

NEWSLETTER - SUMMER 2004

Drs. Fine, Hoffman & Packer Again Lead the Way
By Dr. I. Howard Fine



Our optical shop is converted into a lecture hall for the didactic lecture portion of the course.

In the last weekend of August 2004, Drs. Fine, Hoffman and Packer provided at the Oregon Eye Surgery Center, a course on the newest technique in cataract surgery: bimanual micro-incision phacoemulsification. This is a technique that allows for the removal of a cataract through incisions as small as 1.2mm and is an extremely exciting and rapidly evolving technology. This is the second course that we have done, the first being a year ago, and both were attended by at least 30 physicians from all over the United States.

It is interesting to note that although these physicians were coming to learn of this technique, bimanual micro-incision phacoemulsification has been used by Drs. Fine, Hoffman and Packer almost exclusively for two years. In addition to refining and expanding the indications of the technique itself, we have been responsible for developing most of the instrumentation and optimizing the technology used for cataract surgery right here in our own Oregon Eye Surgery Center. We have been at the cutting edge of cataract and refractive surgery for almost 20 years and were investigators on most of the technology that is currently being used. These new innovations have created a miraculous procedure out of cataract surgery compared to what it was 20 years ago in the way of inconvenience and post-operative visual disability for weeks prior to the prescription of glasses.

We have been core clinical investigators on each of the improvements in intraocular lens (IOL) technology in America including the first small incision

lenses that reduced the size of the cataract incision and dramatically reduced surgically induced astigmatism. We have participated in all of the new material studies that have shown improved biocompatibility of IOL materials as well as in all of the design modifications that have led to better stability and improved or enhanced vision.



Dr. Fine instructs Dr. Allan Rutzen of the University of Maryland on bimanual micro-incision phacoemulsification.

We investigated the first multifocal and accommodative lenses as well as other categories of lenses including the new Tecnis IOL which corrects for spherical aberrations. We have also been core investigators and have participated in the development or improvement of all of the phacoemulsification equipment manufactured within the United States. Each of these individual changes were small at the time, but it is through these incremental improvements over a period of 20 years that cataract surgery has become a procedure that is minimally invasive, rapidly rehabilitative and enormously safe.

In addition, we have designed more than 30 instruments that are used world-wide for cataract surgery and/or intraocular lens implantation. We have also innovated over 20 surgical procedures or components of the cataract surgery that are, at this time, utilized by almost the majority of ophthalmologists world-wide. The Oregon Eye Surgery Center, the surgery center within our clinic, has more cataract surgery technology than any hospital or medical school in the world. Surgeons and other medical personnel come from all over the world to observe our surgical techniques, instrumentation and technology. It is hard to believe this is true when you consider the size and location of our fair city, but this is an actual fact.

Our emphasis on innovations and participating in new investigational studies has been an enormous advantage for our patients because they have access to enhanced technology and techniques as early as four or five years ahead of the rest of the country. We are pleased to continue this tradition by being the first site in the United States of America to offer an investigational laser, the MEL-80 laser manufactured by Carl Zeiss Meditec, which after our initial use appears to be superior to the currently used lasers.

Drs. Fine, Hoffman and Packer take great pride in providing new and improved techniques, technology and devices that have enriched the lives not only of our patients, but of the millions of patients around the world whose surgeons have come to Eugene, Oregon to learn about these techniques and to bring them home to their own patients.

A Rude Awakening **By Richard S. Hoffman, MD**



Richard S. Hoffman, M.D.

An abrasion of the corneal surface is a painful event. Under most circumstances, these abrasions of the corneal surface will heal within several days without any permanent loss of vision. In rare instances, patients can develop recurrent painful episodes in eyes that have had abrasions. These episodes tend to occur in the middle of the night or upon wakening in the morning and can last several hours or rarely several days. When this condition develops it is termed a recurrent corneal erosion.



Epithelial erosion
of the cornea

Recurrent corneal erosions result from poor adhesion of the cornea's outer most surface (corneal epithelium) to the underlying corneal tissue. The corneal epithelium is normally adherent to the underlying layer of the cornea by anchoring structures that are broken when an abrasion develops. These anchoring structures will reform within several months, however, if recurrent erosions develop, the epithelium is not able to form these anchoring structures. This occurs when the eyelid sticks to the epithelium during sleep followed by pulling of the epithelium off of the cornea with REM (rapid eye movement) or upon opening the eyes when wakening. Older patients with dry eyes are at greater risk for developing erosions but they can happen to anyone. There are also pathologic conditions of the cornea that can make individuals prone to erosions without ever having had an abrasion.

There are various treatments for this condition. The simplest and least invasive management involves the use of lubricating ointments throughout the day and especially at bedtime. Bland lubricating tear ointments or sodium chloride (salt) eye ointments work well for this purpose. If a patient can keep their eye lubricated every day and allow the epithelium to create those anchoring structures without getting pulled off, then the condition will usually be cured. When this fails, minor surgical techniques can be employed with great success.

Awards, Honors and Achievements By Sherrie Brunell, MS



Dr. Packer discussed IOL power calculations in Fukuoka, Japan.

Drs. Fine and Packer were delighted to continue their teaching efforts around the world. Dr. Packer spoke at the annual meeting of the Japanese Society of Cataract and Refractive Surgery on IOL power calculations. His talks were well received and he was treated as an honored guest. In addition to speaking in Bali, England, and Paris, Dr. Fine was particularly honored to be an invited speaker in a University of Oregon Anatomy and Physiology course. He discussed how the anatomy of the eye can be changed and reshaped to create better vision. The students were excited by his enthusiastic presentation if not somewhat queasy by some of the video footage demonstrating various eye surgery techniques.

Dr. Packer was recently invited to join the editorial board of EyeWorld Magazine. EyeWorld is the official magazine of the American Academy of Cataract and Refractive Surgery. As an already sitting member of the EyeWorld editorial board, and a regular columnist, Dr. Fine is delighted to welcome his partner on board. Dr. Packer also recently graduated from the Oregon Medical Association Leadership Development Program.

Dr. Hoffman continued spearheading several publication efforts this summer including multiple articles in ophthalmic journals such as the Journal of Cataract and Refractive Surgery and Ophthalmology Times on such topics as refractive lens exchange, pupil expander rings, and micro-incision intraocular lenses. In addition, Dr. Packer is currently in the process of compiling a textbook on refractive lens surgery that should be published in early 2005.

New Faces



Drs. Fine, Hoffman and Packer with
Drs. Christoph Thomas
and Francisco Porfirio.

If you were in our offices in August, you met Christoph Thomas, a medical student from Germany, who was here observing Drs. Fine, Hoffman and Packer as part of his medical training.

Brazilian ophthalmologist, Francisco Porfirio, MD, also observed Drs. Fine, Hoffman and Packer in August and September of this year.

Our observership program allows physicians like these to share the advanced techniques they learn here with their colleagues at home to benefit patients worldwide.

Sharing New Vision By Kristie Sampson



Kristie Sampson

I had LASIK in December 2003 and could not be happier with the results. I went in seeing 20/400 and I am now 20/15! As I told Dr. Packer, the surgery was worth 5 times the cost! My eyes are no longer drained and tired after working at a computer all day. I don't have to stress out about getting make-up in my contacts or losing them if I am skiing or scuba diving. It saves me lots of time getting ready in the morning. Inevitably, if I was ever late for an appointment, that would be the day that I would get a tear or dirt in my contacts!

I tell all my friends to have the surgery. It was so easy, your office was very professional yet friendly and it was quick! My only regret is that I didn't do it sooner.

By Shane Johnson



Shane Johnson

I started wearing glasses at age seven. After having the LASIK procedure, I wonder why I waited so long to have it done. I thought at first it was for vanity, but now I realize it also improves your quality of life. No more cleaning my glasses and no more pushing them up on my nose. I am able to wear good sunglasses. I can see my alarm clock. The list of improvements goes on and on. It has been a freeing experience for me.

Dr. Hoffman did an exemplary job explaining the procedure and with the follow up. The staff was very professional and made me feel quite comfortable with the process.

I would recommend the procedure to anyone.