

## The TriActive<sup>™</sup> System: a Simple and Efficacious Way of Combating Cellulite

Zerbinati Nicola, \*Vergani Raffaella, \*Beltrami Barbara

Università degli Studi dell'Insubria, Varese - Italy \*Centro Medico Polispecialistico, Travacò Siccomario, Pavia - Italy

### Introduction

Cellulite is an anti-aesthetic condition that affects almost all women, regardless of age. Moreover, with the passing of time this condition gets worse and gives rise not only to physical problems, but also to psychological ones as well.

Cellulite mainly affects hips, thighs, and the inner part of the knee, shoulders and arms. Less frequently the breast area and stomach are affected.

While several factors contribute to cellulite, three agents determine its development: heredity, estrogen and fat. Cellulite is fat trapped by a network of connective tissue fibers. Fat deposits will accumulate within the structure of this tissue network, which causes a dimpling effect. As connective tissue weakens with age, the dimpling becomes even more pronounced.

These factors cause the fat cells in the subcutaneous layer to increase as much as 300 times their original size and stick together within the connective tissue fibers. In women, the fibers extend from the muscle up through the fat and connect to the undersurface of the skin and run perpendicularly at a 90-degree angle, which allows bulging and puckering. In men, these fibers run at a 45-degree angle, so the fat is less likely to accumulate in pockets.

The resulting clinical aspect is that of a "padded cushion" with "orange peel" type skin. When the Cellulite is extensive, the bodyline becomes deformed. The skin surfaces change and take on an undulating, pebbled or quilted aspect. On palpation, the hypertrophic lobes feel like subcutaneous nodes. The skin over the area affected may be colder or paler due to the compression on the dermic circulation exerted by the hypertrophic lobes. Cellulite is not eliminated by weight loss, exercise, creams, or surgical liposuction.

There are various treatments that can be used for combating Cellulite, including topical treatments with the application of creams and lotions, non-invasive physical treatments like ultrasound therapy, physically invasive treatments like electro-lipolysis, ionophoresis or ozone-therapy, invasive pharmacological treatments like mesotherapy, and surgical treatments like liposuction or lipo-sculpturing<sup>2</sup>.

In addition, there is the TriActive system, a revolutionary instrument capable of guaranteeing positive results at low costs, with a limited number of sessions, and in the absence of side effects.

### Materials and Methods

The TriActive system is a revolutionary instrument for the treatment of Cellulite, capable of restoring the normal homeostatic conditions to the skin thanks to 3 factors;

- a localized cooling system capable of reducing the oedema;
- a massage with rhythmic aspiration and a tension that works in various directions in order to reactivate the collagenic and elastic toning, and stimulate the lymph-drainage;
- a deep stimulation laser that benefits the arterial, venous and lymphatic microcirculation.

These progressive massaging and stimulation actions on the connective and adipose tissues allow for physiologically re-activating the biological waste elimination mechanisms and oxygenating the tissues, reproducing a harmonic realignment of the connective fabric.

These three combined effects allow for attenuating the anti-aesthetic aspects of the skin and obtaining a tonic, elastic and firm skin with a harmonious remodelling of the body contours. Moreover, they produce a reduction in the Cellulite, associated with a reduction in fluid retention, and are capable of toning, smoothing, firming and modelling the areas treated.

Ten patients affected by localised Cellulite of the buttocks and thighs were subjected to 10- treatment session in the aim of assessing the efficacy of the TriActive system in an objective manner. The sessions each lasted 20 minutes and were all conducted with a frequency of 3 treatments a week.

Apart from the clinical assessment of the extent of the Cellulite, the circumference of the districts was also measured and the plicometry, skin elasticity and thermography assessed.

The measuring of the district circumferences is useful seeing that it gives an indication of the extent of the adipose panniculus in the area under examination, which has to be treated. Via the plicometry we were able to assess the extent of the cutaneous plicas, from which it is possible to obtain the percentage of body adipose tissue.

The skin elasticity allowed us instead to gauge the skin tone correlated to the functionality of the elastic fibers and collagen.

The thermography is very useful in assessing the extent of Cellulite and monitoring the treatment seeing that this method is capable of detecting disorders of the microcirculation. The thermographic picture, which is typical of Cellulite, is known as "moucheté" or "leopard skin".

### Results

The treatment was well tolerated by all the patients. At the end of the 10 sessions we observed a clinically evident reduction in the Cellulite on the hips and thighs, associated with a reduction in the district circumferences and the plicometry and an increase in skin elasticity.

Important results were observed in relation to the thermographic picture that showed a homogeneous aspect which replaced the "leopard skin". This result is particularly important as it highlights the action of the TriActive system on the microcirculation.

Hand in hand with these objective results it must also be noted that all the patients were very satisfied as the TriActive-system allows for reducing the fluid retention and sensation of heaviness and swelling of the lower limbs, accompanied by a subjective feeling of well-being. In fact these are the benefits that the patients noted after only 2-3 sessions. Subsequently, the results that can be proved clinically were observed and the patients noticed an increase in skin tone and a reduction in the circumference of the areas treated that involved a remodelling of the body profile.

### Discussion

The problem of Cellulite affects almost all females and they are always in search of new, non-invasive treatments capable of overcoming this anti-aesthetic phenomenon.

There are certainly various treatments available that are more or less non-invasive and more or less efficacious. However, the TriActive system represents an innovation as it combines 3 actions in the one instrument that work in synergy in the aim not only of combating

Cellulite in an efficacious manner, but also of improving the altered conditions of the microcirculation that are at the root of this problem. These important results, testified to by the normalisation of the thermographic picture, are due to the combination of the three actions

of the TriActive system. In fact there is a reduction in the cellulitic oedema, which, thanks to being combined with the massaging action, gives rise to the remodelling of the collagen fiber. In this way the nutritional exchanges between the capillaries and the capsule of fibrous tissue that surrounds the adipose lobules no longer obstructs the adipose cells.

The TriActive system is therefore not only efficacious, but also safe seeing that no contraindications or side effects have ever been observed. Moreover, in consideration of today's frenetic lifestyle, the sessions do not last long (20-30 minutes) and the beneficial effects can already be observed after the first sessions.

The results obtained are extremely encouraging and we can safely claim that the TriActive system is efficacious, sure and without doubt a revolutionary instrument in the treatment of Cellulite.

### Bibliography

1. Curri, S.B. Inquadramento nosografico e classificazione delle pannicolopatie da stasi. *Flebologia*, 1, 1990, 15- 29.
2. Proserpio G. Prodotti coadiuvanti per il trattamento di cellulite, smagliature, rilassamenti. In: Proserpio G. *Le basi della cosmetologia*. SEPEM publisher 1992, 309-313.