

MILL VALLEY HERALD

HEALTH & FITNESS

Quest for Perfect Vision

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A faculty member of the Jules Stein Eye Institute at UCLA and the Director of The Pacific Vision Institute in San Francisco, Dr. Faktorovich is one of the few surgeons in the United States to specialize exclusively in laser and refractive vision correction surgeries. Most of us need glasses or contact lenses to see clearly. Some of us are nearsighted, or myopic, which means we can see clearly up close; some are farsighted, or hyperopic, and can best see far away; and some have astigmatism, which means we see double or multiple images. Because so many of us find glasses or contacts such a nuisance, scientists and surgeons have spent the better part of this century searching for ways to provide perfect vision without glasses or contacts. The first vision correction procedure was performed by Dr. Sato in Japan during the 1950's. His work was the precursor to what later became known as Radial Keratectomy (RK), an arcane procedure that involved incisions in the cornea. In the 1970's, the procedure was rediscovered by accident in Russia. Dr. Feyodorov found that nearsightedness could be surgically corrected when he treated a boy whose glasses had shattered during an accident and had scratched his cornea. After the glass was removed, the boy no longer needed glasses to see. During the 1970's RK became immensely popular in many countries. In Russia and India, for example, clear vision without glasses or contacts practically became a necessity, and everyone who wore glasses clamored to have the procedure. It was a lot like braces and the perfect teeth we value so highly here in California.

RK was imported to the United States by Leo Bores in the late 1970's when the quest for perfection in vision correction surgery was joined by U.S. scientists. By far, the greatest advances came with the application of excimer laser technology. Originally developed for the production of IBM computer microchips, the excimer laser can etch any shape you want into virtually any material. In the early 1980's Dr. Trokel at Columbia University pioneered procedures with the excimer laser to reshape the cornea with precision accuracy. The re-

sults were remarkable. During the 1980's and 1990's, the excimer laser technology has evolved through rigorous FDA trials in the U.S., and in 1995 the technology was approved. Over the last six years, I have participated in the explosive development of this field. While completing my residency at UCSF, I performed RK and then ALK (Automated lamellar Keratoplasty) - the precursor to LASIK - on patients here in the Bay Area. In 1996, while at the UCLA Jules Stein Eye Institute, we performed PRK (Photo refractive Keratectomy) on thousands of patients. Today, LASIK is the most common vision correction procedure in the world. In my own practice, I perform LASIK on more than 90% of my patients because it is the optimal procedure in comfort, precision and rapid recovery. And the results are outstanding. The excimer laser reshapes inner layers of the cornea with precision accuracy in increments of less than .25 microns (one-tenth the thickness of human hair). LASIK can correct mild, moderate, and high levels of nearsightedness, as well as farsightedness, and astigmatism.

Another remarkable innovation is the new Intacs, which were just approved this spring. Intacs are clear, ultra-thin polymer crescents that reshape the cornea, allowing patients with mild and moderate amounts of nearsightedness to see clearly. Unlike other vision correction procedures, the Intacs are a non-laser procedure that can be removed, thereby reversing the treatment. This may become desirable as the patient's vision changes with age or in the event the patient wants to use different alternatives in the future. With all these procedures, we can now treat 95% of the world's vision problems exceptionally well. Challenges that remain are the treatment of extreme cases of nearsightedness and farsightedness. As the Chief Clinical Consultant of IntraOcular Research here in the Bay Area, I am leading the development of ultra-thin contact lens implants, which we expect will be ready in about five years.

Then of course, there is presbyopia, the reason we all need reading glasses, around the age of 40. We are currently working on procedures that can help with this condition, too. In the meantime, we can compensate for presbyopia with monovision, which gives one eye better distance vision and the other eye better vision up-close.

If you have questions, please fax Dr. Faktorovich c/o the Marin Scope at 332-5057.