

STUDY CENTRE OF AESTHETIC PATHOLOGIES OF AREZZO and FENIX GROUP - Montesilvano (Pe)

International Study Center of Aesthetic Pathologies of Legs

COMPRESSING MICROVIBRATION WITH "ENDOSPHERES AK55" Scientific considerations and clinical observations

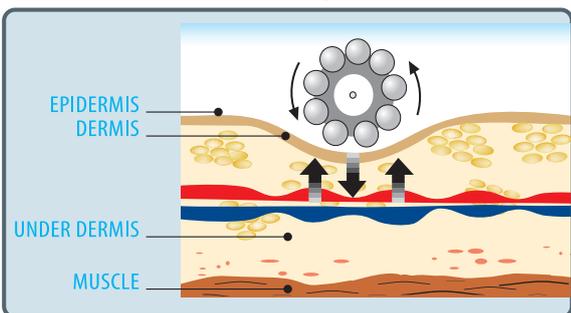
About ten years ago were moved the first steps to finally give a solution to some specific medical needs for the care of cellulite, Lymphoedema and Lipolymphoedema.

Seven years have been useful to put right a project able to fulfil the expected scientific results; it has thereby been created the new methodology of "Compressing Microvibration with rotary spheres". With this new concept in the last three years, it has been possible to begin studies and clinical analysis in various universities, research institutes and medical centres operating in the field of lymphoflebitis, thermographic research, physique and sport medicine.

The new methodology twists completely the theory of "suction-traction of tissues" so as to introduce the modern concept of the tissue elastic compression-microvibration, that is based on a special type of **compressing microvibration** which is conveyed to the tissues through a cylinder inserted into a 55 rotary spheres maniple, fundamental instrument for the **Endosphères Therapy**.



The frequency of the vibrations, swinging from 40 up to 254 HZ, is determined by the programmed variation of the cylinder speed. The rotation as well as the pressure involved in this process, ensure to obtain a microcompression on physical tissues, called pump effect. This is the one good combination of powers giving the right intensity for each different clinical conditions of a patient.



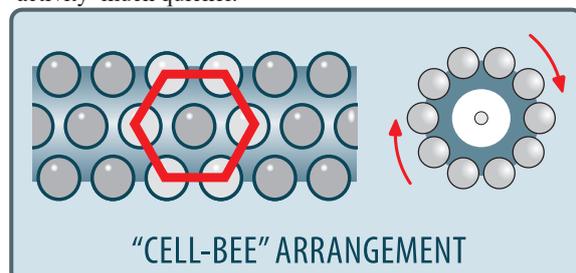
The toning up process as well as the tissue compaction achieved with the melting of the adipose areas together with the lymphodrainning action, the liquid conveying into the lymphatic ganglions, the tissue oxygenation, the phlogistic repairing process and, ultimately, the increase of skin temperature, represent the most meaningful effects produced by the work of **Endosphères Therapy**. The methodology also highlights the interesting results obtained by treating the main muscular groups, giving a remarkable **soothing action** on the nerves ultraexcitability.

Endosphères Therapy, by treating the muscle, consequently forms a prolonged continuous tense action in order to enable an extension of connective tissues so as to render it more elastic. In this way muscular contraction is overcome in only few treatments. This can be considered the point that spreads to the different pathologies touched by sport medicine and rehabilitation, from such pains as: lumbar and cervical inflammation, muscular weakness, foot pain. From the many documentations done in different institutes as "Gabriele D'Annunzio University", the Advanced Biomedical Technologies Institute (ITAB) of Chieti, the Spa of Caramanico and twenty more medical centres, it has been elicited that the innovative characteristics of the Endosphères show their benefits especially through the compressing microvibration process in the treatment of Flebitis in the lymphatic system, which symptomatic of swollen legs /chronic and acute Lymphoedema), loss of tone and Cellulite (PANNICULITE), specifically the 29 different faces of Cellulite.

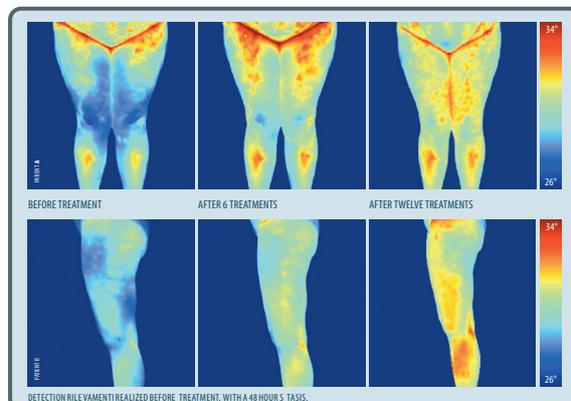
Main clinical activities

ACTION ON THE VASAL SYSTEM

The bee-cell shaped vibrating spheres inserted in the cylinder, working together well with the microcompression, operate with little pressures directly on the receptive particles, in order to develop their vasal and metabolic activity much quicker.



By doing so, tissues become more elastic, yet create an upward pressure favouring the so called vascular gymnastic that helps efficiently the blood circulation in the treated areas. Endosphères produces a counterbalance of the hydrostatic pressure of veins, ensuring both a metabolic and a blood flow interchange.



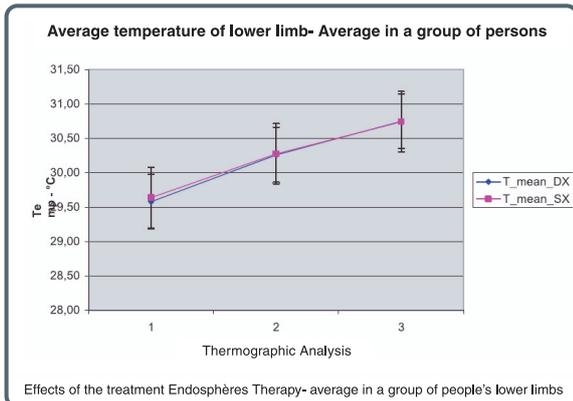
Medical research clearly shows through thermographics, an increase of skin temperature due to the strong dynamicity

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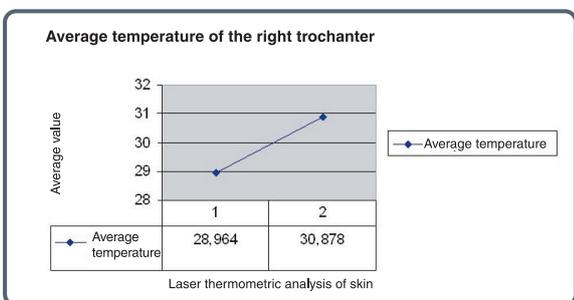
of vascular energy. This must be considered an important goal for sport medicine but also a concrete means to get rid of the ugly pif skin affecting women, such as ITAB (Advanced biomedical technology Institute) of Chieti demonstrates.

At the end, the heat rise can be certainly seen as the result of *“an increase of perfusion as well as the skin oxygen process, a better metabolic effect of tissues, a melting increase of the adipose areas and in addition, a dynamic anti inflammation repairing process of tissues”*, as Dr.



Merla from ITAB underlines. These conclusions perfectly match with the studies done at the Centre of Aesthetic Pathologies of Arezzo, where it has been tested the same thermal rise and oxygenation effect of the skin, therefore encouraging the lymphodrainage action.

As a consequence the patient will perceive a real lightness on the legs and feel much healthier.



ACTION ON THE LYMPHATIC SYSTEM AND TISSUE CONCAVITY

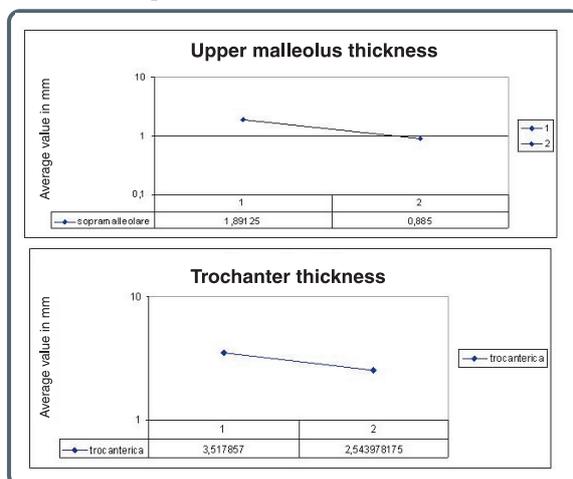
The structure of tissues can be damaged in time as long as toxic substances pervade it. The longest legs are affected by oedema the most free radicals arise, tissues get more acid, furthermore followed by the alteration of Metalloproteasins made even more difficult in the case that tissues get thicker (Fibrosis). In addition to what has been just said, it must be known that muscle ache will get more acute because of the presence of unhealthy fluids as well as the lack of tissue oxygenation, which sets back the body purification.

With these premises not only do connective fibres get smaller and shorter, yet this facilitates the proliferation of non- aesthetic pif skin. The so called Lymphoedema can be considered a real disease and it is caused not only by both lymphatic oedema and the increase of liquids within tissue concavities; it is mainly due to metabolic disorders besides the bad activity of tissues, which are the two important

elements regulating the balance of the cellular system and is also useful to make our internal sea purer because, when it is obstructed, it gets rough and thicker almost like a fresh juicy mozzarella cheese getting older. The pulsating vibration of Endosphères is given by the sense of rotation of the cylinder guided and handled by the doctor. The hard pushing action works directly on the lymphatic system so as to expel the exceeding toxic fluids (lymphatic stagnation + Lipolymphoedema) in order to make the extracellular activity faster.

The draining process occurs complementary with the microvibration on the lymphatic system, without undergoing the possibility to take too much on the skin and damage it.

The amazing success in reducing oedema and cellulite, has been one of the most important collected results in the twenty Italian medical centres that have credited and supported the daily clinical studies, by giving the key premises to create a technically advanced software suitable for Endosphères. The deductions gathered from these tests take up our observations elaborated in the Study Centre of Arezzo. One of the mentioned centres, the University of Chieti, has carried out a particular analysis of Lymphoedema subjected to Endosphères treatment, so that to prove how significantly this new methodology decreases the subcutaneous thickness. Mr. Raul Saggini, holding the Chair of Physiotherapy at the University of Chieti, is able to uphold that in all the twenty treated patients what has been noticed is: *“a relevant reduction of oedema connected with a significant decrease of ache symptomatic of those patients suffering from an acute inflammation of the adipose areas (Panniculite) as well as Erythema Nodosum.”* Such a reaction has also been verified in our Centre of Arezzo where sixteen patients underwent treatment.



The reduction of oedema added to the physiological increase of temperature, seem to be the main source of strength and compaction surveyed after each treatment.

PAIN RELIEF

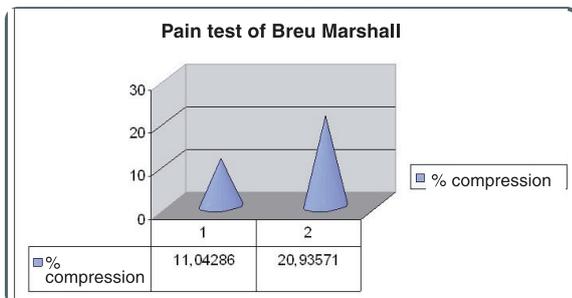
Cellulite appears in twenty-nine different forms related to the same number of pathologies, to find out more about this, see the article on the paper *“Cellulite: pathophysiology and treatment”* written by Mitchel Goldman, Per Antonio Bacci, Doris Hexel and Fabrizio Angelini, published by Taylor & Francis of New York, year 2006.

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We can basically distinguish two big categories of cellulite: the **HOT** one and the **COLD** one. Hot cellulite shows a rise of the fat tissue and is mainly linked to young girls or overweight women. Cold cellulite is constituted by a very slow blood microcirculation, lymphatic stagnation and toxic substances. This disease is typical of girls taking the contraceptive pill (Estrogen hormones), but also young sedentary patients, performing little vascular activity, showing swollen legs and, mostly, affected by old, thick cellulite. Indeed it shows rough adipose spots, toxic tissues and leg ache. The results of this study come to the conclusion that the compressed microvibration specifically acts on the pain source and, moreover, leads to a diminution of the inflammation and a pain relief, especially if managed by a doctor. The mechanic receptors will then gradually lose sensitiveness and overcome the Phlogosis, which means a goal for the treatment of cold cellulite and all the pains related to Lymphoedema and cellulite pathologies, as well as all the other pathologies concerning sport medicine.

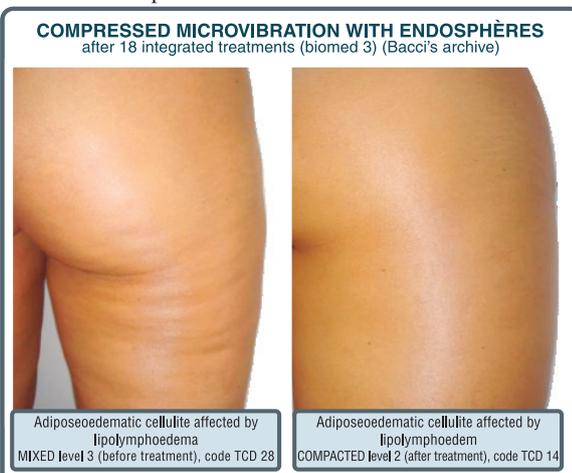
The efficacy in pain reduction was proved in June 2005 in a study made at the University of Medicine of Chieti as



new methodology (Pescara, Caramanico Terme, Ancona, Napoli, Roma with over 100 treated patients). These centres are in accordance with the studies realized in our centre, about the Pain- test of Breu Marshall, demonstrating how clearly visible is the pain decrease after treating cellulite and also the improvement of the metabolic activity as well as the expulsion of toxic substances.

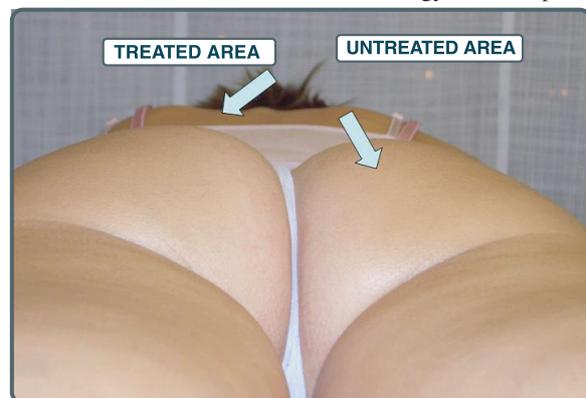
TONING UP AND TISSUE SHAPING

The increase of cellulite on the lower body, means that both the connective system and the subcutaneous tissues are older, but also that there's the presence of both Fibrosis and stagnation of the connective septums, which are the main cause of pif skin. There are some other cases where



the patient's body has been born with lymphatic problems and what happens is a subsidence of the whole tissue, completely changing the body shape and its harmony. Discreet results can be achieved since the first treatments, as the person will have a nice feeling of lightness and wellness, and puffiness will eventually disappear.

Endosphères operates according to the concept of "microvibration- compression - elastic traction", tending to work on muscles and toning in order to reach the microcompression of adipose areas and break them. This kind of activity permits the skin shaping thanks to the improvement of tissue compaction, metabolic regular work and decrease of toxic substances. In case of skin subsidence or lack of tone, it is interesting to focus on the increase of the tissue structure, which is the first symptom of toning up through compressed microvibration, obtained soon after the first treatment. This is the methodology used in sport



medicine as a preparation for athletes or to accomplish muscle rehabilitation. The first visible result in sedentary patients is the vascular activity and an improvement of muscular toning up, also called muscle reactivation.

The methodology also acts on very bad cases where there are tissue alterations (chest and hips) that can be cured in addition to other specific methods. The clinical observations made on the 200 patients showing different typologies of cellulite, demonstrate how Endosphères works better on such difficult cases as adipose - oedemetic cellulite, cold cellulite in sedentary people lacking muscular tone.

The results are visible much slower than the clinical results seen through the Coccide TCD, an instrument reporting the level of tissues's vascular activity, pif skin and other pains.



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OLD FIBROUS CELLULITE



The doctor will afterwards add up his personal judgements together with the patient undergoing the treatment. You then obtain a general result matched to a specific reference

COMPRESSED MICROVIBRATION



number in order to evaluate the improvements achieved throughout the treatments.

It is important to make a report every six treatments, because tissues are ever changing and the doctor must know how to adapt the methodology on the next treatment.

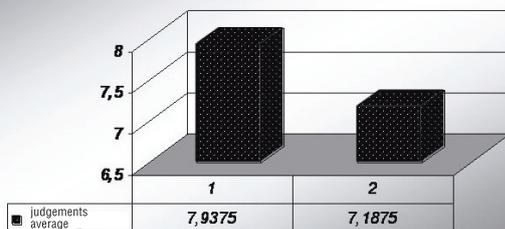
LIPOSCULPTURE AND COMPRESSED MICROVIBRATION



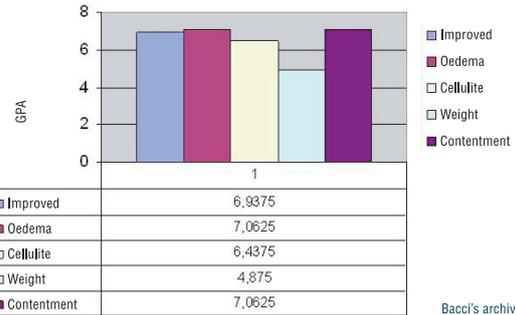
TCD code is the instrument which allows to see the gradual changes visible after twelve treatments (two sessions every week). Liposculpture or Laser are good means to obtain a

COMPRESSED MICROVIBRATION

Tolerance (1) and efficacy (2) - MEDICAL JUDGEMENTS



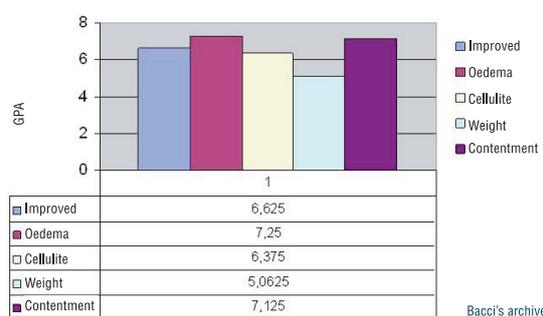
CLINICAL EVALUATING JUDGEMENT



good shaping as well as a good tissue compaction.

After visiting sixteen persons our Centre agrees with the twenty other observations made in twenty Italian medical centres, where it has been noticed a discreet toleration to the compressed microvibration methodology. But there is a fulfilling clinical feed back other than aesthetic, in treating both oedema and cellulite. Neither collateral effects nor complications such as vessel damaging, haematoma, bruise, infections, subsidence, appeared to turn up after treatments. Although in treating cellulite it is very important the judgement of people who have undergone it. Self evaluation notes describe a reduction of puffiness, improvement of cellulite, reduction of weight and pain relief.

PATIENT SELF EVALUATING JUDGEMENT



The preliminary data obtained in three years from over 300 patients affected by Flebitis, orthopaedic pathologies and some other aesthetic pathologies, demonstrate the good influence of the **compressed microvibration** operated by **Endosphères**.

It is obvious that in the future research and analysis will broaden to other pathologies, but we can ascertain that this new method certainly represents the turning point in the treatment of cellulite and Lipolymphoedema and will be the reference source for every other kind of therapy and methodologies. There is no magic machine curing anything, especially when it's about cellulite, which is a real disease generated by different factors and tissue alterations, requiring specific medical therapies.

The first step to move in order to fight cellulite, certainly is a precise diagnosis of your doctor, aesthetic surgeon or dermatologist combined with a good physical activity done with an official and improved methodology.

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