

Optimum VA

NAVAO Newsletter

Summer 2007

News and Notes

- [AFOS, FSO Meeting October 22-23, 2007](#)

99202

- [New Treatment for VKC](#)
- [New Social Security Rules](#)
- [Don't Say No to Gonio](#)
- [Not So Green: The Push for More Yellow](#)
- [IVK and Retinal Deposits](#)
- [Trusopt Hits the Spot with RP](#)
- [Lower the Lipids, Axe the AMD](#)
- [The Cost of Not Seeing](#)
- [Gene Replacement for LCA](#)
- [An Eye Doctor Using Eye Protection? No Way!](#)
- [Coding and Billing](#)
 - [99211, Level 5 Codes](#)

Editor's Box

- [Help Keep Us Informed](#)
- [Contact Optimum VA](#)
- [Submission Information](#)

Web Links

- | | |
|--------------------------------|-------------------------------------|
| ➤ Associations | ➤ Low Vision and VT |
| ➤ Coding | ➤ Ocular Disease |
| ➤ Contact Lens | ➤ Ophthalmic Misc |
| ➤ Conventions | ➤ Optical |
| ➤ Foreign Webs | ➤ Optometry Schools |
| ➤ Govt Health | ➤ State Information |
| ➤ Journals | ➤ Systemic Disease |

Welcome to Tampa!

Aly Wasik, OD

The 2007 [Federal Service Optometry Meeting](#) will be held October 22 - 23, 2007 (Monday & Tuesday prior to AAO) at the Sheraton Tampa Riverwalk Hotel. Room rates are \$88.00 Single/Double Occupancy.

On Monday, October 22, there will be a service breakout session to be conducted by Dr John Townsend. Topics at this time will include traumatic brain injury, the state of VA optometry, and a question and answer session followed immediately by a reception.

On Tuesday, October 23, there will be approximately 8 hours of CE available & lunch will be provided for a cost of \$60 for members or \$125 for non-members. Courses will include *The Eye in Systemic Disease & Traumatic Brain Injury* by Dr Peligrino, *True Ocular Emergencies* by Dr Pelino, and *Have We Gotten Too Multi-Purpose?* by Dr Lievens. The link to register for the meeting and make hotel reservations can be found on the AFOS website, www.afos2020.org; then click on FSO meeting. Point of contact: Aly Wasik, OD, AFOS Membership Chair (Alyon.wasik@va.gov).

[Back](#)

President's Report – cont.

[Back to Top](#)

Includes 8 hours of CE; Breakout Session with Dr. Townsend

[Back to Top](#)

Cyclosporine A Product Receives FDA Orphan Designation

The first drug dedicated to the treatment of Vernal Keratoconjunctivitis (VKC) has received Orphan Drug Designation from the FDA. Vekacia (Novagali) is an improved Cyclosporine A product which provides children patients with optimal safety, efficacy and comfort to bring them the care needed to eradicate this disease, according to the company.

In March 2006, the European Medicines Agency (EMA) recommended orphan drug designation in the European Union to Vekacia® for the treatment of VKC. In May 2007, Novagali Pharma receives US FDA Orphan Drug Designation for Vekacia® for the treatment of Vernal Keratoconjunctivitis. A phase III clinical trial in VKC patients with Vekacia® is completed. It should be the first product available in Europe for such a condition.

<http://www.novagali.com/en/eye-therapy/allergy/>

[Back to Top](#)

Other Forms of Visual Fields Now Accepted

New Social Security Administration rule for determining legal blindness are in place. The Social Security Administration had been requiring a Goldmann test which had been out of favor with eye doctors for over two decades. The rules should allow for more accurate disability determinations based on acuity.

The Social Security Administration published new rules for visual disorders in the Federal Register (71 FR 67037) on November 20, 2006. These rules became effective on February 20, 2007. As in the past, statutory/legal blindness continues to be defined as best corrected visual acuity of 20/200 or less in the better eye; or a visual field limitation such that the widest diameter of the visual field, in the better eye, subtends an angle no greater than 20 degrees, as measured with a Goldmann III4e or equivalent size stimulus.

Under the new rules, how visual acuity and visual field can be tested to meet this definition has changed. For visual field testing, the following measurements can be used:

1. Automated static threshold perimetry (Humphrey 30-2 and 24-2)
 - a. For Humphrey Field Analyzers, a 10dB stimulus is equivalent to a 4e stimulus. A dB level that is higher than 10 represents a dimmer stimulus, while a

dB level that is lower than 10 represents a brighter stimulus. Therefore, for automated static threshold tests performed on Humphrey Field Analyzers, any point seen at 10dB or higher are a point that would be seen with a 4e stimulus.

2. Kinetic perimetry, such as the Humphrey "SSA Test Kinetic"
 - a. The kinetic test must use a white III4e stimulus projected on a white 31.5 apostilb (10 cd/m²) background.
3. Goldmann perimetry
 - a. With a III4e target.

SSA will not use the results of visual field screening tests, such as confrontation tests, tangent screen tests, or automated static screening tests, to determine legal blindness.

For visual acuity testing, the criteria changed because most test charts that use Snellen methodology do not have lines that measure visual acuity between 20/100 and 20/200. Newer test charts, such as the Bailey-Lovie or the Early Treatment Diabetic Retinopathy Study (ETDRS), do have lines that measure visual acuity between 20/100 and 20/200.

Under the new criteria, if a person's visual acuity is measured with one of the newer charts, and they cannot read any of the letters on the 20/100 line, they will qualify as legally blind, based on a visual acuity of 20/200 or less. For example, if the person's best-corrected visual acuity for distance in the better eye was determined to be 20/160 using an ETDRS chart, they would now be classified as legally blind. Regardless of the type of test chart used, the person will not be classified as legally blind if they can read at least one letter on the 20/100 line. For example, if a person's best-corrected visual acuity for distance in the better eye was determined to be 20/125+1 using an ETDRS chart, they would not be classified as legally blind because they were able to read one letter on the 20/100 line. To view the new rules please use the following link:

<http://www.ssa.gov/disability/professionals/bluebook/2.00-SpecialSensesandSpeech-Adult.htm>

[Back to Top](#)

Only 45% of Glaucoma Patients Are Tested

Although primary angle-closure glaucoma (PACG) is one of the largest causes of blindness in the world, many glaucoma practitioners do not screen for it. "Nobody should ever lose vision from angle-closure glaucoma because it is easily diagnosed, easily treated, and the treatment is almost always successful," said George L. Spaeth, M.D., Wills Eye Hospital, Philadelphia.

PACG is a type of glaucoma particularly common in the Asian population as well as in patients who are elderly, very far-sighted, or with small fronts to the eyes, Dr. Spaeth said. Screening for PACG is easily performed with gonioscopy, he said. It is likely there are different types of primary angle-closure glaucoma. The mechanisms and the appropriate treatments probably vary with the type of disease. For example, laser iridotomy may be a more suitable treatment for angle

closure in people of European ancestry than of Asian descent. Still, “Most patients don’t get examined, and there are no premonitory symptoms,” Dr. Spaeth said. “Doctors don’t look for it, patients don’t ask their doctors to look for it, and doctors often miss it.”

In fact, a 2003 study from Archives of Ophthalmology, written by Allen M. Fremont, M.D., RAND Health Program, Santa Monica, Calif., and co-investigators, reported that only 45.9% of patients with primary open-angle glaucoma in a managed care setting had gonioscopy performed. Although those patients had open-angle glaucoma, the frequency in which gonioscopy was performed is still applicable to PACG, practitioners said.

It is unclear why gonioscopy is not always performed, although lack of training might be a reason, said Alan L. Robin, M.D., associate professor of ophthalmology and associate professor of international health, Bloomberg School of Public Health, Johns Hopkins University, Baltimore. It also takes extra time with the patient.

Gonioscopy should be performed when a patient is newly diagnosed with glaucoma, to help identify the kind of glaucoma the patient has, said Leon W. Herndon, M.D., associate professor of ophthalmology, Duke University Eye Center, Durham, N.C. However, he will repeat gonioscopy if there is an unexplained pressure increase.

“Everyone with glaucoma should have this done at least once,” Dr. Robin said. Some practitioners may hesitate to perform gonioscopy because it can potentially scratch the front of the eye, Dr. Spaeth said. Other disadvantages include the need for topical anesthesia and possible patient discomfort, said Dennis S.C. Lam, M.D., chairman, Department of Ophthalmology & Visual Sciences, The Chinese University of Hong Kong.

Although some newer technologies can help screen for PACG, practitioners insist that gonioscopy still plays a vital role. “Ultrasound biomicroscopy (UBM), and optical coherence tomography [OCT], are newer techniques [for PACG screening], but I don’t want us to get away from the bread-and-butter way of documenting the angle, which is gonioscopy,” Dr. Herndon said. “Many practices are not using gonioscopy to the rate they should be. A simple tool such as gonioscopy should be over-emphasized.” “It’s not clear with the other imaging studies if you can clearly screen for angle-closure glaucoma. There are some subtleties you may miss,” Dr. Herndon said. “I haven’t seen the resolution with ultrasound biomicroscopy to be to the level to be able to unequivocally diagnose PACG. Even with anterior segment OCT, it doesn’t give you the same degree of anatomic detail.”

However, tools such as anterior chamber OCT may provide an easier way to screen patients, Dr. Spaeth believes. “We’re starting to use it. I believe this may be an enormously important step ahead because you can screen without touching the eye,” Dr. Spaeth said. “It’s quick, fairly reliable, and non-invasive.” Dr. Robin also likes the more objective role that technology such as OCT can play in PACG screening. Still, the price of this technology—\$35,000 and upwards—may prevent some from purchasing it. “If you don’t do gonioscopy to begin with, why would you spend more money on something you don’t do?” he said. OCT may be a valuable purchase for glaucoma practices that serve larger Asian populations, such as in San Francisco, New York, or Los Angeles in the United States, Dr. Robin said.

In addition to the pricey screening concerns, different ways to treat PACG also generate discussion among practitioners. Conventional treatment for PACG patients is a laser iridotomy. Still, most of these eyes require further treatment after laser iridotomy, said Yasuaki Kuwayama, M.D., Osaka Koseinenkin Hospital, Osaka, Japan.

“The potential problems associated with the use of prophylactic laser peripheral iridotomy include IOP spikes, pigment release from the iris, and increased anterior chamber inflammation, which can potentially speed up cataract formation and further appositional or synechial angle closure,” Dr. Lam said.

Some practitioners are trying other methods to treat PACG. When a cataract is present along with PACG, lens extraction appears to help, Dr. Kuwayama said during a presentation at this year’s ASCRS•ASOA Symposium & Congress in San Diego. “Cataract surgery widens the angle in eyes with PACG,” he said. “Early cataract removal may be the first line of treatment for PACG because it can relieve the angle closure.” Lens extraction should be the definitive treatment in patients with combined cataract and PACG, Dr. Kuwayama said. Some recently published studies examine how cataract surgery may positively affect PACG patients. One study published last year in the Journal of Glaucoma found that IOP decreased from a mean level of 19.7 mm Hg to 15.5 mm Hg in 21 PACG patients after cataract extraction with a clear corneal incision was performed. The mean number of glaucoma eye drops required in those patients decreased from a mean pre-op level of 1.91 to 0.52 at the final follow-up. The study did not have a control group for comparison.

“The results of that study have suggested that cataract extraction with phacoemulsification alone significantly reduces intraocular pressure and the number of anti-glaucoma medications, with a mean follow-up period of 20 months, in PACG patients,” said lead study investigator Jimmy S. M. Lai, M.D., Department of Ophthalmology, United Christian Hospital, Kowloon, Hong Kong. “It implies that phacoemulsification alone without a filtering operation may be sufficient to control the IOP in PACG patients.”

Dr. Lai and co-investigators have a randomized control trial in the works to compare outcomes with phacoemulsification against those with combined phacoemulsification and trabeculectomy.

Dr. Lam said he has unpublished data that show after an acute primary angle-closure attack, “early cataract extraction significantly reduces the chance of developing chronic IOP elevation when compared to laser iridotomy alone,” he said.

Studies such as the one from Dr. Lai prompt Dr. Herndon to consider cataract surgery alone in his next patient with PACG and cataract and evaluate the degree of pressure control obtained. Dr. Robin said some studies point to a role for cataract surgery to help treat PACG patients, but he believes other techniques also are viable. He has performed goniosynechialysis in individuals who have adhesions from the iris to the trabecular meshwork.

“In some individuals, you can increase the aqueous dynamics and improve the way the fluid leaves the eye by breaking the adhesions,” Dr. Robin said. He has performed his procedure in 15 patients over the last two years, and said it was successful in 10 of those patients. He believes there is a growing role for goniosynechialysis in PACG patients.

Yellow Solid-State Laser in the Works

Lasers have become an indispensable part of ophthalmology—but there's always room for improvement. For ophthalmic surgeons, wavelength is key; it determines penetration depth and absorption patterns. Until recently some wavelengths could only be generated in a basic way, using costly, difficult-to-maintain instruments. Now a new laser in development by Iridex Corp. (Mountain View, Calif.) is making it possible to produce a key wavelength—peak yellow at 577 nm—and to do so with improved power and control.

Greg Halstead, global marketing manager at Iridex, explains how Iridex came to develop the new laser. “The first lasers were argon and krypton gas lasers,” he says. “Argon lasers were a deep bluish-green, with a wavelength around 514 nm; they worked fine for coagulation. Eventually, tunable dye lasers came out, making it possible to select a wavelength, including yellows, oranges and reds.

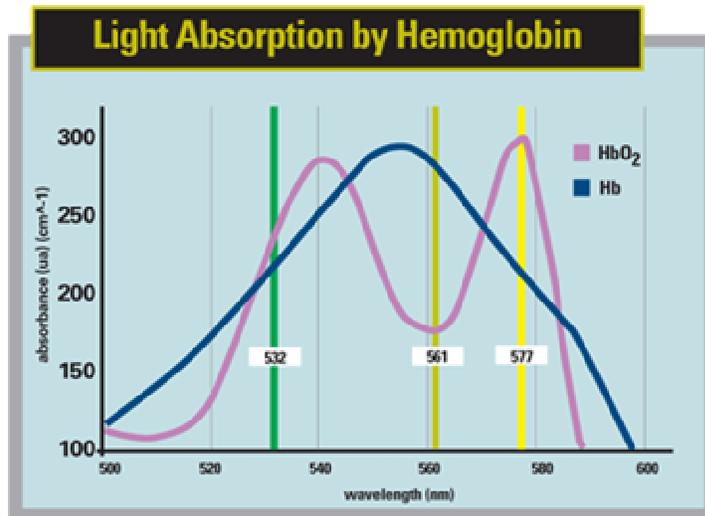
“Yellow was a common selection at 577 nm, the pure yellow band, for a couple of reasons,” he continues. “When you're targeting with the laser inside the eye, a chromophore such as melanin, xanthophyll or hemoglobin absorbs the laser light, producing heat and triggering a reaction, and different wavelengths are more or less efficient at this. As it turns out, pure yellow is very efficient. You can use less energy to achieve the same results, and there's less scatter in the eye.” (A previously published study by Martin A. Mainster, PhD, MD, listed the advantages of 577-nm light as including peak absorption for oxyhemoglobin; negligible absorption by macular xanthophyll; low light scattering in intraocular transit; negligible retinal phototoxicity; good lesion visibility; limited patient pain; and a high ratio of oxyhemoglobin to melanin absorption for treatment of vascular structures with a minimum of damage to adjacent pigmented tissues.¹)

“Unfortunately,” Mr. Halstead continues, “maintaining those tunable lasers could be expensive and difficult, and some of the dyes in them were carcinogenic. But companies eventually created solid-state lasers in the infrared and the green ranges; we now have 532-nm and 810-nm solid-state lasers. These were quickly adopted because of their lower cost and reduced need for maintenance.”

As it turned out, however, the existing solid state technology couldn't produce the 577-nm wavelength. “Several lasers on the market today can produce a 561-nm beam that's a greenish-yellow,” he notes. “But once you get to 560 nm, you're off the peak absorption for hemoglobin, and you're a little less efficient than the 532s.”

Mr. Halstead explains that Iridex recently found a different technology that makes it possible to produce a solid-state 577 nm laser—with other features that make it especially useful. “We wanted these lasers to have two key attributes,” he says. “The first was a true-yellow, 577-nm laser light. Second, we wanted the laser to have more power and micropulsing capabilities. Micropulsing gives the surgeon much finer control over laser delivery.” The new laser, now being tested and refined, has all of these characteristics.

Mr. Halstead notes that micropulsing opens the door to new ways of treating with the laser. “Without micropulsing, when the light is absorbed by the tissue, it creates visible scarring that tells you the treatment was effective—a little white blanching. But with micropulsing it’s possible to stay below the level of visible scarring and still deliver a clinically significant dose of laser energy that evokes a healing response, much like selective laser trabeculoplasty. You don’t see a visible response, but you do get



a biological effect.” (A study presented at the Association for Research and Vision in Ophthalmology meeting in 2005 [Ingvaldstad et al, IOVS 2005;46:ARVO E-Abstract 123] compared micropulse laser trabeculoplasty to argon laser trabeculoplasty; they produced equally effective, statistically significant lowering of intraocular pressure.)

Mr. Halstead says the new technology also allows the laser to produce a more powerful beam. “The solid state lasers currently available that produce the off-peak 560 nm-range light can produce about 600 to 800 mW of power,” he says. “The yellow laser we demonstrated at the American Academy of Ophthalmology meeting last fall has a full 1,500 mW of power. This should translate into more uses, more efficiency and better reliability.” He adds that the new laser also features a revised user interface. Instead of simply turning a dial to set power levels, it features a touch-screen, similar to what you see on a vitrector or phaco machine.

Mr. Halstead says the laser is still in development, and the company is filing for 510K clearance. “This is our top project at Iridex right now,” he notes. “It has the potential to be the all-purpose laser; with its micropulsing capability you can use it in your office for general ophthalmic applications such as photocoagulation and use it in the OR for retina work as well. We hope to have full clearance by early summer.

http://www.revophth.com/index.asp?page=1_13401.htm

[Back to Top](#)

Not a Problem According to Authors

The authors investigated possible toxic side effects of epiretinal triamcinolone acetonide deposits at the posterior pole after an intravitreal injection in both a vitrectomized and a non-vitrectomized eye. The vitrectomized eye developed massive epiretinal triamcinolone acetonide deposits at the

posterior pole that were less pronounced in the non-vitreotomized eye. After resolution of the deposits, no morphologic signs of retinal toxicity were apparent. Mild scattered visual field defects did not correlate with the localization of the triamcinolone acetonide deposits. However, because recent in vitro studies indicate potential cytotoxicity, patients should be instructed to keep their heads in an upright position after intravitreal triamcinolone acetonide injection to avoid deposits at the posterior pole. [*Ophthalmic Surg Lasers Imaging* 2007;38:238-241.]

<http://www.osli.com/showAbst.asp?thing=15226>

[Back to Top](#)

May Help With CME

The authors attempted to determine the value of a topical carbonic anhydrase inhibitor for extended treatment of cystoid macular oedema (CME) in patients with retinitis pigmentosa (RP).

Method: Eight patients with RP and foveal cystic-appearing lesions observed on fundus examination and by optical coherence tomography (OCT) testing were treated with a topical form of carbonic anhydrase inhibitor. Results: Foveal cystic-like spaces were documented by OCT testing in all eight patients before treatment. All patients had a significant reduction in their foveal thickness (FT) and foveal zone thickness (FZT) in at least one eye after using 2% dorzolamide three times a day for 1 or 2 months. Six patients had an improvement in both eyes. After an additional 6–13 months of the same treatment regimen, out of six patients who had a sustained reduction in FT and FZT in at least one eye, four had this reduction in both eyes. While they were still taking Trusopt, a recurrence (rebound) of CME in both eyes was observed in two patients, whereas one patient had a sustained improvement in one eye and rebound of CME in the other eye. Out of 8 patients, 3 showed an improvement in their visual acuity by ≥ 7 letters, in at least one eye, on Snellen acuity charts, which was determined as clinically significant.

Conclusion: Results from this study suggest that patients with RP could potentially sustain a beneficial effect from continued treatment with a topical form of carbonic anhydrase inhibitor.

<http://bjo.bmj.com/cgi/content/abstract/91/6/743>

[Back to Top](#)

Decreases Likelihood of Neovascular AMD, Study Says

Objective: To evaluate the association of lipid intake with baseline severity of age-related macular degeneration (AMD) in the Age-Related Eye Disease Study (AREDS).

Methods: Age-Related Eye Disease Study participants aged 60 to 80 years at enrollment (N = 4519) provided estimates of habitual nutrient intake through a self-administered semiquantitative food frequency questionnaire. Stereoscopic color fundus photographs were used to categorize participants into 4 AMD severity groups and a control group (participants with <15 small drusen).

Results: Dietary total ω -3 long-chain polyunsaturated fatty acid (LCPUFA) intake was inversely associated with neovascular (NV) AMD (odds ratio [OR], 0.61; 95% confidence interval [CI], 0.41-0.90), as was docosahexaenoic acid, a retinal ω -3 LCPUFA (OR, 0.54; 95% CI, 0.36-0.80), comparing highest vs lowest quintile of intake, after adjustment for total energy intake and covariates. Higher fish consumption, both total and broiled/baked, was also inversely associated with NV AMD (OR, 0.61; 95% CI, 0.37-1.00 and OR, 0.65; 95% CI, 0.45-0.93, respectively). Dietary arachidonic acid was directly associated with NV AMD prevalence (OR, 1.54; 95% CI, 1.04-2.29). No statistically significant relationships existed for the other lipids or AMD groups.

Conclusion: Higher intake of ω -3 LCPUFAs and fish was associated with decreased likelihood of having NV AMD.

<http://archophth.ama-assn.org/cgi/content/short/125/5/671>

[Back to Top](#)

Over \$51 Billion, Study Says

This week Prevent Blindness America released [a new study](#) that shows vision loss costs the U.S. an estimated \$51.4 billion—a number that is expected to grow exponentially in the coming years as the nation's 78 million baby boomers reach retirement age and beyond. American families are paying a lot in costs associated with eye diseases such as macular degeneration, glaucoma, cataracts, and diabetic retinopathy. And the cost is not only financial. What's often not talked about is the bigger toll that vision loss takes on families. Many people and their loved ones feel at a loss following a vision loss diagnosis. A new AFB poll shows vision loss is the health condition Americans fear most because they worry it means loss of independence.

While some families adapt successfully, there are many others who don't know where to turn for help, or even if such help exists. This sentiment is echoed in a testimonial on AFB Senior Site from Deanne Jackson.

"When I got home after I'd heard the news that I had wet macular in my left eye with 20/400 vision, it was like an overnight devastation. I thought my life was over because I am very independent and I take care of myself and my family. And I've been a caretaker for a while with members of my family and I think, what am I going to do and what are they going to do?...I went in a fit of depression and just kind of sat there for months."

What so many families don't realize is that there is a lot you can do with vision loss. We need more public education on how to remain active and live productively with less sight. People can continue living on their own, cooking, reading, paying bills, getting around, and staying fit with low vision. But without proper tools and information, seniors with vision loss are put at greater risk for depression, medication mishaps, and falling.

We created [AFB Senior Site](#) so that the 6.5 million older Americans living with vision loss have the tools they need to live safely, happily, and independently with less sight. AFB Senior Site contains instructional videos and articles describing independent living solutions and points people and their families to resources in their communities, such as vision loss specialists who can recommend solutions. Boomers are known for their active, youthful, independent lifestyles. This is not a generation that will sacrifice their independence or passions because of sight problems. It's time we all start paying attention to this growing public health issue, and invest the money and resources in helping families live with vision loss.

http://www.afb.org/blog/blog_comments.asp?TopicID=2703

[Back to Top](#)

Moves Into Human Study

Children born blind from a devastating retinal condition called Leber congenital amaurosis (LCA) may soon be able to see thanks to an innovative gene replacement therapy that has just moved into a clinical trial. The study, funded in part by the Foundation Fighting Blindness, is being conducted by University College of London and Moorfields Eye Hospital in London. Two additional Foundation-funded clinical trials are scheduled to begin soon at the University of Pennsylvania and the Children's Hospital of Philadelphia.

Over the past 15 years, the Foundation funded the preclinical investigations that are making these gene replacement studies possible. One world-renowned research project gave sight to a Briard dog named Lancelot and 50 of his relatives.

"This is one of the most important milestones ever reached in retinal research, because it offers the promise of giving vision to children who otherwise would never see," says Bill Schmidt, Chief Executive Officer, Foundation Fighting Blindness. "We are thrilled to be at this hopeful juncture."

"Not only does gene replacement hold promise for LCA, the same approach may be used to treat a variety of other retinal diseases including retinitis pigmentosa, Stargardt disease, Usher syndrome, and age-related macular degeneration," says Stephen Rose, Ph.D., Chief Research Officer, Foundation Fighting Blindness. "The success of these studies in the U.S. and the U.K. can pave the way for many more treatments to save and restore vision in millions of people around the world."

People affected by LCA are born with a genetic variation that causes blindness or severe vision loss at birth. Investigators have thus far identified 14 genes that can cause LCA. The current and forthcoming human studies involve delivery of a healthy gene to the retinas of people with LCA caused by variations in the gene RPE65.

<http://www.blindness.org/research.asp?id=305>

[Back to Top](#)

Seldom Use Eye Protection for Intraocular Injections

Objective: To evaluate the use of eye protection and frequency of eye splash events during intraocular injections as well as infection risk awareness among retina specialists and fellows in training.

Methods: In a prospective survey of practicing retina specialists and retina fellows, frequency of use and type of eye protection employed during intraocular injections, frequency of eye splash occurrences, description of the eye splash event, number of procedures performed, and awareness of transconjunctival infection risk were investigated.

Results: Sixty-four ophthalmologists responded to the questionnaire: 40 retina fellows and 24 retina specialists. The response rate was 100%. Twenty-five percent of the fellows and 33.3% of the specialists reported using eye protection, including corrective glasses, during all intraocular injections. Two of the retina fellows and none of the specialists used special forms of eye protection. Retina fellows had a mean +/- SD of 2.1 +/- 1.3 years experience and the specialists had a mean +/- SD of 10.4 +/- 6.7 years experience in performing intraocular injections. The mean number of injections +/- SD performed by the fellows and specialists was 23 +/- 14.6 and 35 +/- 11.9 per month, respectively. Twelve conjunctival or corneal splash occurrences were reported by six fellows and two retina specialists. Eleven splash events occurred due to reflux of fluid during administration of subconjunctival anesthetic injection, and one event occurred during an anterior chamber tap. Splash events were significantly more likely to occur during procedures performed by fellows, with a relative risk of 8.4 for unprotected procedures ($P < 0.001$, Fisher exact test). Most (87.5%) of the participants were aware of the risk for transconjunctival viral infection.

Conclusion: Special eye protection is seldom used during administration of intraocular injections. Although the risk for eye splash during administration of subconjunctival anesthetic before intraocular injections is relatively small, protective measures may be considered when treating high-risk patients.

<http://www.retinajournal.com/pt/re/retina/abstract.00006982-200706000-00013.htm;jsessionid=G4rJQvTVhTHGzvtvpFBpPlz9yJxrF2k90hnZwplslvy2zHPJKWr2!1240718814!-949856144!8091!-1>

[Back to Top](#)

Review of the "Tech" Code and Level 5's

99211. Ophthalmic technicians work under Medicare's "Incident To" rules when employed by physicians. Work performed by them is included in the service billed by the physician. There are certain types of services that are medically necessary and may be performed by a physician extender that does not require the services of a physician, such as an injection. Code 99211 is used

when these services are performed and there is no physician participation in the service. However, the service still must be medically necessary.

When a patient returns for a special ophthalmologic diagnostic test — such as visual fields, ultrasonography, fundus photography — most often there is not a medically necessary reason for billing code 99211. If your chart notes reflect that the patient is to return for a diagnostic test but not a medically necessary office visit with the physician you cannot bill 99211 for the technician.

The abuse of code 99211 in such situations is the reason that the bundles of all ophthalmic diagnostic tests and office visits occurred originally and is currently implemented in the National Correct Coding Initiative. If a patient is to be scheduled or is scheduled for cataract surgery and is instructed to return for an A scan with intraocular lens power calculations, there is no medical necessity for a technician visit, and billing such is perpetuating fraud. The same is true for other diagnostic tests. However, in the case of visual fields, for example, if a scheduled office visit with the physician is planned for glaucoma follow up, then it would be permissible to bill for both the office visit and the test.

Level 5 Office Visits/Consultations. Many practices still have not mastered the basic requirements of Evaluation and Management Coding. The Documentation Guidelines issued in 1997 by Health Care for All (now Centers for Medicare and Medicaid Services) and the AMA (American Medical Association) are still the ones that you need to be in compliance with for E/M codes and many carriers have local coverage determinations (LCD) and coding guidelines for the ophthalmology (eye) codes. The E/M codes are going to be in effect for some time since the last attempted revision was voted down last year. A great deal of legal compliance work is being generated by practices under audit for various problems associated with both sets of codes. The E/M level 5 codes are often a trigger for audits.

CPT defines the various level five codes as follows:

99245 Office consultation for a new or established patient, which requires these three key components:

- A comprehensive history;
- A comprehensive examination; and;
- Medical decision making of high complexity.

99205 Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components:

- A comprehensive history;
- A comprehensive examination; and;
- Medical decision making of high complexity.

99215 Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components:

- A comprehensive history;
- A comprehensive examination;
- Medical decision making of high complexity.

In Medicare's auditing procedures, a practitioner will seldom have met the requirements for 99245. This is basically due to a conflict of interpretation of high

risk. In the majority of cases it is prudent to use 99244. Some carriers (i.e., Wisconsin) have prohibited use of level 4/5 E/M codes and comprehensive eye codes (92004/92014) when billing extended ophthalmoscopy. Be sure you know your carrier's regulations.

Use of Level 5 Codes: Some coding courses have advocated using 99215, rationalizing this by stating that you can use your previously-taken comprehensive history and then perform a comprehensive examination, thus meeting the two-thirds requirement. Billing 99215 using a brief notation that a previously-taken history was reviewed, accompanied by a comprehensive examination that may or may not be medically necessary, will surely lead to serious problems.

The 1997 Documentation Guidelines state, "Because the level of E/M service is dependent on two or three key components, performance and documentation of one component (e.g., examination) at the highest level does not necessarily mean that the encounter in its entirety qualifies for the highest level of E/M service."

Many well-intentioned practices have been audited and penalized by Medicare by using aforementioned faulty reasoning. When billing for follow-up patients who are being followed at frequent intervals, there is seldom enough severity to warrant using code 99215.

<http://www.eyeworld.org/article.php?sid=2796>

[Back to Top](#)

Help Keep Us Informed

Please don't hesitate to submit news and notes to the Optimum VA. The more you submit, the better our newsletter will be. Such information may include:

-  Letters to the editor
-  Case reports
-  Photos
-  Article abstracts (include publication information)
-  Upcoming events (CE, meetings, etc.)
-  Personal accomplishments
-  Internet links

*** Feel free to submit at any time by clicking the link [Contact Optimum VA](#) which is also located on the front page in the Editor's Box. Submission and publication dates are listed below.**

**** Residents and students are also encouraged to submit.**

Issue	Submissions Due	Publication Date
Winter	December 15	January 1
Spring	March 15	April 1
Summer	June 15	July 1
Fall	September 15	October 1

[Back to Top](#)

Associations, Institutes, Organizations, Societies

[All About Vision](#)

[Alliance for Aging Research](#)

[American Academy of Ophthalmology](#)

[American Academy of Optometry](#)

[American Academy of Pediatrics](#)

[American Optometric Association](#)

[American Optometric Foundation](#)

[Association of Regulatory Boards of Optometry \(ARBO\)](#)

[Council for Refractive Surgery Quality Assurance](#)

[Eye Advisory](#)

[Eye Surgery Education Council](#)

[Glaucoma Research Foundation](#)

[Healthy Vision 2010](#)

[International Glaucoma Association](#)

[NASA Vision Group](#)

[National Eye Research Foundation](#)

[National Keratoconus Foundation](#)

[National Optometric Association](#)

[NBEO](#)

[Optometric Extension Program](#)

[Optometric Refractive Surgery Society](#)

[Optometrists.org](#)

[ORMS](#)

[Parents Active for Vision Education](#)

[RGP Institute](#)

[Schepens Eye Research Institute](#)

[Vision Council of America](#)

[World Council of Optometry](#)

[Back to Top](#)

Coding

[AHIMA](#)

[AMA \(CPT\)](#)

[Centers for Medicare & Medicaid Services](#)

[Healthcare Common Procedure Coding System \(HCPCS\)](#)

[ICD-9-CM Coordination and Maintenance Committee](#)

[NCHS - Classification of Diseases , Functioning, and Disability](#)

[Medicare Carriers by State](#)

[Alabama](#)

[Alaska](#)

[Arizona](#)

[Arkansas](#)

[California](#)

[Colorado](#)

[Connecticut](#)

[Delaware](#)

[District of Columbia](#)

[Florida](#)

[Georgia](#)

[Hawaii](#)

[Idaho](#)

[Illinois](#)

[Indiana](#)

[Iowa](#)

[Kansas](#)

[Kentucky](#)

[Louisiana](#)

[Maine](#)

[Maryland](#)

[Massachusetts](#)

[Michigan](#)

[Minnesota](#)

[Mississippi](#)

[Missouri \(Eastern\)](#)

[Missouri \(Western\)](#)

[Montana](#)

[Nevada](#)

[New England](#)

[New Hampshire](#)

[New Jersey](#)

[New Mexico](#)

[New York](#)

[New York \(Queens County\)](#)

[New York \(Upstate\)](#)

[North Carolina](#)

[North Dakota](#)

[Ohio](#)

[Oklahoma](#)

[Oregon](#)

[Pennsylvania](#)
[Rhode Island](#)
[South Carolina](#)
[South Dakota](#)
[Tennessee](#)
[Texas](#)
[Utah](#)
[Vermont](#)
[Virginia](#)
[Washington](#)
[West Virginia](#)
[Wisconsin](#)
[Wyoming](#)

[Back to Top](#)

Contact Lens

[Acuvue](#)
[Bausch & Lomb](#)
[British Contact Lens Association](#)
[CIBA Vision NIGHT & DAY](#)
[CIBA Wesley-Jessen](#)
[Contact Lens and Anterior Eye](#)
[Contact Lens Council](#)
[Contact Lens Manufacturers Association](#)
[Contact Lens Spectrum](#)
[CooperVision](#)
[Innovative Sclerals Ltd.](#)
[International Association of Contact Lens Educators \(IACLE\)](#)
[New Zealand Contact Lens Society](#)
[Ocular Sciences](#)
[Official Site of Silicone Hydrogel Lenses](#)
[Virtual Consultant](#)

[Back to Top](#)

Conventions and Meetings

[Great Western Council of Optometry](#)
[Heart of America Contact Lens Society](#)
[Midwest Vision Congress & Expo](#)
[OptoEast](#)
[OptoWest](#)
[Southern Council of Optometrists](#)
[Vision Expo East](#)
[Vision Expo West](#)

[Back to Top](#)

Foreign Web Sites

[American Academy of Optometry \(British Chapter\)](#)
[Association of Optometrists, UK](#)
[Australasian College of Behavioural Optometrists \(ACBO\)](#)
[Bradford, University of, Department of Optometry \(UK\)](#)
[Brazilian Optometry Association](#)
[Canadian Association of Optometrists](#)
[College of Optometrists - UK](#)
[Eye Health Council of Canada](#)
[Hong Kong Polytechnic University Optometry Section \(PRC\)](#)
[Hong Kong Society of Professional Optometrists](#)
[Institute of Optometry - UK](#)
[Karolinska Institutue - Sweden](#)
[Melbourne College of Optometry - Australia](#)
[New Zealand Association of Optometrists](#)
[Ontario Association of Optometrists](#)
[Optometrists Association \(Victoria\)](#)
[Optometrists Association Australia \(New South Wales Division\)](#)
[Optometrists Association Australia \(Queensland Division\)](#)
[Optometrists Association Australia \(Victorian Division\)](#)
[Optometry and Optics Today - UK](#)
[Tanzania Optometric Association](#)
[Thai Optometry](#)
[Victorian College of Optometry](#)

[Back to Top](#)

Government Health

[Armed Forces Optometric Society](#)
[Centers for Disease Control and Prevention](#)
[ClinicalTrials.gov](#)
[Federal Registry](#)
[NAVAO](#)
[VA Optometry](#)

[Back to Top](#)

Journals

[American Journal of Ophthalmology](#)
[American Society of Cataract and Refractive Surgery](#)

[Archives of Ophthalmology](#)
[British Journal of Ophthalmology](#)
[Digital Journal of Ophthalmology](#)
[Eyeworld](#)
[Ocular Surgery News](#)
[Ophthalmology Times](#)
[Ophthalmology](#)
[Primary Care Optometry News](#)
[Primary Eye Care News](#)
[Review of Ophthalmology](#)
[Review of Optometry](#)

[Back to Top](#)

Low Vision and Vision Therapy

[American Foundation for the Blind](#)
[Canadian National Institute for the Blind](#)
[Eschenbach Optical](#)
[Foundation for Fighting Blindness](#)
[Lighthouse International](#)
[Low Vision Gateway](#)
[NORA - Neuro-Optometric Rehabilitation Association](#)
[Ocutech](#)
[Prevent Blindness America](#)
[State License Renewal Requirements](#)
[Vision and Computers](#)

[Back to Top](#)

Ocular Disease

[AMD Alliance International](#)
[American Macular Degeneration Foundation](#)
[Lutein Information](#)
[Macular Degeneration Foundation](#)
[Macular Degeneration International](#)
[Macular Degeneration Network](#)
[Macular Degeneration Partnership](#)
[Macular Disease Society](#)
[MAXIVISION](#)
[Center for Keratoconus](#)
[Chua Eye Page](#)
[Collaborative Longitudinal Evaluation of Keratoconus Study \(CLEK\)](#)
[EyeCancer Network](#)
[Ophthoguide](#)
[Ophtholinx](#)

[Trials Summary](#)

[Back to Top](#)

Ophthalmic Equipment and Medications

[Alcon Laboratories](#)

[Allergan](#)

[BOTOX®](#)

[Carl Zeiss Meditec](#)

[Hilco](#)

[Lombart Instruments](#)

[Medtronic Solan](#)

[Merck](#)

[Novartis Ophthalmics](#)

[Novartis](#)

[Reichert Ophthalmic Instruments](#)

[Reliance Medical Products](#)

[Topcon](#)

[Wilson Ophthalmic](#)

[Back to Top](#)

Optical

[Corning Ophthalmic](#)

[Essilor](#)

[General Optical Council - UK](#)

[National Academy of Opticianry](#)

[Optical Laboratories Association](#)

[Optical Society of America](#)

[Opticians Association of America](#)

[Opticians Association](#)

[Polycarbonate Lens Council](#)

[Prio](#)

[SOLA](#)

[Varilux](#)

[Back to Top](#)

Optometry Schools

[Illinois College Of Optometry](#)

[Indiana University](#)

[Michigan College of Optometry at Ferris State University](#)

[New England College of Optometry](#)

[Northeastern State University](#)

[NSU College of Optometry](#)

[Ohio State University](#)

[Pacific University](#)
[Pennsylvania College of Optometry](#)
[Southern California College of Optometry](#)
[Southern College of Optometry](#)
[SUNY State College of Optometry](#)
[UAB School of Optometry](#)
[University of California - Berkeley](#)
[University of Houston](#)
[University of Missouri - St. Louis](#)

[Back to Top](#)

State Optometry Associations

[Alabama](#)
[Alaska](#)
[Arizona](#)
[Arkansas](#)
[California](#)
[Colorado](#)
[Connecticut](#)
[Florida](#)
[Georgia](#)
[Idaho](#)
[Illinois](#)
[Illinois](#)
[Indiana](#)
[Iowa](#)
[Iowa](#)
[Kansas](#)
[Kentucky](#)
[Maine](#)
[Maryland](#)
[Massachusetts](#)
[Michigan](#)
[Minnesota](#)
[Missouri](#)
[Montana](#)
[Nebraska](#)
[Nevada](#)
[New Hampshire](#)
[New Jersey](#)
[New York](#)
[North Carolina](#)
[North Dakota](#)
[Ohio](#)
[Oklahoma](#)
[Oregon](#)
[Pennsylvania](#)
[South Carolina](#)

[South Dakota](#)

[Tennessee](#)

[Texas](#)

[Utah](#)

[Virginia](#)

[Washington](#)

[West Virginia](#)

[Wisconsin](#)

[Wyoming](#)

[Back to Top](#)

Systemic Disease

[American Diabetes Association](#)

[AskPhysicians.com](#)

[National Headache Foundation](#)

[Sjögrens Syndrome Foundation](#)

[Back to Top](#)