

VOLUME 42, NUMBER 10

SAN FRANCISCO, OCTOBER 2010

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www.sfpoa.org

# Advances in LASIK and Other Vision Correction Procedures: <u>Speed, Precision, Safety</u>

## LASIK with new ultra-fast lasers: the need for speed

San Francisco police officers considering vision correction can now have access to the safest and the fastest laser technology. All-laser LASIK brought extreme safety to laser vision correction. The combination of lasers in alllaser LASIK is the femtosecond Intra-Lase laser used to lift the top layer of the cornea and the wavefront laser used to change the shape of the inner cornea to achieve good vision without glasses and contacts. Recently, both lasers have gotten faster. This means that the procedure now takes seconds. "The extreme speed of the procedure is reassuring for patients." said Dr. Ella Faktorovich, Director of Refractive Surgery at Pacific Vision Institute, San Francisco and the author of "Femtodynamics", the first book on femtosecond laser application to eye surgery. "Patients feel at ease when they can be in and out of the laser suite very quickly, their vision corrected, and ready to go." Ultra-fast laser time also means that the eye surface doesn't get dry during treatment. This translates into more comfort for the patients and importantly extreme

precision in correction vision even in the most severe cases. Nearsightedness (myopia) is the most common vision disorder corrected. Astigmatism is also common and can be corrected with safety and precision using the ultra-fast lasers. Some patients have farsightedness (hyperopia) which can also be corrected very well, including in patients who are in the military and safety professions. These days, anyone wearing glasses and contacts should consider a consultation with a specialist. Many prescriptions can be corrected quickly with outstanding results.

Ultra-fast lasers demand ultra-fast eye trackers that track even the tiniest movements of the eyes. Did you know that when you look at the target your eyes are never completely still? They make tiny movements all the time. That's why the new ultra-fast lasers have extremely accurate infra-red eye trackers that track eye movements to make sure that laser pulses are delivered at the precise location. Precise laser pulse placement guided by the ultra-fast tracker results in clear and precise vision. With the new ultra-fast trackers, patients can be reassured that the laser beam will simply follow the eye if it moves.

#### Software tracks 20/20 results and allows patients to compare surgeons

LASIK has been performed for many years. Millions of people have had it done. If someone is interested in having their vision corrected, what is the best way for them to determine where to have it done? The answer is simple. It is recommended that patients choose to have their vision corrected where they can expect to get the best results. They should choose to go where they have the highest likelihood of getting not only 20/20 but better than 20/20 vision without glasses or contacts. How can a patient know where they will get the best results? The advanced web-based software -SurgiVision - allows surgeons to input their results on all patients and to track the outcomes. The software then provides a third-party verified comparison between the surgeon's results and the average from other surgeons, both nationally and internationally, performing similar surgery. "Currently, SurgiVision data is the only way to compare results from different surgeons," said



SurgiVision surgeon results comparison data

Dr. Faktorovich "At Pacific Vision Institute, for example, nearly 100% of patients achieve 20/20 or better vision after LASIK, regardless of their prescription, whereas the global surgeon average is 81%. Two thirds of PVI patients achieve better than 20/20 vision, whereas globally only one third of patients achieve this." Excellent vision results are a combination of 3 T's - team, technology and techniques. Top practices track their outcomes.

#### New technology speeds up vision recovery after PRK

Patients who are not candidates for LASIK may be recommended PRK. With LASIK the top layer of the cornea is lifted and the inner layers of the cornea are reshaped. With PRK, the reshaping laser is applied directly to the surface of the cornea. Patients whose corneas are too thin or too bumpy for LASIK may be recommended PRK. Patients with corneal scars may also be recommended PRK. If the scar is only in one eye, as it was in the SFPD officer whose vision was recently corrected, this eye can be corrected with PRK, while the other eye can be corrected with LASIK. Traditional PRK may require longer healing time, compared to

LASIK. New technology however, may make the healing time with PRK as fast as LASIK. The technology is available only through participation in a study currently being conducted at Pacific Vision Institute in San Francisco.

### US Military approves implantable contact lens ICL for active duty personnel

Most patients who wear glasses and contact lenses wonder about permanent vision correction options at one time or another. The urgency is especially great for individuals in the military, police, and other fields where loss of a contact lens can mean the difference between safety and danger, life and death.

The US Military has been at the forefront of advances in vision correction surgery. Laser vision correction, including LASIK with IntraLase and PRK is now routinely performed on military personnel, including fighter pilots. For some patients, however, laser vision correction is not the best way to achieve great vision. ICL implantable contact lenses have been FDA approved for years and have been done in the general population with excellent results. The military has now embraced this treatment option as well. Over 3,000 ICL phakic IOL implant-

able contact lens procedures have been performed on active duty military personnel to date.

ICL may be recommended over LASIK/PRK when the prescription is too high for LASIK/PRK or when the cornea is too thin, too uneven, or too flat. ICL will result in better vision in such patients with excellent acuity both day and night. Since this procedure doesn't result in dryness it may be better for patients with certain medical conditions or taking certain medications that predispose them to dry eyes.

In the US Military, vision results with ICL have been outstanding. 20/20 or better vision was achieved in 98% of patients. These results are remarkable considering that many procedures are done for patients with high myopia/ nearsightedness. Better than 20/20 vision was achieved in 81% of patients, 100% of US Soldiers rated ICL as providing better vision than their glasses and contact lenses, and 100% reported that ICL allows them to function and perform better both day and night. For many patients, ICL phakic IOL should be the number one choice.

For more information please contact Pacific Vision Institute at (415) 922-9500 or info@pacificvision.org