

ENCURVE CREATE GREAT CURVES AND TIGHTEN THE BODY

Lutronic unveils enCurve™, its non-contact and selective radiofrequency technology for the treatment of adipocytes



Dr Eric SARFATI, Centre Laser Victoire Toulon, France

BODY SCULPTING HAS become a very popular and patient-driven procedure worldwide, but conventional methods based on liposuction, including minimally invasive interstitial laser-assisted lipolysis, are associated with unwanted side effects and inconvenience for patients.

Other noninvasive methods have been explored, such as cryolipolysis, contact and massage type radiofrequency (RF) and various iterations of ultrasound. Cryolipolysis delivers good and well accepted but variable effects, with the potential, however, of tissue damage through frostbite and negative effects on blood circulation and the need to be assisted by a skin tightening procedure. Contact-type RF puts a burden on practitioners to manually apply the system and cannot deliver enough heat deep into the adipose tissue. Ultrasound, such as focused ultrasound, can also achieve good results, but is clinician-intensive to apply and can leave an uneven skin surface with indurations. Sometimes sedation is needed because of pain during procedure. More recently a different type of RF has been developed to deliver a rapidly oscillating and powerful electromagnetic field in a non-contact manner, known as field RF, at a much higher frequency

compared with conventional contact RF, namely 27.12 MHz compared with 1-7 MHz.

Lutronic's enCurve™ is the easy and comfortable way to reduce adipocytes through apoptosis-inducing RF delivered in a non-contact manner. Working through controlled delivery of RF energy deep into the adipocytes, enCurve generates a powerful but safe field of electromagnetic energy at the specialized frequency, which selectively targets and heats a large volume of adipocytes to the optimal temperature. Heating the target fat and maintaining the temperature above the apoptotic threshold causes adipocyte denaturation through programmed gentle cell

death, known as apoptosis, leading to volume reduction of unwanted fat in a variety of body areas. The heating occurs selectively in the adipocytes, while maintaining temperatures in the overlying skin and adjacent muscle, vasculature and other tissues safely below the apoptotic threshold.

Dr Eric Sarfati, an aesthetic surgeon practising in France, has added enCurve to his practice. 'In recent years, certain phenomena are trending in the aesthetic medicine sector. The current trends are well-being and self-care of both face and body with non-invasive techniques' he said. 'enCurve is the perfect answer to these new tendencies,' he added.

'enCurve is a non-painful field RF treatment, with results that can be optimized through several sessions,' stated Dr Sarfati. 'We have now perfectly harnessed RF technology. We can precisely target the areas to treat in order to satisfy the different needs of our patients: skin tightening, as well as skin elasticity and texture, can be addressed,' he continued. Dr Sarfati was impressed that patients can completely relax during an enCurve session, and both patient and clinic benefit from high satisfaction. 'I notice that, thanks to the fact that the applicator can cover larger areas, such as the abdomen and flanks.



enCurve provides great all-round skin tightening' Sarfati said (Figure 1). 'This device is not in competition with cryolipolysis technology,' he pointed out. 'It really works as a complementary treatment since its first purpose is to smooth out superficial fat folds. Try it and you won't be able to do without it in your practice,' Dr Sarfati concluded.

enCurve utilizes Personalized Impedance Synchronization Application Technology (PISA) to more safely deliver heat deep into the subcutaneous layer. enCurve automatically synchronizes treatment energy with real-time changes in each patient's impedance during the entire treatment session in order to minimize energy loss and achieve a better clinical outcome. PISA technology overcomes the shortcomings of traditional RF devices. The appropriate enCurve applicator is placed over or around the area to be treated and the parameters are selected from the easy-to-operate GUI. The device measures the impedance of the tissue and begins to tune the energy output to the adipose tissue. It constantly adjusts the energy levels in order to ensure and maintain homogeneous heating of the target adipocytes to accommodate slight movements of the patient, respiration-related changes, and so on. Patients relax while enCurve works to reveal their curves, while clinicians can recognize the benefits of the hands-free system to their profitability.

This non-contact body contouring device features two applicators and supports a variety of treatment options including the abdomen and flanks, thighs, arms and other large areas, in the one session. enCurve



Figure 1 (A) Before and (B) after treatment with enCurve. Courtesy of Eric Sarfati, MD, France

has been proven for waist circumference reduction in patients who want to have better body curves. The enCurve Ab applicator with its adjustable 'wings' enables simultaneous treatment of the abdomen and flanks in one session with the ability to adjust the contour to best match the contour of the tissue being treated. The Multi applicator with its flexible adjustability can treat a variety of body areas including the arms and thighs.

enCurve, delivering up to a powerful 300W, provides the ideal power for optimal treatment outcomes with shorter operating times. A recent

in vivo histological and morphological animal study on enCurve in the minipig model compared 300W over 20 minutes and 200W over 30 minutes (delivering the same 360,000J energy, thus potentially allowing shorter treatment times as a convenience to both patients and clinics. Based on the results of a number of tissue, cellular, and metabolic assessments, the study showed that apoptosis-inducing enCurve RF treatment with the shorter time and higher power was as effective as the longer time and lower power treatment, or even slightly more effective, but with equal safety. 

