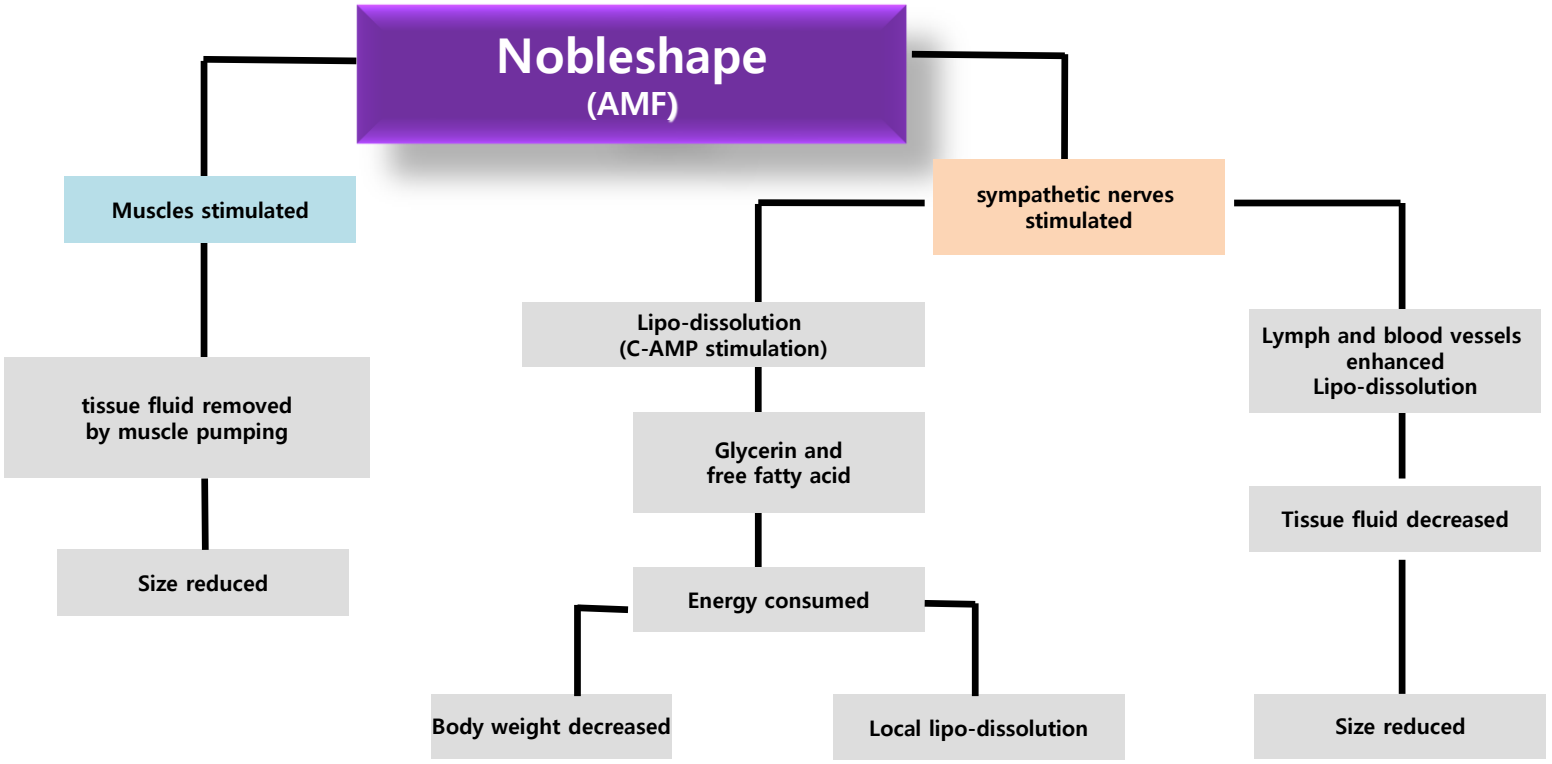
- Low Frequency (1 - 1,000Hz) : difficult to deliver energy due to skin resistance
- Moderating to 4,000Hz of moderate frequency for minimization of skin resistance and energy delivery to subcutaneous layers
- Scarfskin resistance problem-solving with current modified as 4,000Hz by Nemec (scientist from German)
- Wave-current using the modified 4,000Hz moderate frequency, which has been used in obesity and pain treatment for 20 years
- Smooth feeling and safe use of wavelength similar to human brainwave

➢ AM modification: use of carrier frequency in which other frequency is added



Modified frequency

AMF – Amplitude Modulated Middle Frequency



AMF – Amplitude Modulated Middle Frequency

➢ Principle

- It induces muscle contraction and consumes energy to burn and dissolve fat
- Low frequency -> nerve cell stimulation and muscle cell activation (physical therapy and pain relief)
- Intermediate and low frequency
  - Muscle contraction and relaxation
  - Electrolyte migration by potential difference
  - Increased muscle strength, capillary dilation, and increased blood flow
  - Degradation of triglycerides into fatty acids and glycerol
  - Because energy is consumed through muscle movement, fat burns
  - Improvement of elasticity through muscle contraction

AMF – Amplitude Modulated Middle Frequency

Course1
Cellulite
(30min)

Course2
Lipolysis
(30min)

Course3
Body Styling
(30min)

Course4
Revital
(30min)

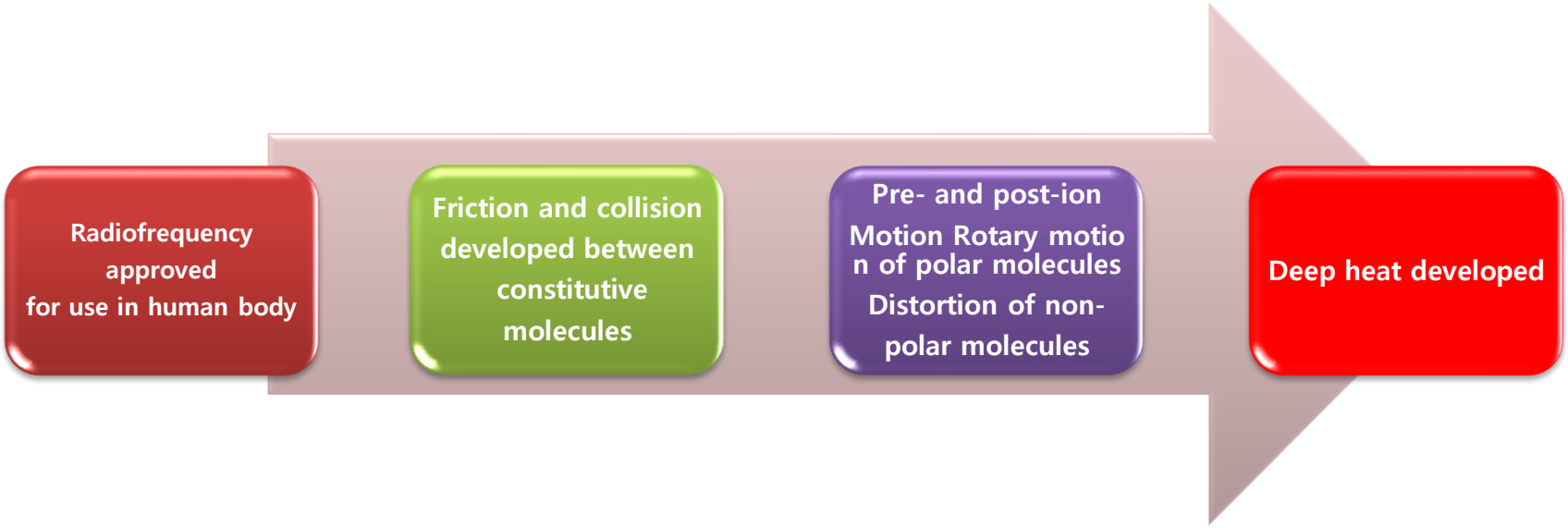
Course5
Relax
(30min)

Course6
Lymph Drainage
(20min)

AMF – Amplitude Modulated Middle Frequency

Course	Indication	Time	Frequency	Effect
1	**Cellulite**	30M	1 ~ 400Hz	• Connective tissue elasticity • Skin tissue activity • Improvement of blood and lymphatic circulation
2	**Lipolysis**	30M	3 ~ 400Hz	• Promoting fat dissolution • Improvement of blood and lymphatic circulation • Vasodilation
3	**Body styling**	30M	3 ~ 200Hz	• Strengthening of muscular connective tissues • Muscle tension and relaxation
4	**Revital**	30M	5 ~ 400Hz	• Muscle activation • Increase of metabolism
5	**Relax**	30M	1 ~ 400Hz	• Blood and lymphatic circulation • Promoting muscle contraction and relaxation
6	**Lymph drainage**	20M	10 ~ 400Hz	• Blood and lymphatic circulation • Vascular relaxation

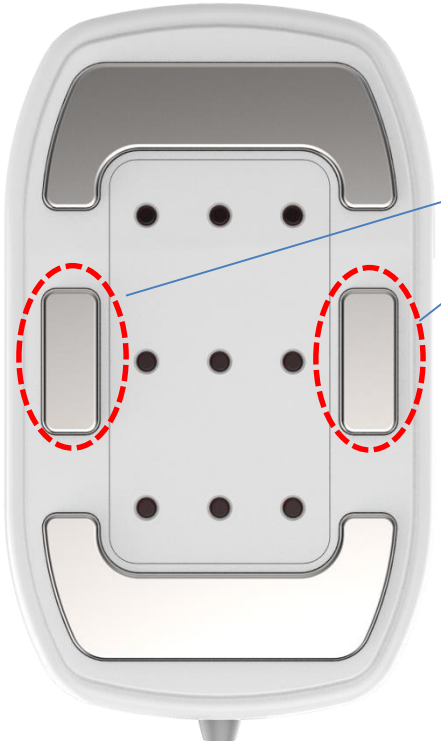
RF – Radio Frequency



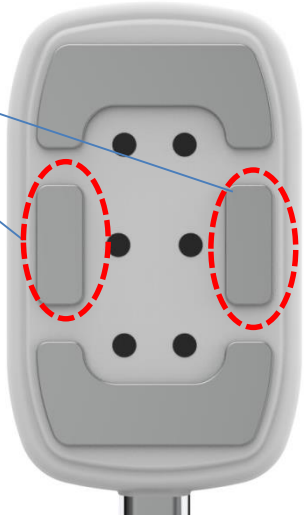
Deep heat refers to heat developed in vivo, which is also called bioheat as biological matters heat itself by radiofrequency stimulation.

Lipocytes start to dissolved upon maintenance of ≥41' of thermal effect.

RF - Radio Frequency



RF
Radio frequency



- Type : Bi-polar
- Frequency : 1MHz
- Level : 0~8
- Temperature sensor

Original Article

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MEDICAL LASERS

Original Article

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 20 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 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 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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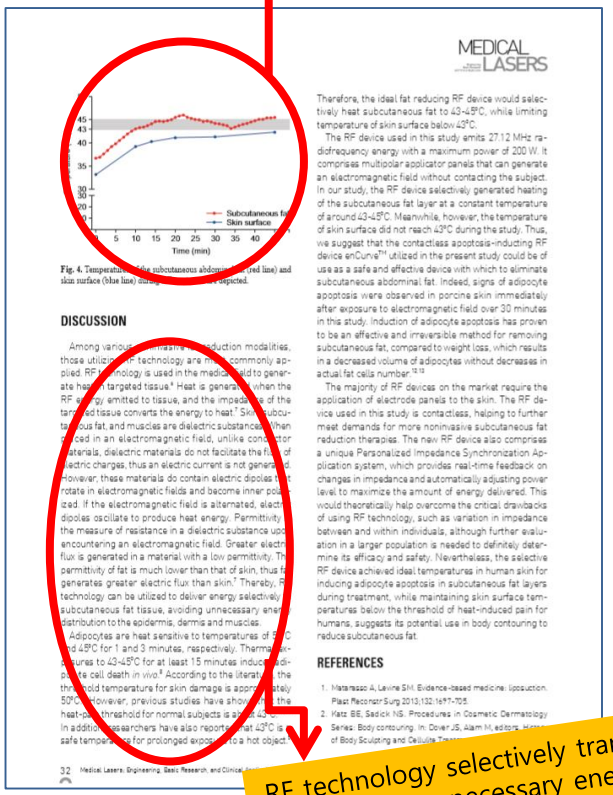
"Impact of Contactless Apoptosis-Inducing RF on Temperature of Human Skin Surface and Subcutaneous Layer as well as Porcine Histology: A Pilot Study"



MEDICAL LASERS

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

DISCUSSION

Among various [illegible] reduction modalities, those utilizing RF technology are most commonly applied. RF technology is used in the medical field to generate heat on targeted tissue.[4] Heat is generated when the RF energy emitted to tissue, and the impedance of the targeted tissue converts the energy to heat.[5] Skin, subcutaneous fat, and muscles are dielectric substances. When placed in an electromagnetic field, unlike conductor materials, dielectric materials do not facilitate the flow of electric charges, thus an electric current is not generated. However, these materials do contain electric dipoles that rotate in electromagnetic fields and become inner polarized. If the electromagnetic field is alternated, electric dipoles oscillate to produce heat energy. Permittivity is the measure of resistance in a dielectric substance encountering an electromagnetic field. Greater electric flux is generated in a material with a low permittivity. The permittivity of fat is much lower than that of skin, thus fat generates greater electric flux than skin.[5] Thereby, RF technology can be utilized to deliver energy selectively to subcutaneous fat tissue, avoiding unnecessary energy distribution to the epidermis, dermis and muscles.

Adipocytes are heat sensitive to temperatures of [illegible] and 45°C for 1 and 3 minutes, respectively. Thermal exposures to 43-45°C for at least 15 minutes induce adipocyte cell death *in vivo*.[6] According to the literature, the threshold temperature for skin damage is approximately 50°C. However, previous studies have shown that the heat-pain threshold for normal subjects is about 43°C. In addition, researchers have also reported that 43°C is a safe temperature for prolonged exposure to a hot object.

Therefore, the ideal fat reducing RF device would selectively heat subcutaneous fat to 43-45°C, while limiting temperature of skin surface below 43°C.

The RF device used in this study emits 27.12 MHz radiofrequency energy with a maximum power of 200 W. It comprises multipolar applicator panels that can generate an electromagnetic field without contacting the subject. In our study, the RF device selectively generated heating of the subcutaneous fat layer at a constant temperature of around 43-45°C. Meanwhile, however, the temperature of skin surface did not reach 43°C during the study. Thus, we suggest that the contactless apoptosis-inducing RF device enCurve™ utilized in the present study could be of use as a safe and effective device with which to eliminate subcutaneous abdominal fat. Indeed, signs of adipocyte apoptosis were observed in porcine skin immediately after exposure to electromagnetic field over 30 minutes in this study. Induction of adipocyte apoptosis has proven to be an effective and irreversible method for removing subcutaneous fat, compared to weight loss, which results in a decreased volume of adipocytes without decreases in actual fat cells number.[9,10]

The majority of RF devices on the market require the application of electrode panels to the skin. The RF device used in this study is contactless, helping to further meet demands for more noninvasive subcutaneous fat reduction therapies. The new RF device also comprises a unique Personalized Impedance Synchronization Application system, which provides real-time feedback on changes in impedance and automatically adjusting power level to maximize the amount of energy delivered. This would theoretically help overcome the critical drawbacks of using RF technology, such as variation in impedance between and within individuals, although further evaluation in a larger population is needed to definitely determine its efficacy and safety. Nevertheless, the selective RF device achieved ideal temperatures in human skin for inducing adipocyte apoptosis in subcutaneous fat layers during treatment, while maintaining skin surface temperatures below the threshold of heat-induced pain for humans, suggests its potential use in body contouring to reduce subcutaneous fat.

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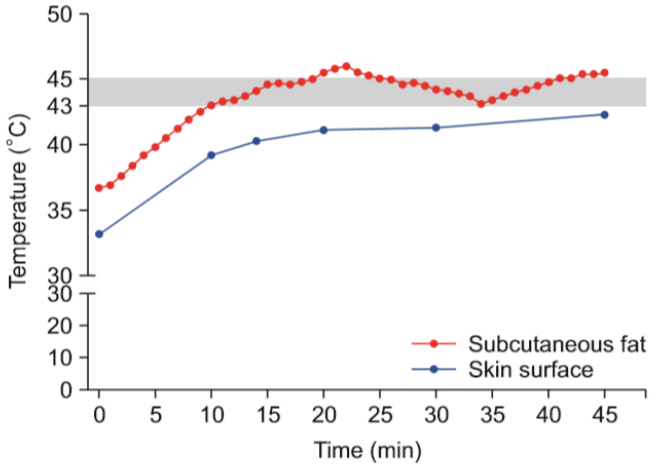

Fig. 4. Temperatures of the subcutaneous abdominal fat (red line) and skin surface (blue line) during RF treatment are depicted.

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 on the epidermis 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.

“Hyperthermic Injury to Adipocyte Cells by Selective Heating of Subcutaneous Fat With a Novel Radiofrequency Device: Feasibility Studies”

Lasers in Surgery and Medicine 42:361–370 (2010)

Hyperthermic Injury to Adipocyte Cells by Selective Heating of Subcutaneous Fat With a Novel Radiofrequency Device: Feasibility Studies

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Background and Objective: The main objective of the present study is to demonstrate the feasibility of utilizing a novel non-invasive radiofrequency (RF) device to induce lethal thermal damage to subcutaneous adipose tissue only by establishing a controlled electric field that heats up fat preferentially.
Study Design/Materials and Methods: Adipocyte cells in six-well plates were subjected to hyperthermic conditions: 45, 50, 55, 60, and 65°C during 1, 2, and 3 minutes. Cell viability was assessed 72 hours after exposure. Two groups of abdominoplasty patients were treated with the RF device during and days before their surgical procedure. Temperatures of cutaneous and subcutaneous tissues were measured during treatment (3 minutes) of the first group. The immediate tissue response to heating was assessed by acute histology. The delayed tissue response was assessed by histology analysis of the second group, 4, 9, 10, 17, and 24 days after treatment (22 minutes). A mathematical model was used to estimate treatment temperatures of the second group. The model uses patient-based diagnostic measurements as input and was validated with in vivo clinical temperature measurements.
Results: Cell viability dropped from 89% to 20% when temperature increased from 45 to 50°C during 1 minute exposures. Three minutes at 45°C resulted in 40% viability. In vivo, the temperature of adipose tissue at 7–12 mm depth from the surface increased to 50°C while the temperature of cutaneous tissues was ~30°C during RF exposure. Acute and longitudinal histology evaluations show normal epidermal and dermal layers. Subcutaneous tissues were also normal acutely. Subcutaneous vascular alterations, starting at day 4, and fat necrosis, starting at day 9, were consistently observed within 4.5–19 mm depth from the skin surface. Subcutaneous tissue temperatures were estimated to be 43–45°C for 15 minutes.
Conclusions: A controlled internal electric field perpendicular to the skin–fat interface is selective in heating up fat and, consequently, has the ability to induce lethal thermal damage to subcutaneous adipose tissues while sparing overlying and underlying tissues. In vitro adipocyte cells are heat sensitive to thermal exposures of 50 and 45°C on the order of minutes, 1 and 3 minutes, respectively. In vivo, 15 minutes thermal exposures to 43–45°C result in a delayed adipocyte cellular death response—in this study, 9 days. The novel RF device presented herein effectively delivers therapeutic thermal exposures to subcutaneous adipose tissues while protecting epidermal and dermal layers. Lasers Surg. Med. 42:361–370, 2010.

Key words: radiofrequency heating; subcutaneous fat; adipocyte cell viability

INTRODUCTION

In general, an electromagnetic plane wave is exponentially attenuated as it propagates into tissue. At high frequencies or small wavelengths (e.g., laser light at 2.40×10^{14} Hz frequency or 1,310 nm wavelength), power is transferred rapidly near the surface, attenuating the wave as power is taken out of it. Since the wave is highly attenuated deeper into the tissue, there is no energy left to extract from it. At lower frequencies (e.g., radiofrequency (RF) waves at 10^6 Hz or 150 m), the penetration depth is more since the wavelength is large and, consequently, heating cannot be localized to restricted regions—hence, the term “bulk” tissue heating.

RF heating is generated in materials by energy transferred from the electric field to the charges in the material. This transfer of energy occurs through three basic mechanisms of interaction between the electromagnetic field and the charges: (i) orientation of electric dipoles that already exist in the atoms and molecules in the tissue; (ii) polarization of atoms and molecules to produce dipole moments; and, (iii) displacement of conduction electrons and ions in the tissue (Stuchly and Stuchly 11). In the

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DOI 10.1002/lsm.20925

to estimate treatment temperatures of the second group of patients.

In Vivo Tissue Response to RF Treatment

Epidermal and dermal tissues appeared normal in every patient biopsy. Histology evaluation of subcutaneous tissues is summarized in Table 3. Subcutaneous tissues were normal immediately after RF treatment, patients 1 and 2. Starting at day 4, subcutaneous tissues showed vascular alterations at variable depths, patients 3, 4, and 5. Purpura, congested vessels and increased vascularity were present within 4.5–19 mm from the skin surface. Adipocyte necrosis was observed at days 9 (patient 3), 17, and 24 (patient 5). Necrosis was not obvious at day 10 (patient 4) although macrophages were present in this biopsy sample. Figure 3 and fig:hist:tx show untreated control and treated subcutaneous tissue at day 10, respectively. The treated tissue show increased vascularity, vascular congestion and foamy macrophages next to fat cells.

Preferential Electric Heating of Fat

Heating in the fat is greater than in skin when the electric field is perpendicular to the skin–fat interface. This can be explained in terms of an infinite parallel-plate capacitor as shown in Figure 4. The boundary condition at the skin–fat interface requires that

$$\varepsilon_s E_s = \varepsilon_f E_f \qquad (4)$$

where ε is the relative complex permittivity of tissue. Equation (4) is valid at any point because E_s and E_f are constant throughout the respective tissues. From Equations (3) and (4), the ratio of power absorbed per unit volume is

$$\frac{Q_f}{Q_s} = \frac{\sigma_f |E_f|^2}{\sigma_s |E_s|^2} \qquad (5)$$

$$= \frac{\sigma_f}{\sigma_s}\frac{|\varepsilon_s|^2}{|\varepsilon_f|^2} \qquad (6)$$

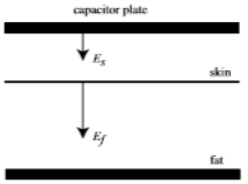


Fig. 4. Infinite parallel-plate capacitor model to illustrate why heating in fat is greater than in skin when E is perpendicular to the skin–fat interface.

At 1 MHz, the fat has much less attenuation or dissipation of the electric field (less lossy) than skin, $\sigma_f/\sigma_s \approx 13$. However, the electric field in fat is much stronger than that in skin, $E_f/E_s = 83$. It follows that heating in the fat is greater since the absorption goes as E^2, at 1 MHz $Q_f/Q_s \approx 10$. Therefore, even though the fat is less lossy than the skin, it heats more because E_f is stronger than E_s. A similar analysis for the fat–muscle interface results in $Q_f/Q_s \approx 20$ [7,8]. The novel RF device presented herein has the ability to spread the electric potential uniformly across the entire surface of the RF applicator by means of the tightly spaced concentric rings. A constant surface electric potential produces internal electric fields that are perpendicular to the skin surface and tissue interfaces. It follows that this RF device has the ability to heat up subcutaneous fat to deliver lethal thermal exposures to adipocyte cells while maintaining skin and muscle tissues at safe temperatures.

DISCUSSION

Numerous in vitro [illegible] show that the rate of cell killing during exposure to heat is exponential and

TABLE 4. Critical Temperatures, $T_c = E_a/(R[\ln(\ln(1/P))])$, Coefficients for Different Skin Damage Endpoints; E_a Activation Energy, R the Universal Gas Constant

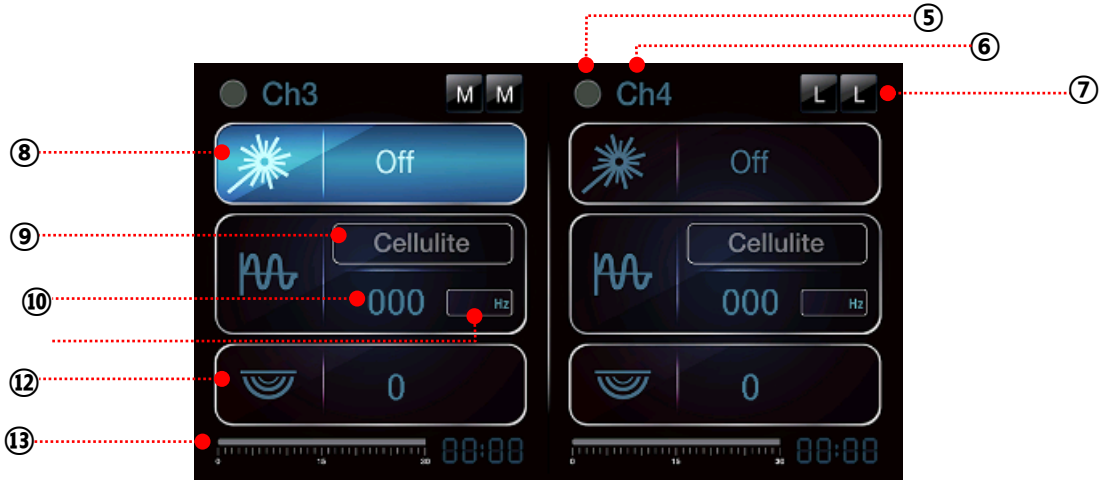
		E_a (J/mol)	T_c (°C)
		6.28×10^5	59.7
		7.83×10^5	55.6
		3.27×10^5	59.9
		2.4×10^5	61.3
	[illegible]	4.32×10^{404}	4.18×10^5	64.4
	[illegible] pig skin	9.39×10^{404}	6.69×10^5	59.5
	$T<55$	3.1×10^{98}	6.27×10^5	59.2
	$T>50$ trans-epidermal necrosis human skin	5×10^{65}	2.96×10^5	65
[illegible] et al. [26] and Pearce and Thomsen [27]	All T skin collagen birefringence loss rat skin	1.606×10^{65}	3.06×10^5	80

When a high-frequency wavelength of 1MHz is applied to the human body, fat is more greatly affected by the electric field than the skin is, thus is heated easily.

GUI Display

No	Description
①	START/STOP Button
②	Mode Selection Buttons in the Selected Channel
③	Channel Selection Buttons (Select either Ch1 or Ch2, or Select either Ch3 or Ch4)
④	Buttons to adjust Set Values in each Mode

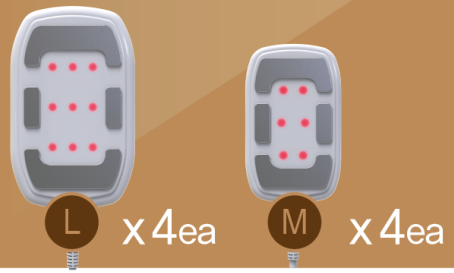
GUI Display



No	Description	No	Description
⑤	Displays of the States of Operation of Product	⑩	Set-up and Display of the Level of Low Frequency (0~100)
⑥	Name of Channel	⑪	Display of the Frequency of Current Output
⑦	Display of the Size of PAD	⑫	Set-up and Display of the Level of High Frequency (0~8)
⑧	Set-up and Display of the Level of Low Power Laser (ON/OFF)	⑬	Display of Time Elapsed for Operation of Product
⑨	Set-up and Display of the Low Frequency Program (6 Programs)		

Strength

4 Channels and 8 Pads

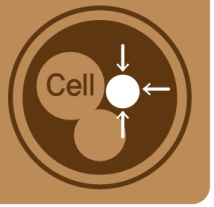


Rapid treatment within 30 min

Noninvasive treatment

Automatically turns off at abnormal temperatures

Reduction of fat cells / Size reduction

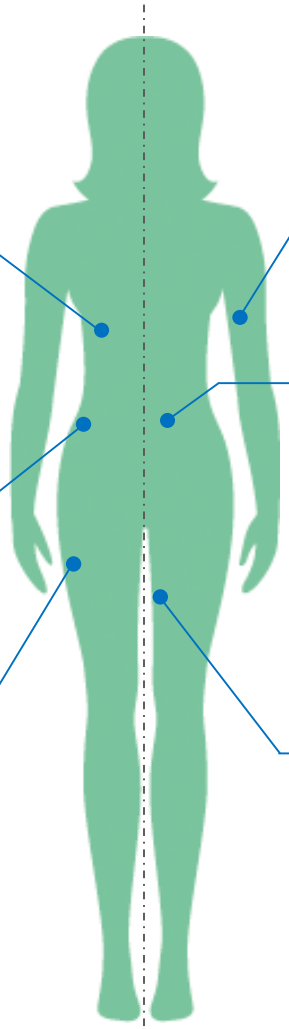


NO Downtime

Treatment Area

BACK

Front



Brassiere line :
Large hand piece: 1~2ea
Removal of bumpy body fat and extra flesh out of underwear

Love handles :
Large hand piece: 1~2ea
Removal of sagging flesh and bumpy extra flesh out of a top underwear

Under the hips & back legs :
Cellulite reduction and removal of extra flesh

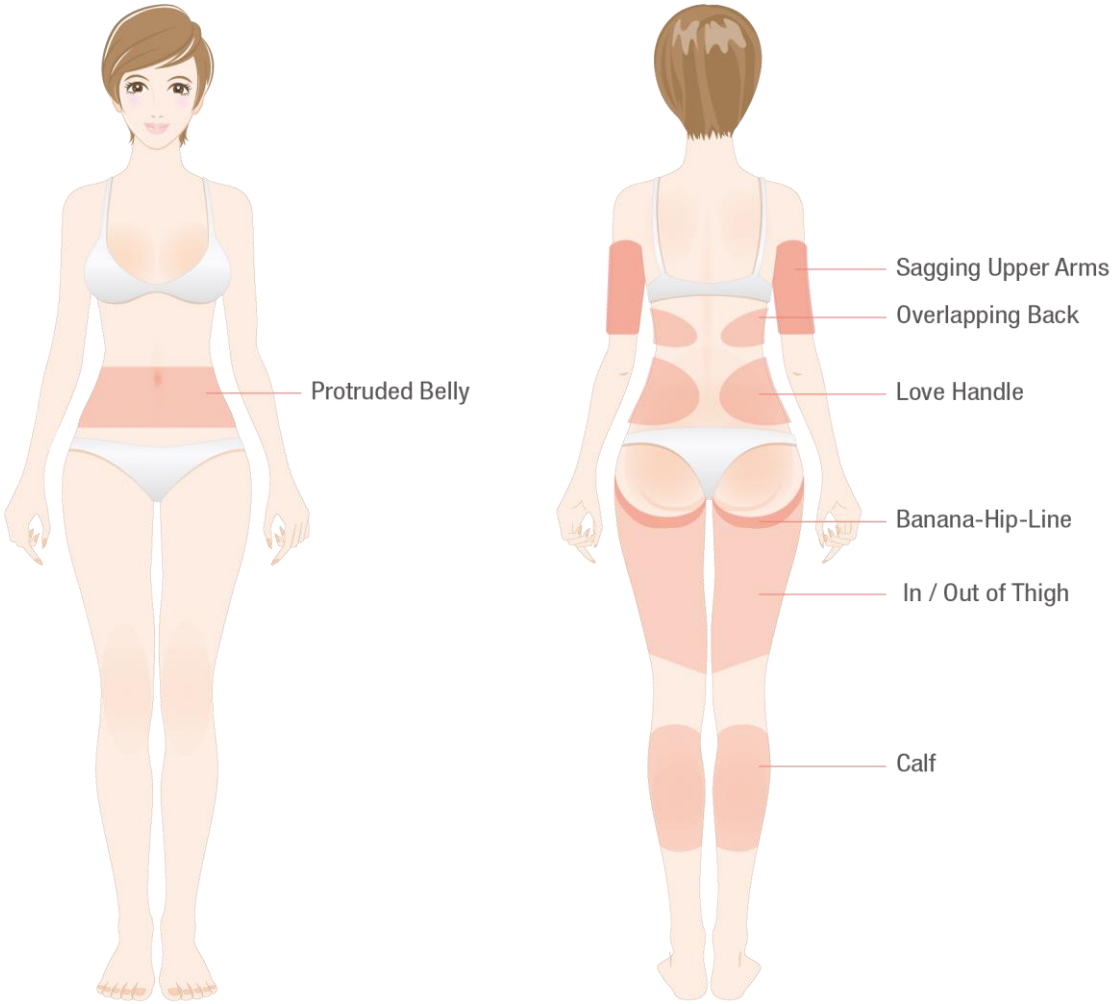
Forearm :
Medium hand piece: 1~2ea
Removal of extra flesh in the forearm, sagging flesh, and cellulite reduction

Abdomen :
Large hand piece: 2~4ea
Solution for obesity in upper and lower abdomen
Cellulite reduction

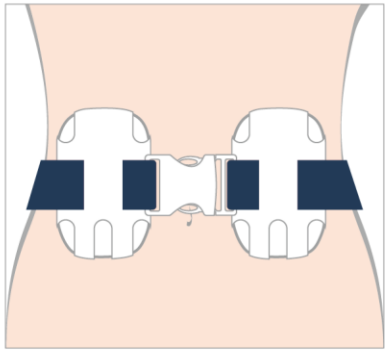
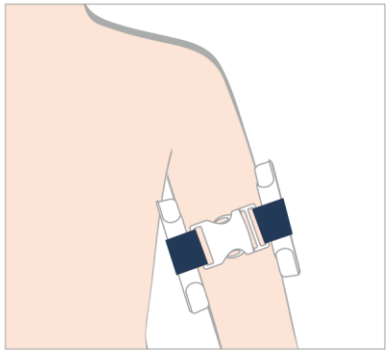
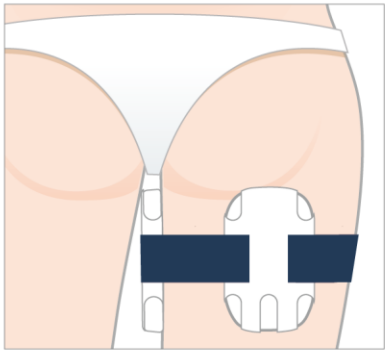
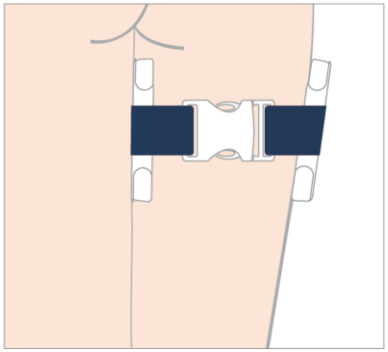
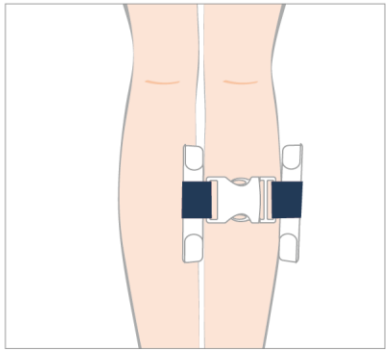
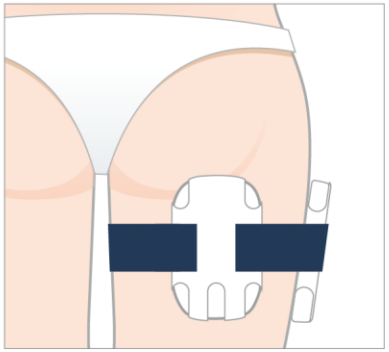
Inner legs :
Large hand piece: 1~2ea
Cellulite reduction and removal of extra flesh

Use of PAD appropriate to area of applicable site

Treatment Area



Treatment Area

Contraindications

- Malignant tumor
- Children
- Pregnant or nursing women
- Herpes
- Epileptic, Infection and rash
- Inflammatory response
- Hemorrhagic disease (eg. Hemophilia)
- Cardiovascular Disease
- Nephritis
- Pacemaker users
- Insulted Metal Stand
- Dysarteriotony
- Diabetes
- Dermatopathy
- Taking medicine anti-cogolants
- Autoimmune Disease
- Facial Paralysis
- Lupus/ Achromoderma
- High Fever
- Menstruation Period
- Filler
- Implant (Dentistry, Plastic Surgery, orthopedics)
- Blooding cuts, eyes or near eyes, ears or near ears
- Chronic dermatopathy impacting topical or whole body.
- Keloid Skin
- Weak to electric shock therapy
- Febrile patient (over 38℃)
- Other Extraordinary disease

SUMMARY

Complex — Obesity management using multiple functions

Multiple — Maximization of treatment effect using multiple mechanisms

Various — Various PADs of different sizes can be applied to various body parts

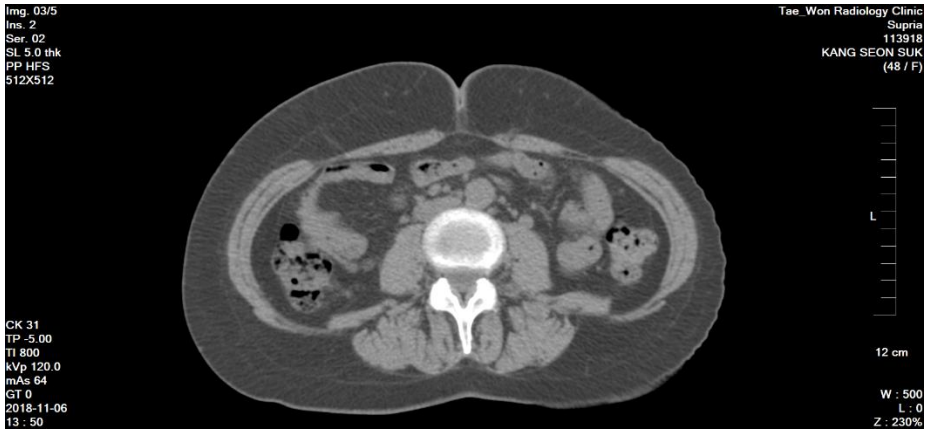
Safety — Safe procedures with a built-in real-time temperature sensor
Realization of various treatment programs

Effect — Definite treatment effect without downtime

Specification

Energy Type	LLD , AMF, RF
Meddle frequency	1 ~ 4,000Hz (L: 4ch, M:4ch)
Low level laser	658nm, 40mW
Radio frequency	1MHz, Bi-polar
Input power	100 - 240 ~
Dimension (WxDxH mm)	394.6 X 482.1 X 264.3

Clinical data (Visceral Fat CT Examination Report)



Analysis Results	2018-11-06	2018-12-12	Difference (-)	Difference (+)
Height[cm]	167.0	167.0	-	-
Weight[kg]	65.0	66.0	-	**1**
Visceral fat area[cm²]	94.6	79.0	**15.6**	-
Subcutaneous fat area[cm²]	215.5	213.5	**2**	-
Waist (CT)[cm]	86.9	85.3	**1.6**	-
Visceral fat / Subcutaneous fat ratio	0.44	0.37	**0.07**	-
Body Mass Index (BMI)	23.3	23.7	-	**0.4**

➢ **Treatment : 2 times/week, 1 month later**

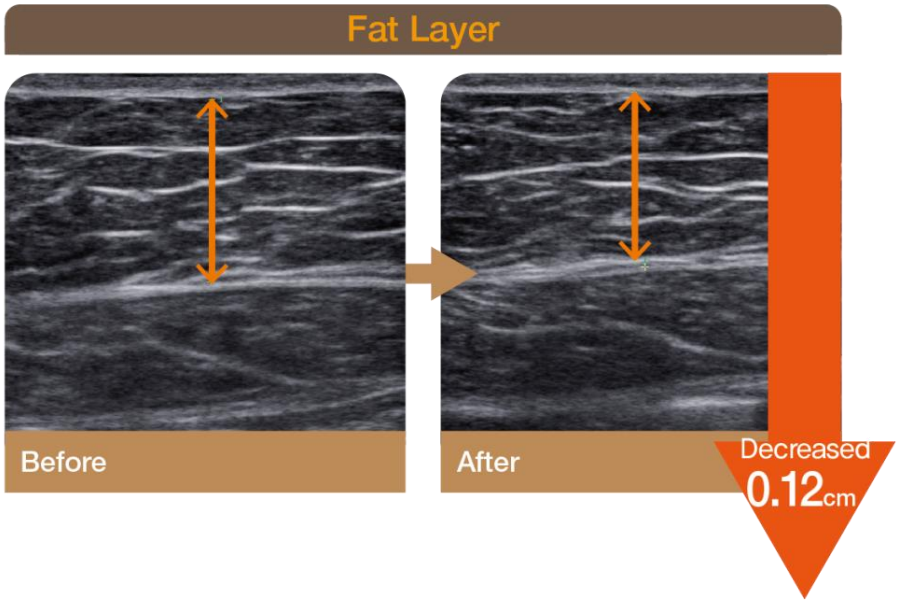
❖ **Waist (CT) : -1.6cm**

❖ **Visceral fat area : - 15.6cm²**

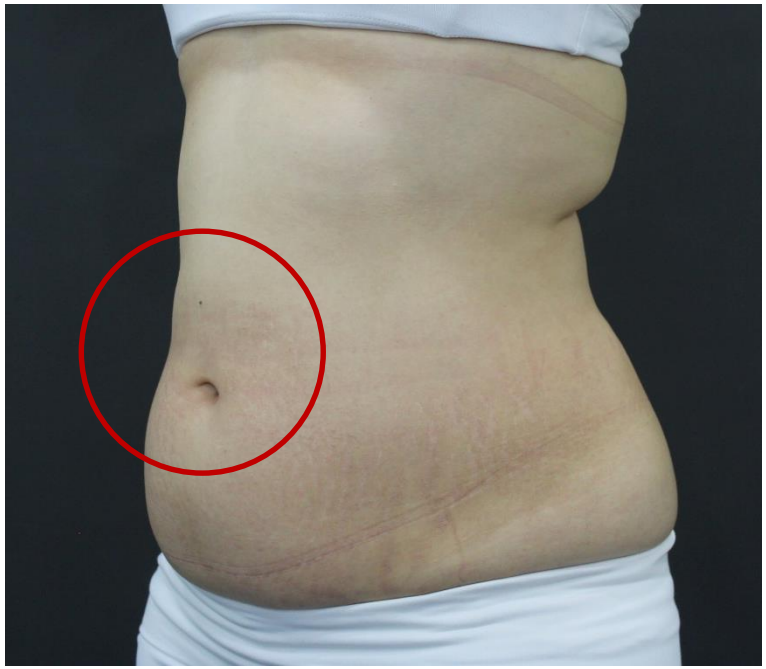
❖ **Subcutaneous fat area : -2cm²**

Clinical data

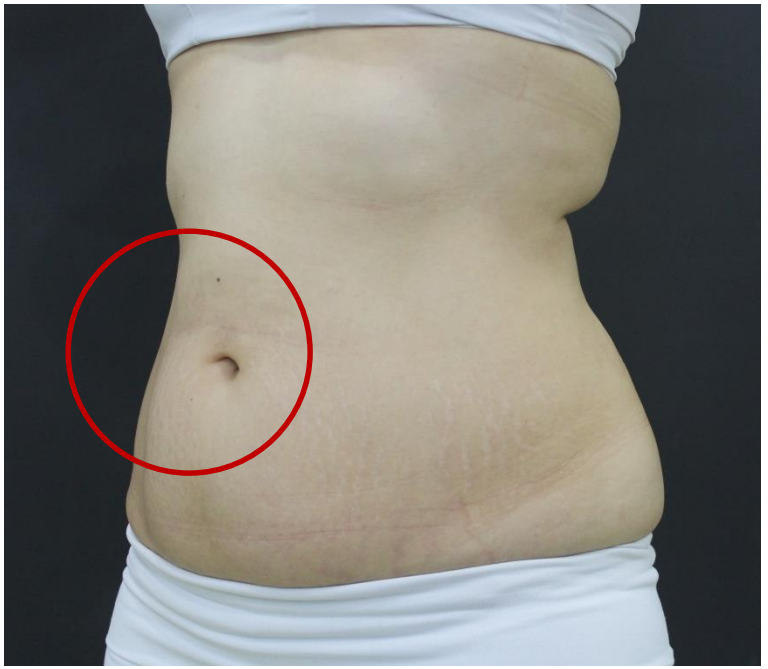
- 4 times treatment Progress / The latter of 30's / Female
- Ultrasound scan after LLD, MLF, RF treatment



Clinical data



[Before]



[After]

Abdomen F /The latter of 30's

Clinical data

[Before]

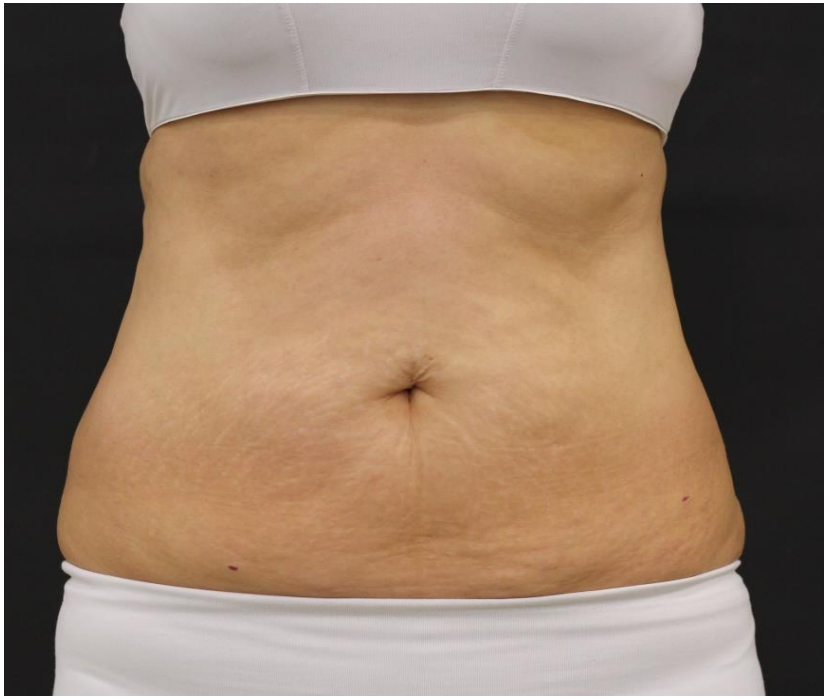
[After]

Abdomen M /The latter of 30's

Noble shape + cavi (9 Session)

[자료: 2018, EunSung Global Lab.]

[Before]



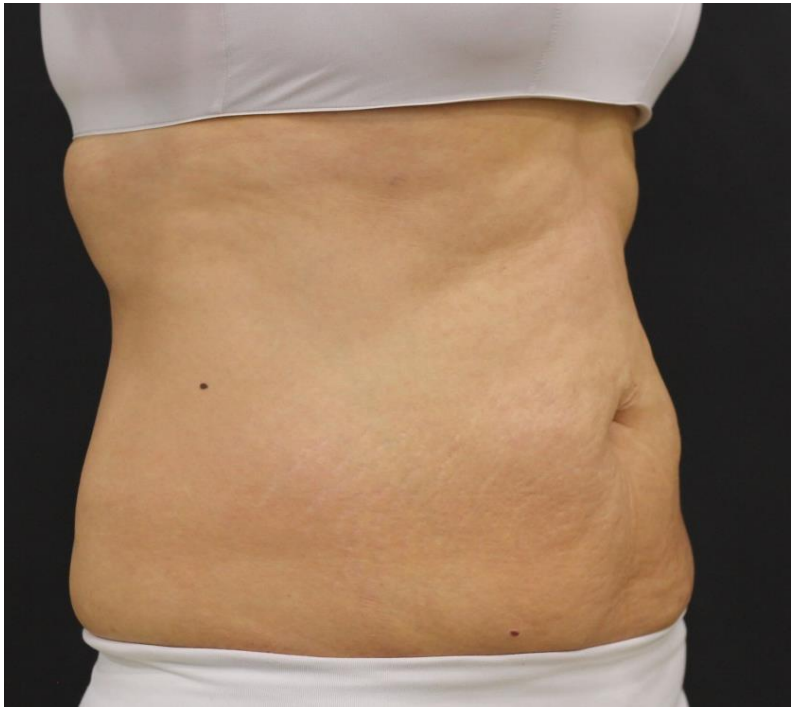
[After]

Abdomen F /The latter of 50’s

Noble shape + cavi (9 Session)

[자료: 2018, EunSung Global Lab.]

[Before]



[After]

Abdomen F /The latter of 50’s

Noble shape + cavi (9 Session)

[자료: 2018, EunSung Global Lab.]

[Before]

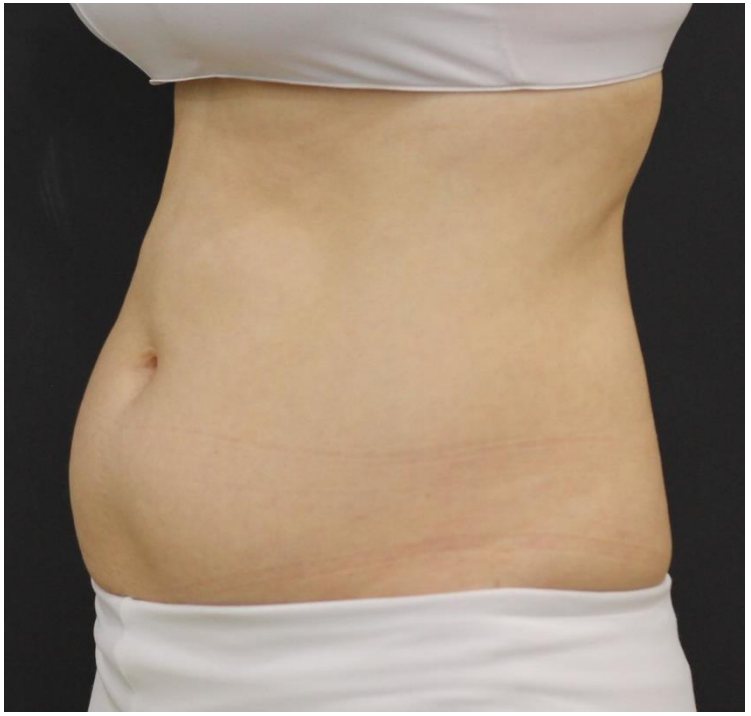
[After]

Abdomen F /The latter of 50’s

Noble shape + cavi (12 Session)

[자료: 2018, EunSung Global Lab.]

[Before]

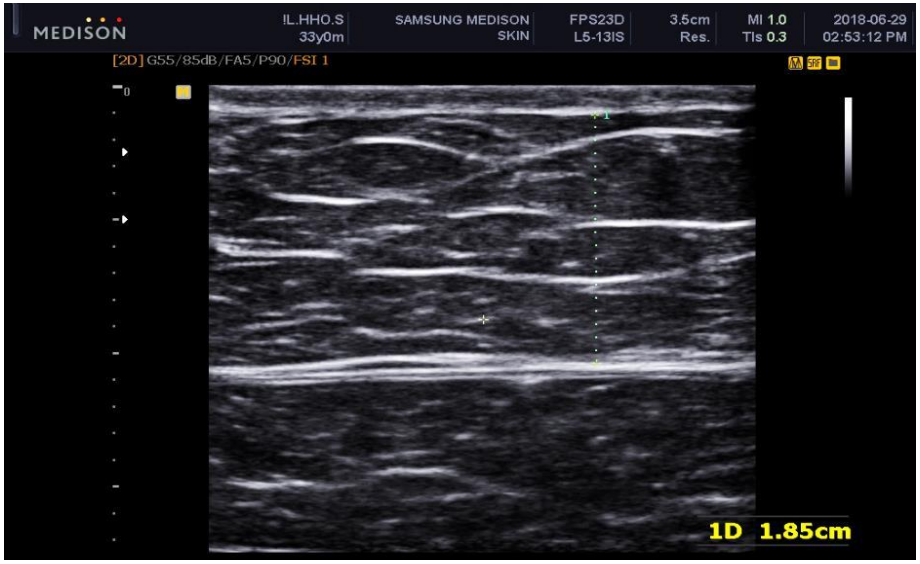


[After]

Abdomen F /The mid of 30’s

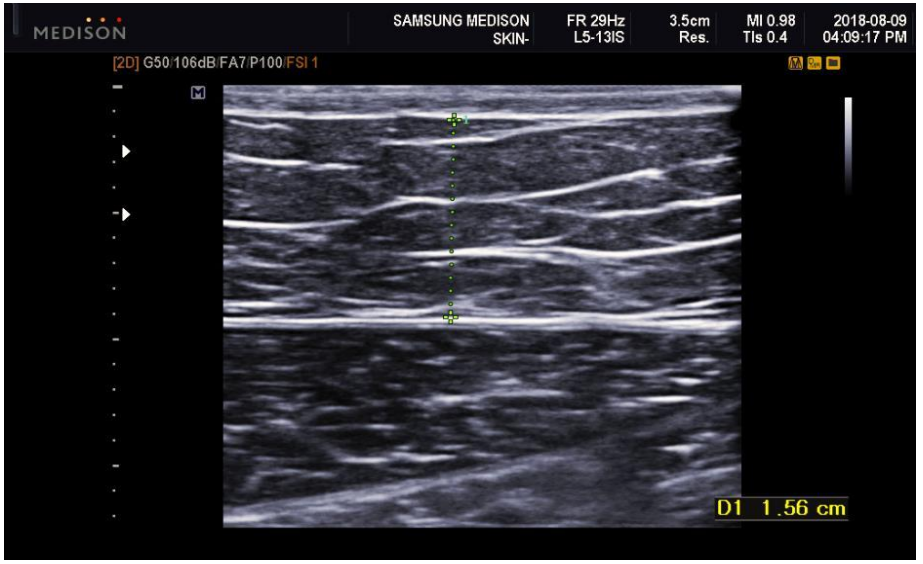
Noble shape (6 Session)

[자료: 2018, EunSung Global Lab.]



1.85cm

1st TREATMENT SONOGRAM



1.56cm

6rd TREATMENT SONOGRAM

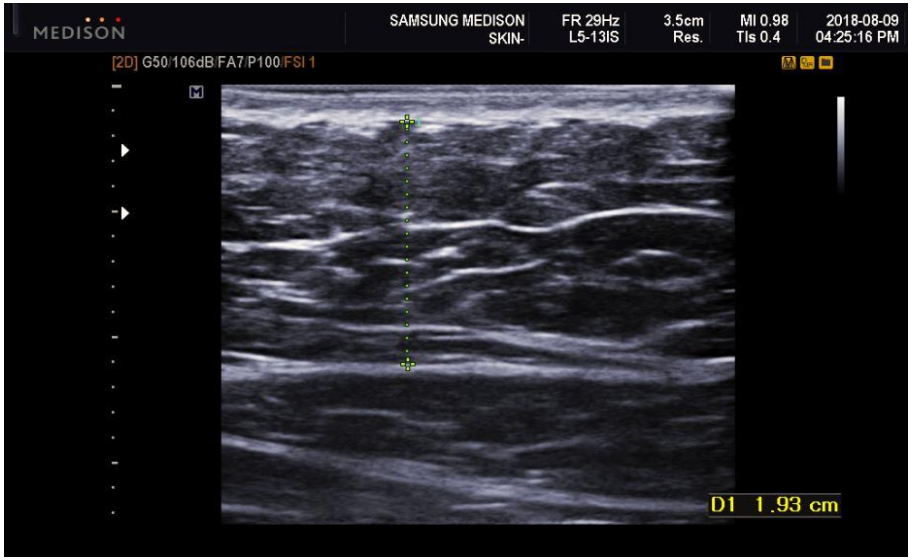
Abdomen M / 33

Noble shape (6 Session)

[자료: 2018, EunSung Global Lab.]

2.35cm

1st TREATMENT SONOGRAM



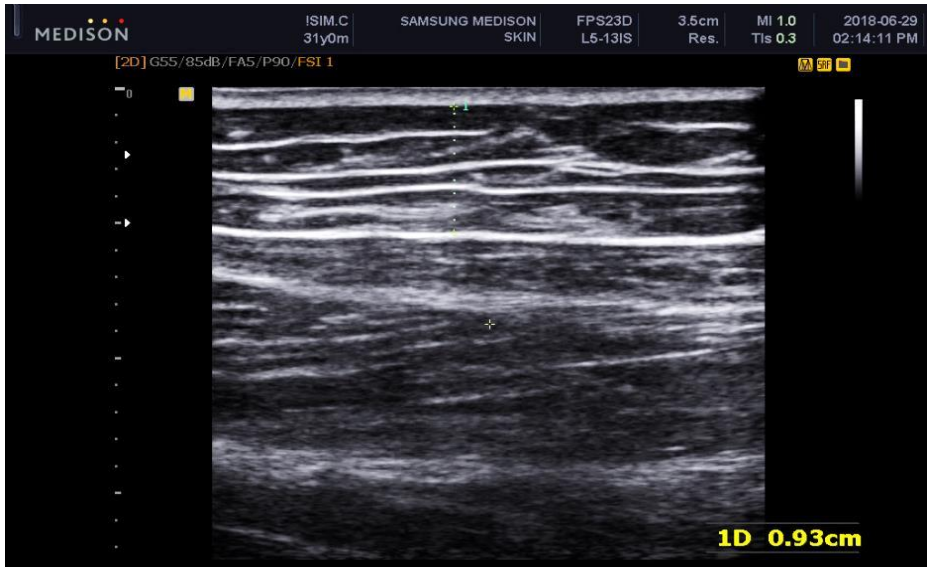
1.93cm

6rd TREATMENT SONOGRAM

Abdomen M / 33

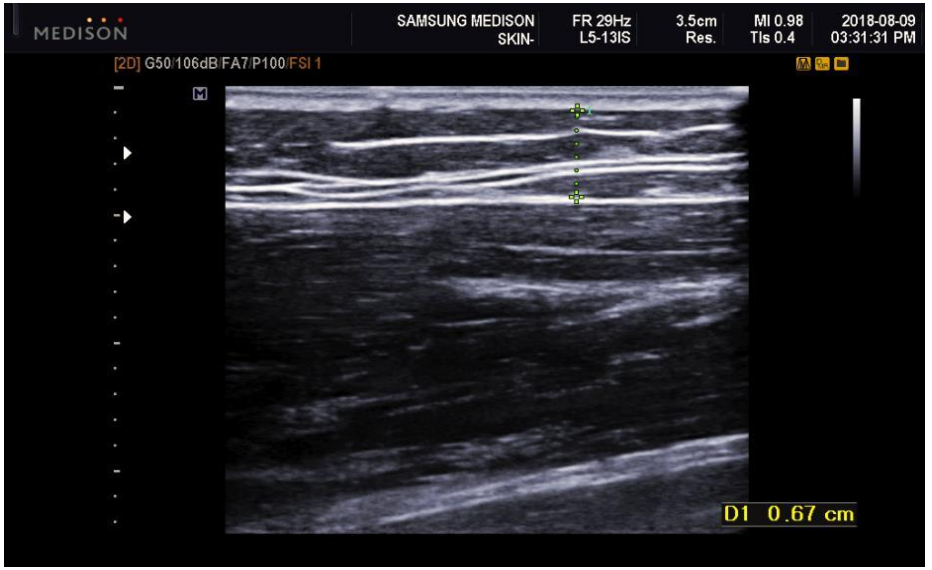
Noble shape (8 Session)

[자료: 2018, EunSung Global Lab.]



0.93cm

1st TREATMENT SONOGRAM



0.67cm

8rd TREATMENT SONOGRAM

Abdomen F / 48

THANK YOU

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