Technological Advancements Transform Non-Invasive Body Contouring Market

Before Tx

11 months after six VASER Shape treatments
Photos courtesy of Tohl Humes, M.D.

Abdomen before Tx

Abdomen after five sessions of TriActive+ treatments
Photos courtesy of Nikola Milojevic, M.B.B.S., M.B.A.C.D.

promising system delivers pulsed, non-thermal focused ultrasound energy that selectively breaks down adipocytes without affecting surrounding structures. Also, it comes with a unique optical tracking and guidance system that facilitates uniform treatment of the body.

Focusing on cellulite reduction, Med^2 Contour, from General Project (Florence, Italy), is an innovative cavitational system for the treatment of localized fat and cellulite, utilizing dual low-frequency ultrasound waves and vacuum technology that lifts the adipose tissue and concentrates ultrasound energy only in the affected tissue. In addition, the unit scans all frequencies from 20 to 60 kHz in one ultrasonic wave emission, allowing the physician to deliver energy at all possible depths beneath the skin's surface.

The TriActive+™ System from DEKA (Calenzano, Italy), employs ultrasound and diode laser energies in conjunction with localized contact cooling and rhythmic suction to promote fat deposit tissue mobilization and improve microcirculation. Nikola Milojevic, M.B.B.S., M.B.A.C.D., clinical director of the Milo Clinic in London, U.K., explained, "Being a non-surgical aesthetician, the TriActive machine was a must in our newly opened clinic. With three different technologies available in one device, we are not disappointed."

Laser-based devices are also popular for non-invasive body shaping and skin tightening. A premier example of this trend is Cellulaze™ from Cynosure, Inc. (Westford, Massachusetts, U.S.), which has been clinically proven for long lasting treatment of cellulite. The device's 1440 nm Nd:YAG laser uses SideLight 3D, a side-firing laser fiber with thermistor technology incorporated into the cannula. The heat energy is delivered bi-directionally under the skin to thermally promote skin thickening and tightening; heat and disrupt herniated pockets of fat; and release fibrous bands that dimple skin. The treatment also helps to stimulate collagen, resulting in smoother skin.

The AccuSculpt™ Laser Lipolysis System, from Lutronic, Inc. (Fremont, California, U.S.), uses a pulsed Nd:YAG laser operating at a 1444 nm wavelength for laser-assisted lipolysis and deep tissue heating. During skin tightening and body shaping procedures, the system's short pulse duration enables an effective peak power while reducing unnecessary heating of adjacent tissue. Patients experience minimal discomfort, in addition to less bruising and downtime when compared to traditional cold liposuction techniques.

The Zerona® device, from Primcogent Solutions (Dallas, Texas, U.S.), uses a 635 nm laser wavelength to emulsify adipose tissue, which is then released into the interstitial space. This excess fat is passed through the body during its normal course of detoxification.

i-Lipo from Chromogenex Technologies, Ltd. (South Wales, U.K.), uses a low-level diode laser (658 nm) to achieve circumferential reduction and temporary reduction of cellulite after only a single session. The overall effect of treatment is similar to body processes that occur naturally.