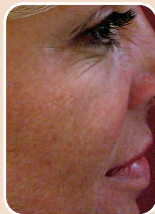


# Matrix IR Employs Syneron's Proprietary elōs Technology

By Bob Kronemyer, Associate Editor



Before Tx



After one Matrix IR Tx

Photos courtesy of Vince Afsahi, M.D.

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Before Tx



After one Matrix IR Tx

Photos courtesy of John Shieh, M.D.

Syneron Ltd.'s (Yokneam, Israel) Matrix IR is a fractional technology that combines a 915 nm diode laser and bi-polar radiofrequency (RF) for highly efficacious skin tightening and treatment of wrinkles with no downtime. The Matrix IR applicator is upgradable to both the eMax or elaser platforms.

As an elōs fractional device, using Syneron's proprietary technology, the Matrix IR heats the tissue in matrix thermal bands, sparing the adjacent tissue and providing effective, targeted deep dermal heating.

"The Matrix IR is very easy to operate, with minimal discomfort, and results are noticeable after only two treatment sessions," said Moshe Lapidoth, M.D., head of the laser unit at Rabin Medical Center in Tel Aviv, Israel. "Although the system was designed mainly for wrinkles and skin tightening, I have also had great success in treating some superficial blood vessels on the face and lower legs."



**Moshe Lapidoth, M.D.**  
Head of Laser Unit  
Rabin Medical Center  
Tel Aviv, Israel

For skin rejuvenation, patients schedule three to five treatment sessions with up to one month intervals. "Most patients achieve a 40% to 70% improvement in wrinkles," Dr. Lapidoth said. For superficial blood vessels, patients require only one to two sessions, spaced two months apart. "By choosing the right vessel, you can achieve 100% clearance."

According to Dr. Lapidoth, 915 nm "is an excellent wavelength, and the Matrix IR is the only 915 nm device I know of that is being used for fractional treatment. This wavelength reaches both the dermis and the vascular regions. Compared to some other wavelengths, there is less absorption in water and deeper penetration."

Matrix IR's elōs fractional technology also provides "relatively higher energy fluence in each microspot," Dr. Lapidoth

said. "The safety profile is very high. Patients love treatment."

Bulk heating is provided by the conducted bi-polar RF of the Matrix IR, whereas intersecting diode energy and bi-polar RF cause strong thermal bands in the deep dermis, with minimal risk of side effects to the epidermis. In addition, the heat conducted to the collagen fibers produces collagen contraction and remodeling. Overall heating also stimulates new collagen synthesis.

According to Vince Afsahi, M.D., a dermatologist in private practice in Orange County, California, U.S., "The Matrix IR allows us to treat facial wrinkles in all skin types with very little downtime." The concept behind fractional technology "allows us to deliver a higher energy with very little discomfort. The tip of the laser is also chilled to approximately 5° C for limited patient discomfort. About 15% to 20% of our patients desire topical anesthesia. But more often than not, patients do very well without it."

With the Matrix IR, Dr. Afsahi primarily treats crow's feet, nasolabial folds, marionette lines (on the lower lip) and horizontal creases on the neck. Patients schedule, on average, three sessions about two weeks apart. "For any given area, treatment takes about 15 minutes," Dr. Afsahi noted.



**Vince Afsahi, M.D.**  
Clinical Instructor in  
Dermatology  
University of Southern California  
Los Angeles, CA, USA

"Clinically, we have seen a tightening and softening of wrinkles and creases," said Dr. Afsahi, a clinical instructor in dermatology at the University of Southern California in Los Angeles, California, U.S. "The diode laser and bi-polar RF work synergistically to deliver energy where it needs to be – about 2.5 mm underneath the skin – to promote collagen contraction, reorganization and stimulation. Patients can expect both short-term results with immediate tightening of the skin, and long-term results with reorganization and stimulating collagen."