



Pacific Vision Institute hosted the **16th Annual San Francisco Cornea, Cataract, and Refractive Surgery Symposium** at the Four Seasons Hotel in San Francisco on January 27th. Bay Area optometrists enjoyed a full day of lectures and workshops, earning 8 hours of FREE CE approved by California State Board of Optometry. Four prizes were raffled off at the end of the Symposium. The top prize winner received two tickets to a Warriors Game and the team swag.

Pearls for the Modern Optometric Practice: Highlights of the 16th Annual San Francisco Cornea, Cataract, and Refractive Surgery Symposium

OCT Basics

Terri Pickering, MD, Glaucoma Center of San Francisco, San Francisco, CA

1. Clinical decisions should never be driven by OCT results alone. Decisions should incorporate complete eye exam and VF assessment.
2. Three major patterns of OCT RNFL progression: (1) widening of an existing RNFL defect best seen on the RNFL 12-clock-hour pie chart; (2) deepening of an existing RNFL defect best seen on the clock hour or TSNIT graph; (3) development of a new RNFL defect seen on the clock hour, quadrant or TSNIT graphs, and RNFL thickness deviation map. Focal parameters are better at predicting and detecting progression than global parameters, i.e. overall RNFL or GCC thickness.
3. Top OCT artifacts are: decentration; PVD pulling on the retina, creating false increased RNFL thickness, then false decrease when PVD releases; poor signal strength; posterior RNFL is misidentified (if RNFL is 0, it's a mistake); anterior RNFL is misidentified (ERM, PVD); missing scan segments (vitreous floaters); peripapillary atrophy (myopia); incomplete segmentation; motion artifacts; scan edge is cut off.



Glaucoma Medications

Sunita Radhakrishnan, MD, Glaucoma Center of San Francisco, San Francisco, CA

1. Despite other treatments available (laser and surgery), medications remain the mainstay of glaucoma management.
2. First line therapy: Prostaglandins are the most common - lower IOP by 30%, once a day dosing, effective day and night, few systemic side effects. Use beta blockers if concerned with locals prostaglandin side effects (eye redness) - lower IOP by 20-25%, but not effective at night, systemic side effects. New options for first line therapy - latanoprostene bunod and netarsudil.
3. Second line therapy: Alpha agonists and CAIs - added to either prostaglandin or beta-blocker. Prostaglandins used as second line therapy are not as effective as monotherapy with the same drug.

Clinical News & Views



Managing Posterior Segment Complications of Anterior Segment Surgery

J. Michael Jumper, MD, West Coast Retina, San Francisco, CA

1. Careful preoperative assessment may help avoid operative complications. Screen for and control diabetic retinopathy. Screen for and control uveitis. Consider including OCT in preoperative assessment of select cases.
2. Retained lens material after cataract surgery has good prognosis with appropriate intraoperative and postoperative management, which includes IOP control, inflammation control, and referral to retinal surgeon for lens material removal.
3. Aminoglycosides injected in or around the eye for infection prophylaxis during cataract surgery may result in macular infarction and vision loss.

CONTOURA LASIK: What Is It and Who Can Benefit?

Ella G. Faktorovich, MD, Pacific Vision Institute, San Francisco, CA

1. CONTOURA LASIK is topography-guided laser vision correction that allows the most customization of any type of LASIK procedure. 22,000 data points mapped (vs. 200 with wavefront-guided LASIK) allow for a very accurate map. Ability to center on corneal apex (vs. pupillary center with wavefront-guided LASIK) results in precise centration of correction even in patients with very small angle kappa.
2. More than 1/3 of patients in FDA studies had better vision without glasses postop than their vision with glasses preop.
3. Overall, 11% of patients had less glare postop, 7% had less haloes, and 13% had better night time vision 6 months after LASIK than their vision with contact lenses preop.



Do Evolving Ophthalmic Technologies Improve Lives? A Look Backward and Forward

John Hovanesian, MD, Harvard Eye Associates, Laguna Hills, CA

1. Over the past 40 years, cataract and lens implant surgery evolution focused on safety (80's-90's), efficiency (90's-00's), and precision (2010 - today). The goal for the future is to make the process simpler for the patient, while maintaining safety, efficiency, and precision.
2. New drug delivery systems eliminate the need for eye drops, i.e. Dextenza (Ocular Therapeutix) is a steroid-containing punctal plug.
3. Surgeon should aim for the least amount of refractive error postop. Patients want clear, spectacle-independent vision after their cataract surgery.

The Role of Ocular Surface in Optimizing Surgical Outcomes

Neda Shamie, MD, Maloney-Shamie Vision Institute, Los Angeles, CA

1. Visual complaints are more likely than eye discomfort or FBS in older patients with dry eye disease, even in the presence of corneal staining.
2. When corneal staining or significant tear film evaporation is noted in patients considering cataract surgery, treatment must be initiated before their surgery. Treating the tear film and the corneal surface will improve the quality of scans used in IOL calculations.
3. Improvement may be noted as early as three weeks after initiating topical cyclosporine and steroids BID.



Symposium Highlights:

Social



Symposium Highlights:

Food



Symposium Highlights:

Lectures



Symposium Highlights:

Workshops



Clinical News & Views



Corneal Collagen Crosslinking for Unstable Keratoconus and Post-refractive Corneal Ectasia Michael Furlong, MD, Furlong Vision Correction, San Jose, CA

1. Postoperative care of patients after Collagen Crosslinking is similar to PRK, including bandage contact lens, topical antibiotic and steroid.
2. When refitting contact lenses postop, keep in mind that corneal curvature undergoes initial steepening followed by flattening. Contact lens refitting evaluation may be as early as 1 month postop. Cornea takes 12-24 months to stabilize.
3. Patients need to be educated that the procedure is not intended to eliminate or reduce dependence on glasses and/or contacts, but rather to reduce progression of their disease.

Neuro-Ophthalmological Emergencies Presenting in Optometry

Jacqueline Theis, OD, FAAO, Kaiser Permanente, San Rafael, CA

1. Although neuro-ophthalmological emergencies (giant cell arteritis, aneurism, Horner's, intracranial tumor, myasthenia gravis) are rare in primary care optometric practice, they can still present. The best way to prepare is to have a systematic process for examination and workflow.
2. Symptoms of neuro-ophthalmological emergencies may be - vision loss, diplopia, eye pain, and/or headache. Signs of neuro-ophthalmological emergencies may be - optic nerve swelling or pallor, cranial nerve abnormalities, anisocoria, ptosis. PEARL for Concern: If you have more than one of the following: Pupil abnormality, Eyelid abnormality, EOM abnormality.
3. Binocular diplopia is more likely a sign of neuro-ophthalmological emergency than monocular diplopia.



What Should I Do With the Cross-eyed Kids?

Kim Cooper, MD, Kim Cooper MD, Burlingame, CA

1. Kids of parents with strabismus and amblyopia have 25% chance of strabismus and amblyopia. Siblings of patients with strabismus and amblyopia have 25% chance of strabismus and amblyopia.
2. Determine if amblyopia is present in a child and treat it aggressively. Vision deprivation for as little as 3 weeks between 6 and 12 months and as little as 2 months until age 8 can lead to permanent visual defects.
3. Treatment of accommodative esotropia includes dilation with 1% Cyclopentolate OU at first visit, trying hyperopic spectacles with full cycloplegic correction, rechecking the patient and redilating with Atropine 1% BID x3 and rechecking refraction.

Clinical Pearls for the Modern Optometric Practice

Ron Gallemler, MD, PhD, Retina Macula Institute and Research Center, Torrance, CA

1. Patients with epiretinal membrane (ERM) should always be referred to a retinal specialist. 15% of them are associated with retinal tears; others may be associated with retinal vein occlusion. Early treatment of ERM may prevent/delay need for surgery. Non-surgical treatment includes NSAIDS drops, periocular steroids, and intraocular steroids.
2. Central Serous Retinopathy (CSR) may be precipitated by eye trauma. Risk factors include high caffeine use. Treatment may be Sprinolactone 25 mg po BID.
3. Patients on Plaquenil should be warned about symptoms of Plaquenil toxicity if they lose weight. Dosage is weight dependent.



Counselor's Corner



Q: What can my patient expect during their LASIK consultation at Pacific Vision Institute?

A: The patient can expect to spend about an hour and a half at PVI. They will meet with Patient Care Coordinator, the Laser Engineer, and Dr. Faktorovich. During their pre-LASIK evaluation, the patient will undergo extensive testing and assessment. It will include placebo-disc based corneal mapping to determine geometry of the cornea;

tomography-based corneal mapping to determine corneal thickness, anterior corneal curvature, and posterior corneal curvature; ocular response analyzer (ORA) to determine corneal strength; widefield OCT with epithelial cell mapping to determine how long they'll need to be out of contact lenses prior to their procedure; and CONTOURA Vision Analysis to gather initial data for topography-guided laser vision correction. Simulated vision images will be shown to patient to demonstrate what their vision will be after correction of larger and smaller imperfections in their eye sight. The patient's suitability for laser vision correction will be explained to the patient based on this extensive analysis. They will also be informed what to expect before, during, and after surgery. Cost, method of payment, and financing options will be discussed. The patient will then be scheduled for their procedure. The co-managing optometrist will be informed promptly when the patient is scheduled for their procedure so that follow up exams can be scheduled at the optometrist's office. ■

Refractive Advisor

Q: What should my patient expect after their LASIK at PVI?

A: The patient is seen at PVI on Day 1 Postop. Thereafter, they are seen at the co-managing optometrist's office at 1 week, 1 month, 3 months, and 6 months postop. At 1 year postop, they need to have a routine, dilated comprehensive eye examination. At 1 week and 1 month postop, some fluctuation in VA is not uncommon. Also, glare, haloes, and dryness may be experienced. At 3 months postop, the symptoms should be improving. Some dryness may be experienced. At 6 months postop, all the symptoms should continue to improve. After you complete each exam, the postop form should be faxed to PVI. If you have any questions on any of the post-op visits, please call or e-mail PVI. You may also call or text Dr. Faktorovich or Dr. Quan on their cell phones. ■



OPTOMETRIC CONTINUING EDUCATION

Ongoing: Live Surgery Observation for OD Staff (includes breakfast) - please contact us at

comanagement@pacificvision.org

to schedule the date and time for your staff to attend and learn

Ongoing: Lunch-and-Learn Education for OD Staff at your office (includes lunch provided by Pacific Vision Institute) - please contact us at

comanagement@pacificvision.org

to schedule the date and time for this fun and educational event for your office staff.

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