FisioTeck
studio medico fisioterapico polispecialistico

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HC CRYO T-SHOCK

CRYO T-SHOCK
Into the treatment of Cellulite & Un-desired Fat

CRYO T-SHOCK represents a new approach into the treatment of cellulite and undesired fat removal. In using CRYO T-SHOCK we applied this no invasive energy, setting cold temperature from 0 to – 6 for reducing inflammation (about cellulite) and provoking fat destroying.

CRYO energy is impacting both the major causes of cellulite: fibrous septae and protrusion of fat into the lower dermis.

CRYO breaks up the collagen of the septae and releases the skin, allowing a smoother surface.

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Thanks to the innovative CRYO T-SHOCK, every treatment is performed with the best patient's comfort.
The special soli state hand-piece is assuring the proper control of the delivered energy density, for transmitting from the superficial to deepest tissues.

Advantages of CRYO T-SHOCK

- Non invasive modality
- No gas, no consumable liquid, no ice
- High and medium energy density over the deepest tissues
- Effects could be seen just from the first session
- Effective over a large % of applications
- Very low costs of maintenance
- Few contraindication and collateral effects

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Smashing and melting of hardened connective tissue with the consequent metabolic block of subcutaneous fat does not occur through the administration of medicines, but thanks to the mechanical energy and micro-massage, which concentrates on the first 2/4 cm of depth, where cellulite is located;

- the elimination of liquids in excess and metabolic wastes occurs through a natural re-absorption of the lymphatic system;
- CRYO T-SHOCK causes an increase of skin permeability preparing it to the use of anti-cellulite gel or other substances;
- this treatment is not invasive and the patient does not feel any pain.

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Application modality

Treatment of Cellulite (over the different phases of Cellulite) is generally performed by assuring a shock in terms of temperature. We preferred to increase skin temperature by using warming side of CRYO T-SHOCK and cooling immediately after for provoking a great shock.

The latest part of treatment has bee done for helping drainage of liquid retention and fat.

Technique

Select an area of the body of the patient which is not so vast

Make sure you execute a slow massage over the selected area of the body

The best results come while the treatment is made on the skinfold

Suggestions

To improve benefits and results of the treatment, it is advisable to suggest to the patient to perform drainage over the treated area to help fat elimination by the physiological process.

Furthermore, manual treatment, jogging, running, but also Presso-Therapy and/or Radio Frequency Thecar treatment could strongly help the drainage.

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The main goal of our activity was to improve aesthetics of skin, increasing elasticity and atrophy of the different tissues; reducing edema and liquid retention which the patient could feel like pain and tiring.
Fat removal was one of our main goals and, despite our doubts into the benefit of this new modality, results were higher than expected. Volume of all treated people has been reduced and effects were visible just from the first sessions.

The special technique used into the treatment of cellulite includes vertical micro-massage and horizontal micro-massage with the aim to make drainage during the applications.

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The hand-piece of CRYO T-SHOCK, is passed on well-defined areas to concentrate the effect and optimize the time, a neutral gel is applied to allow the handpiece to slide.
The manual skills to be performed are the lymphatic discharge routes.
Application time varies depending on the imperfection and the area to be treated as the temperature to be used.
It is also possible useful to apply CRYO T-SHOCK in the treatment of the adipose and edemo-fibrous panniculus, reactivates and improves the microcirculation, leading to an increase in cellular metabolism with excellent results.
It is essential that after an impact of treatment a week, it is always advisable to maintain.
The maintenance sessions can be more distant from each other, for example a treatment every 15/20 days, always using the CRYO T-SHOCK or other equipment according to the desired improvement.

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The new treatment of fat mass and cellulite

The problem is not cellulite or fat, but excess fat (hence the name of lipodystrophy). This is the reason for the female desire for a reduction in volume, the operator must always cope with a clinical evaluation, assigned to examine whether the conditions of an excess fat exist.
In man, it is localized at the abdominal level. In the woman in the gluteus-femoral area.

Fibrotic CELLULITE - Gluteus

43 women: 26 to 59 years old

- 30 very good (whole resolution, volume reduction)
- 7 good (regression in inflammation, improvement in skin aspect, volume reduction)
- 3 not so good (small improvement in inflammation and skin aspect)
- 3 none (any improvement)

Suggestions from Clinical experiences

- 8 sessions
- weekly session 1 or 2
- Parameters: 5 min at 40 C; 30 min at – 4°C; 5 min at 39°C

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Fibrotic CELLULITE Legs

92 women: 31 to 62 years old

- 69 very good (whole resolution, volume reduction)
- 14 good (regression in inflammation, improvement in skin aspect, volume reduction)
- 7 not so good (small improvement in inflammation and skin aspect)
- 2 none (any improvement)

Suggestions from Clinical experiences

- 8 sessions
- weekly session: 1
- Parameters: 5 min at 39°C; 20 min at – 4°C; 5 min at 39°C

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FAT REMOVAL - Abdomen

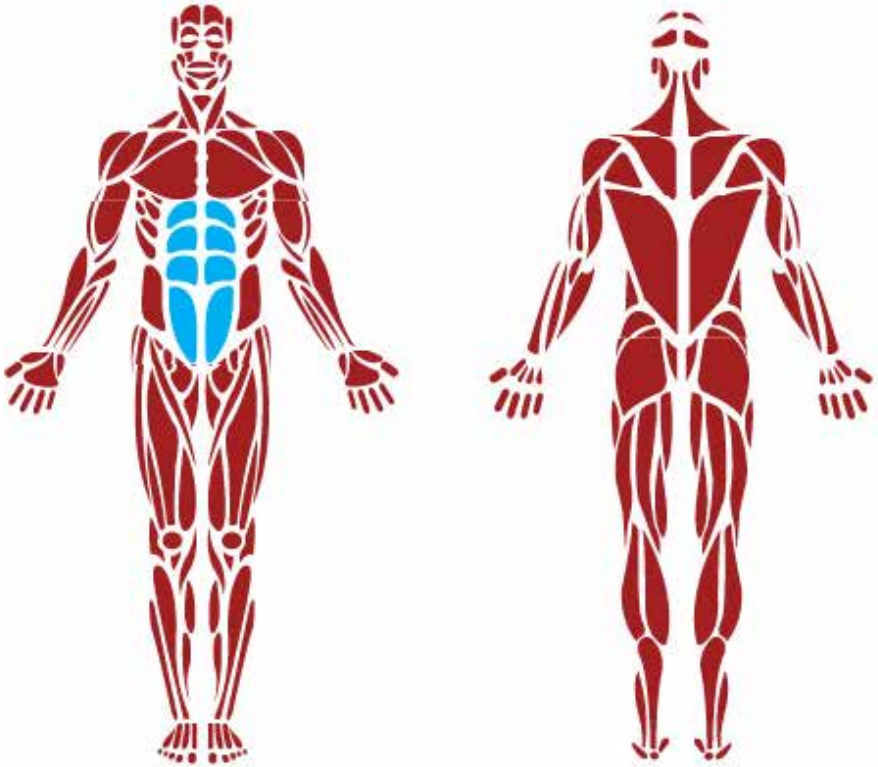
68 women: 22 to 55 years old

- 50 very good (whole resolution, volume reduction)
- 12 good (regression in inflammation, improvement in skin aspect, volume reduction)
- 5 not so good (small improvement in inflammation and skin aspect)
- 1 none (any improvement)

Suggestions from Clinical experiences

- 8 sessions
- weekly session: 1
- Parameters: 5 min at 39°C; 30 min at – 2°C; 5 min at 38°C

Roland HEALTHCARE



ADDOME

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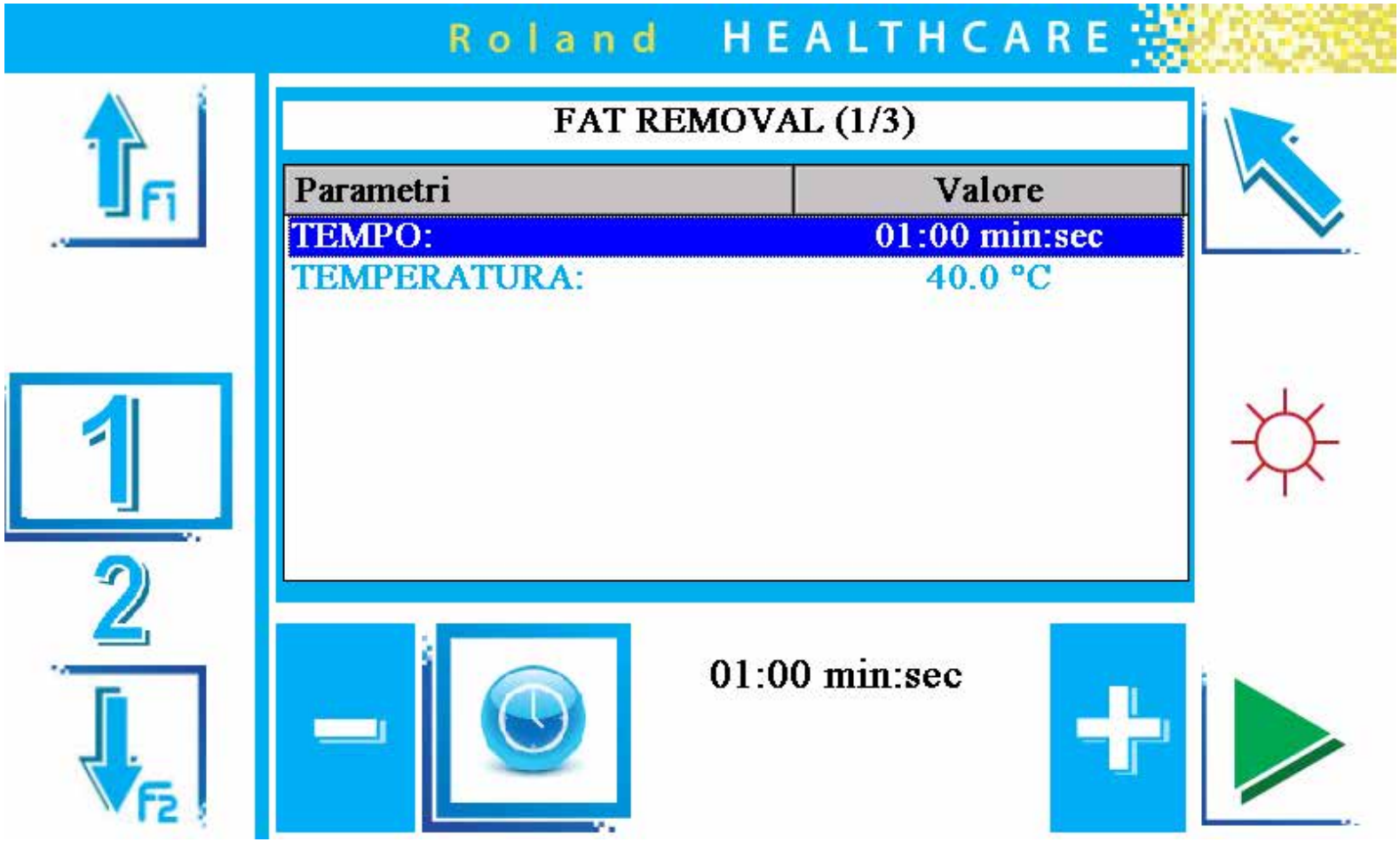
FAT REMOVAL
- Gluteus

55 women: 27 to 58 years old

- 41 very good (whole resolution, volume reduction)
- 12 good (regression in inflammation, improvement in skin aspect, volume reduction)
- 2 not so good (small improvement in inflammation and skin aspect)

Suggestions from Clinical experiences

- 8 sessions
- weekly session: 1
- Parameters: 5 min at 40°C; 30 min at – 4°C; 5 min at 39°C



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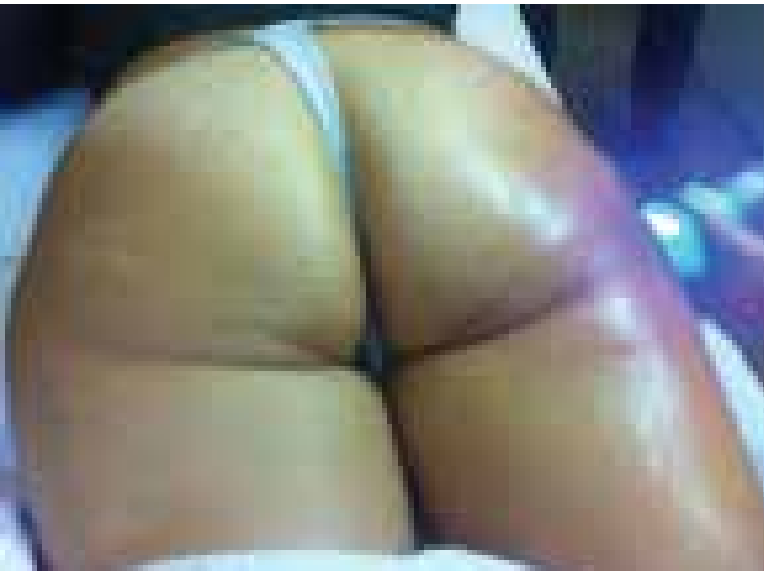

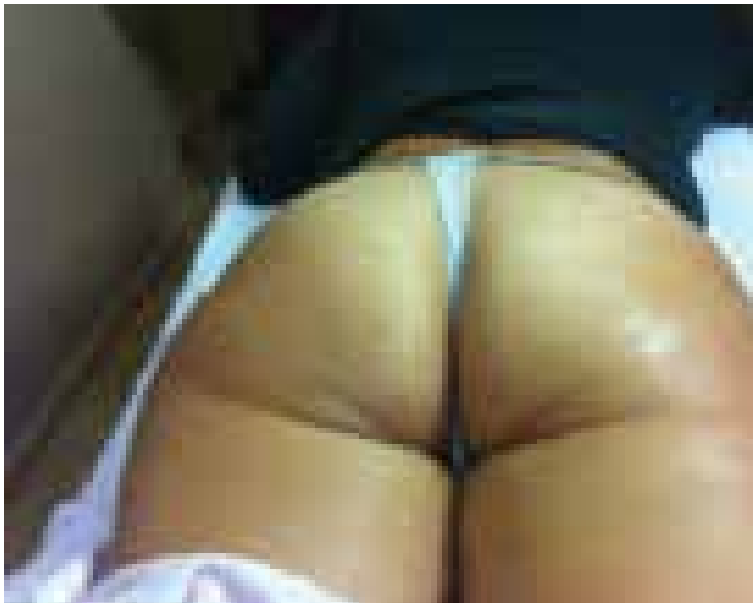

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FAT REMOVAL - Legs

72 women: 24 to 51 years old

- 54 very good (whole resolution, volume reduction)
- 16 good (regression in inflammation, improvement in skin aspect, volume reduction)
- 4 not so good (small improvement in inflammation and skin aspect)
- 1 none (any improvement)

Suggestions from Clinical experiences

- 8 sessions
- weekly session: 1
- Parameters: 5 min at 40°C; 30 min at – 4°C; 5 min at 39°C

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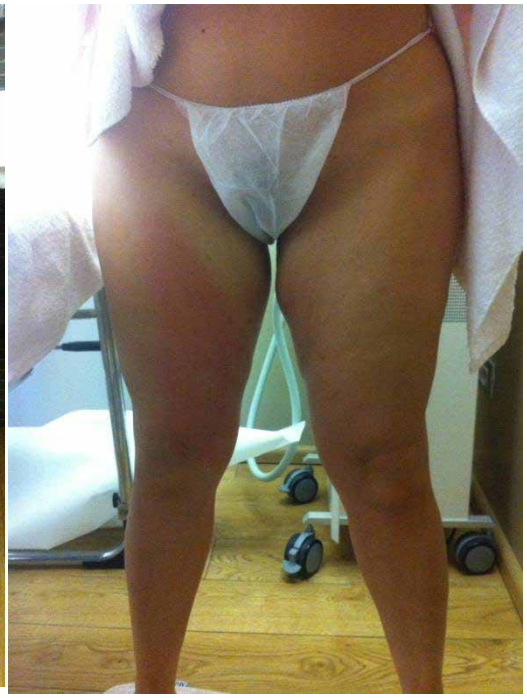

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Conclusions

CRYO T-SHOCK REPRESENTS THE MOST ADVANCED AND EFFECTIVE PROCEDURE FOR REDUCING UN-DESIRED FAT. NO COLLATERAL EFFECTS, CRYO TSHOCK DOESN'T REQUIRE ENDOGENEOUS APPLICATIONS.

THE EFFECTS COULD COME AFTER 4 TO 6 WEEKS FOR PRODUCING THE BEST AFTER 2-3 MONTHS THANKS TO THE ELIMINATION OF FAT CELLS WHICH COULD BE ALSO STIMULATED FROM A QUITE GOOD DRAINAGE, MANUALLY MADE OR BY USING PRESSO THERAPY AND/OR THECAR THERAPY.

THANKS TO THE NATURAL PHYSIOLOGICAL PROCESS.

THERMO CRYO T-SHOCK IS AN ABSOLUTELY NEW AND INNOVATIVE TREATMENT APPROACH

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Conclusions

This machine can be used on male, where you can find unsightly accumulation of localized fat especially on waist and abdomen. On female where it is easier to find, besides the fat, also the imperfection of cellulite.

The number of sessions varies according to the imperfection to be treated from a minimum of 4 to a maximum of 8/10; it is preferable to perform the treatment once a week to allow the body to eliminate triglycerides and cell catabolites. The results after CRYO T-SHOCK are evident already after the first treatment because through the freezing of the adipose cell it leads to the natural death of the cell itself, but it takes two months for the natural expulsion from the organism.

For accelerating drainage and elimination of water retention and fat cells, we suggest to end the treatment by warming the area to be treated.

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SOME INTERNATIONAL REFERENCES

Clin Cosmet Investig Dermatol. 2014 Jun 26;7:201-5. doi: 10.2147/CCID.S44371. eCollection 2014.

Cryolipolysis for noninvasive body contouring: clinical efficacy and patient satisfaction.

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Abstract
In recent years, a number of modalities have become available for the noninvasive reduction of adipose tissue, including cryolipolysis, radiofrequency, low-level laser, and high-intensity focused ultrasound. Each technology employs a different mechanism of action to cause apoptosis or necrosis of the targeted adipocytes. Among these technologies, cryolipolysis has not only been commercially available for the longest time, but has also been best researched including in vitro and animal models and randomized controlled clinical trials in humans. The principle behind cryolipolysis exploits the premise that adipocytes are more susceptible to cooling than other skin cells. The precise application of cold temperatures triggers apoptosis of the adipocytes, which invokes an inflammatory response and leads to slow digestion by surrounding macrophages. In clinical studies, cryolipolysis was shown to reduce subcutaneous fat at the treatment site by up to 25% after one treatment. Improvements were seen in 86% of treated subjects. At 73%, the patient satisfaction rate is higher than with other technologies used for noninvasive lipolysis. Cryolipolysis has been proven to be a very safe method for body contouring, and is accomplished with only minimal discomfort. Expected side effects are temporary erythema, bruising, and transient numbness that usually resolve within 14 days after treatment. With a prevalence of 0.1%, the most common complaint is late-onset pain, occurring 2 weeks post-procedure, which resolves without intervention. Although no procedure has been accepted as the gold standard for noninvasive body contouring as yet, cryolipolysis is considered to be both safe and efficient with a high patient satisfaction rate.

KEYWORDS:
body contouring; cryolipolysis; nonsurgical fat reduction; patient safety; patient satisfaction
PMID:
25061326

Aesthet Surg J. 2014 Mar;34(3):420-31. doi: 10.1177/1090820X13520320. Epub 2014 Mar 5.

Noninvasive selective cryolipolysis and reperfusion recovery for localized natural fat reduction and contouring.

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Abstract
BACKGROUND:
Cryolipolysis is a contemporary method of reducing fat by controlled extraction of heat from adipocytes.
OBJECTIVES:
The authors recorded temperature profiles during a single cryolipolysis treatment/recovery cycle (with and without massage) and report on the clinical safety and efficacy of this procedure.
METHODS:
In the pilot study group (PSG), the abdomens of 6 patients were treated with cryolipolysis and subdermal temperatures were recorded. In the clinical treatment group (CTG), 112 patients were treated without temperature recordings and results were evaluated through matched comparison of standardized photographs, caliper measurements, ultrasound imaging, and global assessments.
RESULTS:
Thirty minutes into the cooling phase, subdermal temperatures of patients in the PSG declined precipitously from pretreatment levels and remained low until the end of treatment. During recovery, subdermal temperatures of the only subject who received massage returned faster and to higher levels than the temperatures of subjects who did not receive massage. Patients in the CTG who were available for follow-up measurements at 6 months (n = 85) demonstrated an average fat reduction of 21.5% by caliper measurements; 6 random patients from this group also showed an average of 19.6% fat reduction by ultrasound imaging at 6 months. Global assessments were highest for the abdomen, hip, and brassiere rolls. Minimal side effects were observed, and patients experienced no significant downtime.
CONCLUSIONS:
Noninvasive cryolipolysis results in a predictable and noticeable fat reduction within 6 months and does not cause skin damage. Profiling of subdermal temperatures may provide additional insights for improving clinical effectiveness and safety.
LEVEL OF EVIDENCE:
3.

KEYWORDS:
body contouring; cryolipolysis; fat removal; liposuction; reperfusion-injury; temperature profile
PMID:
24598865
[PubMed - indexed for MEDLINE]

Lasers Surg Med. 2014 Feb;46(2):75-80. doi: 10.1002/lsm.22207. Epub 2013 Dec 3.

Three-dimensional volumetric quantification of fat loss following cryolipolysis.

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Abstract

BACKGROUND AND OBJECTIVES:
Cryolipolysis is a noninvasive and well-tolerated treatment for reduction of localized subcutaneous fat. Although several studies demonstrate the safety and efficacy of this procedure, volumetric fat reduction from this treatment has not been quantified. This prospective study investigated the change in volume of fat after cryolipolysis treatment using three-dimensional (3D) photography.

MATERIALS AND METHODS:
A prospective study of subjects treated with cryolipolysis on the flank (love handle) was performed at Massachusetts General Hospital.Volume measurements were performed with a Canfield Scientific Vectra threedimensional camera and software to evaluate the amount of post procedure volume change. Clinical outcomes were assessed with caliper measurements, subject surveys, and blinded physician assessment of photographs.

RESULTS:
Eleven subjects were enrolled in this study. Each subject underwent a single cycle of cryolipolysis to one flank.
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The untreated flank served as an internal control. The follow-up time after treatment was 2 months. The mean amount of calculated absolute fat volume loss using 3D photography from baseline to 2 months follow-up visit was 56.2?±?25.6 from the treatment site and 16.6?±?17.6?cc from the control (P?<?0.0001). A mean absolute difference of 39.6?cc between the treated and untreated sides was calculated at 2 months post-treatment. Comparison of caliper measurements from baseline to 2 months post-treatment demonstrated significant reduction of the treated flank from 45.6?±?5.8?mm at baseline to 38.6?±?4.6?mm at 2 months post-treatment (P?<?0.001). The untreated flank did not show significant reduction with caliper measurements demonstrating 45.3?±?5.0?mm at baseline and 44.6?±?5.1?mm at 2 months post-treatment (P?=?0.360). No unexpected side effects or adverse events were reported. Post-treatment satisfaction surveys demonstrated 82% of subjects were satisfied with the results.

CONCLUSIONS:
Cryolipolysis is a safe, well-tolerated, and effective noninvasive fat removal methodology that on average leads to 39.6?cc of fat loss of the treated flank at 2 months after a single treatment cycle.

KEYWORDS:
cold induced fat loss; fat removal; imaging; noninvasive; volume of fat

Semin Cutan Med Surg. 2013 Mar;32(1):31-4.

Cryolipolysis: a historical perspective and current clinical practice.

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Abstract
Dermatologists have long used cold-based therapeutic approaches for a variety of applications. Based on the differences in chemical composition, it is possible to selectively target certain tissues rich with lipid, while sparing the surrounding tissue predominantly containing water.With historical observations of cold-induced panniculitis suggesting the feasibility of this strategy, cryolipolysis has emerged as a new methodology using controlled cooling to selectively target fat. Both preclinical and clinical studies have established the safety and efficacy of cryolipolysis for noninvasive body contouring. This review will focus on the evolution of cryolipolysis from initial case reports of cold-induced panniculitis, to preclinical and clinical studies, and the current clinical practice.

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24049927
[PubMed - indexed for MEDLINE]

Dermatol Surg. 2013 Aug;39(8):1209-16. doi: 10.1111/dsu.12238. Epub 2013 May 2.

Safety, tolerance, and patient satisfaction with noninvasive cryolipolysis.

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Abstract

BACKGROUND:
Comprehensive assessment of safety, tolerance, and patient satisfaction has not been established from noninvasive body contouring techniques, such as low-level laser therapy, ultrasound, radiofrequency, and infrared light, for reduction of subcutaneous fat.
OBJECTIVE:
This multicenter study investigated the clinical outcomes of noninvasive cryolipolysis in European subjects.
METHODS:
A retrospective study was performed at clinical sites in Belgium and France. Safety was assessed according to reports of side effects. Tolerance was evaluated according to pain scores and patient perception of treatment duration. Clinical outcomes were assessed according to patient surveys, caliper measurements, and assessment of photographs.
RESULTS:
The investigators treated 518 patients. No significant side effects or adverse events were reported. The procedure was well-tolerated, with 89% of respondents reporting a positive perception of treatment duration and 96% reporting minimal to tolerable discomfort. Survey results demonstrated 73% patient satisfaction and that 82% of patients would recommend the cryolipolysis procedure to a friend. Caliper measurements demonstrated 23% reduction in fat layer thickness at 3 months. Abdomen, back, and flank treatment sites were most effective, with 86% of subjects showing improvement per investigator assessment.
CONCLUSIONS:
5
With proper patient selection, cryolipolysis is a safe, well-tolerated, and effective treatment method for reduction of subcutaneous fat.

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23639062
[PubMed - indexed for MEDLINE]

Aesthetic Plast Surg. 2012 Jun;36(3):666-79. doi: 10.1007/s00266-011-9832-7. Epub 2011 Nov 1.

Synergistic effects of cryolipolysis and shock waves for noninvasive body contouring.

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Abstract

BACKGROUND:
Excess body fat, localized adiposity, and cellulite represent important social problems. To date, techniques using radiofrequencies, cavitation and noncavitation ultrasound, and carbon dioxide have been studied as treatments for noninvasive body contouring. Ice-Shock Lipolysis is a new noninvasive procedure for reducing subcutaneous fat volume and fibrous cellulite in areas that normally would be treated by liposuction. It uses a combination of acoustic waves and cryolipolysis. Shock waves, used normally in the treatment of renal calculi and musculoskeletal disorders, are focused on the collagen structure of cellulite-afflicted skin. When used on the skin and underlying fat, they cause a remodeling of the collagen fibers, improving the orange-peel appearance typical of the condition. Cryolipolysis, on the other hand, is a noninvasive method used for the localized destruction of subcutaneous adipocytes, with no effects on lipid or liver marker levels in the bloodstream. The combination of the two procedures causes the programmed death and slow resorption of destroyed adipocytes.
METHODS:
In this study, 50 patients with localized fat and cellulite were treated with a selective protocol for the simultaneous use of two transducers: a Freezing Probe for localized fatty tissue and a Shock Probe for fibrous cellulite.
RESULTS:
The procedure significantly reduced the circumference in the treated areas, significantly diminishing fat thickness. The mean reduction in fat thickness after treatments was 3.02 cm. Circumference was reduced by a mean of 4.45 cm.Weight was unchanged during the treatment, and no adverse effects were observed. Histologic and immunohistochemical analysis confirmed a gradual reduction of fat tissue by programmed cell death. Moreover, the reduction in fat thickness was accompanied by a significant improvement in microcirculation, and thus, the cellulite. The safety of the method also has been highlighted because it is accompanied by no significant increase in serum liver enzymes or serum lipids.
CONCLUSION:
The study aimed to observe the effects of the new technique in the treatment of localized fat associated with cellulite in order to assess adipose tissue alterations, cellular apoptosis, and levels of serum lipid or liver markers. The findings show that the action of Ice-Shock Lipolysis is a safe, effective, and well-tolerated noninvasive procedure for body contouring. In particular, the authors believe that this could be an ideal alternative to liposuction for patients who require only small or moderate amounts of adipose tissue and cellulite removal or are not suitable candidates for surgical approaches to body contouring.

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22042359
[PubMed - indexed for MEDLINE]
Clin Plast Surg. 2011 Jul;38(3):503-20,