AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

UPDATE ON CELLULITE TREATMENT

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Since the landmark publication of Nürnberger & Müller, in 1978, many researches have been conducted, aiming to explain cellulite pathophysiology and to assess the safety and efficacy of numerous treatment approaches.
An important number of publications shows the efficacy of topical treatments in cellulite but they have limited therapeutic effects in cellulite.
Recent studies showed that the anatomy and biomechanics are main factors in cellulite and that they are more efficiently treated by surgical procedures. It was well demonstrated that the subcutaneous septa play a determinant role in the occurrence of the depressed lesions of cellulite. Raised areas may also occur, and are most likely linked to the presence of localized fat in these areas. Recent research showed that cellulite can be understood as an imbalance between containment and extrusion forces at the subdermal junction. Moreover, data suggest that aged women have greater risk of developing or worsening cellulite due to skin laxity, as well as women who have lost large amounts of weight.
Treatment modalities for cellulite vary from noninvasive, such as weight loss, massage and topical creams to invasive procedures, such as laser assisted lipolysis, liposuction, and Subcision®. New drug delivery systems are being searched and may enhance the penetration of actives through the skin. The development of many technologies, such as lasers, lights and other energy-based devices have broadened the range of treatments.
Subcision® is a simple surgical technique that improves skin depressions with few complications by severing the subcutaneous septa of superficial musculo-aponeurotic system. It was first described for the treatment of cellulite 20 years ago by Hexsel and Mazzuco. More recently, magnetic resonance images of two patients showed the effects of Subcision® in the fibrous septa 7 months after treatment. The data presented support that the clinical improvement in cellulite depressed lesions occurs due to the sectioning of the septa, and that results are long-lasting. A new device that performs Subcison® has been shown to reduce the appearance of cellulite safely and effectively. The device provides standard treatment depths and fibrous septa release using a unique vacuum-assisted design.
Chemical Subcision® may be available in the next few years, as the collagen-rich septae associated to cellulite can be disrupt chemically. Recent research has showed efficacy superior than placebo but further evaluation of collagenase clostridium histolyticum for cellulite should be performed.
Skin laxity should be also targeted in the treatment of cellulite. Collagen stimulators are being investigated and they can be used in combination with different technologies.

Although researches in the field yielded efficacious treatment modalities for cellulite, as a multifactorial condition, no definite single treatment seems to entirely solve this condition.