

Multi-Source RF Signifies New Era in Anti-Wrinkle and Skin Tightening Technology

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Before Tx



After EndyMed Pro Tx

EndyMed PRO™, from EndyMed Medical Ltd. (Caesarea, Israel) and distributed in the U.S. by EclipseMed Ltd. (Dallas, Texas), uses a new form of radiofrequency (RF) to reduce wrinkles and avoid the disadvantages of older RF technologies. This new treatment drives vertical energy to reach 9 mm into the target tissue, thus reducing the amount of energy flowing through the skin's surface and alleviating the need for cooling. EndyMed was recently FDA cleared to market EndyMed PRO as a non-invasive treatment for facial wrinkles and rhytides in the U.S.

“Existing RF technologies have shown promising results but have some significant limitations,” noted Yoram Harth, M.D., F.A.A.D, a board certified dermatologist from Herzliya, Israel who helped develop EndyMed PRO. “Monopolar (or unipolar) devices may be associated with uncontrolled energy flow and pain while current single source bi-polar technologies provide insufficient penetration. The EndyMed PRO addresses these issues by achieving a controlled and contained deeper distribution of heat without causing discomfort.”

Unlike lasers, which induce heat by selectively targeting chromophores, non-ablative RF generates heat as a result of tissue resistance to the movement of molecules within its field. Temperature is thought to reach 55° C to 65° C in the deeper tissue, which is a critical level to shrink collagen and induce subsequent collagen remodeling. The result is more and better collagen fibers.

With monopolar RF, energy from an electrode disperses through the tissue toward the treatment table or a receiving pad on the back of the patient. High energy is needed to heat tissue at the desired target depth, while potent epidermal cooling is needed to prevent epidermal damage. In the bi-polar configuration, energy flows between two electrodes, increasing the target area but only providing superficial penetration.

Cooling is also needed to prevent overheating in the contact areas.

EndyMed 3DEEP™ technology uses an array of multiple RF sources in which the phase of current flowing from each source is independently controlled. The multiple electrical fields that form in the tissue repel and attract each other, directing the energy to a deeper layer of the skin in an optimal three-dimensional pattern. Since the energy is contained in the target area, considerably less energy is needed. To control energy delivered into the tissue, the system also performs real time measurements of skin impedance and automatically corrects output to maintain requested power and increase predictability of treatment results.

“This new form of RF will allow us to deliver superior treatments painlessly, more safely and more efficaciously,” said Jeffrey C. Caruth, M.D., a cosmetic surgeon in Plano, Texas.

EndyMed PRO, which requires no consumables, is a phase-controlled multi-source RF device FDA approved for the treatment of mild-to-moderate facial wrinkles. The timing of its approval is ideal, according to Dr. Caruth, because many of his patients have been waiting for non-invasive, pain free treatments.

“This system has been shown to deliver remarkable results in wrinkle reduction, cellulite improvement, skin tightening and body contouring in multi-center clinical studies,” reported Dr. Harth.

Both Dr. Harth and Dr. Caruth agree that this new technology also offers practical advantages. “From a business perspective, practitioners will be happy with the ability to provide high-end results without the need for high-cost consumables,” noted Dr. Harth. “In addition, a plethora of built-in, unique and sophisticated temperature motion and impedance safety sensors will allow your staff to perform these non-ablative treatments.”