

Optimum VA

NAVAO Newsletter

Spring 2005

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ACMO Finalized

Sharon Atkin, OD

The ACMO exam is currently being finalized for the initial administration in June by the NBEO. ACMO is designed for optometrists completing an ACOE-accredited VA residency program to achieve the same formal recognition and status that other VA health professionals receive on completion of their residency programs. Exams will be administered electronically at numerous test sites throughout the country to minimize travel. Eligibility to sit for the ACMO examination is limited to current and former VA residents who meet the following criteria:

- Completing a VA residency by June 30, 2005
- Active license with therapeutic privileges as of March 11, 2005 (3 months prior to the test administration)
- No licensure sanctions or active state board investigations

Residency program supervisors need to ensure their residents are aware of this exam and highly encourage them to sit for the exam. VA staff who have completed VA residencies are also asked to strongly consider taking the ACMO. Current/former residents will be awarded a certificate of advanced competence by the NBEO upon successful completion of the exam. Additional information/sample test questions can be found on the [NBEO web site](#).

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President's Report

Sharon Atkin, OD

I would like to thank everyone for their support, wishes, concerns, etc regarding my ongoing medical problems. Things seem to be improving now so hopefully I will be able to return to the clinic before too much longer.

It is time to renew your NAVAO membership. If you have not yet done so, the dues are \$40. I will be distributing a list of paid/new members shortly with another dues notice for your convenience. Also, it is time to be thinking about the upcoming elections. You can nominate another individual for a position to which you think they may be suited or you can nominate yourself if you are interested in supporting NAVAO in this way.

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Poster of Resident Dr. Wang and Attending Dr. Hallak Presented At SECO International

Optometry resident Dr. Karen Wang and attending optometrist Dr. Joseph Hallak published a poster at the 2005 international meeting for the Southeastern Educational Congress of Optometry (SECO). Only 50 posters were selected worldwide. The poster was titled "Traumatic visual field loss: the affect and effect of optometric rehabilitation." Outlined were the methods used for the management of stroke and head trauma patients with resulting visual field loss. Management options described included prisms, optical designs, and vision therapy (scanning techniques). The poster was presented in the multi-media center throughout the meeting and will be displayed on the SECO website for up to 3 years.

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Brachytherapy System for Wet AMD Investigated

Enrollment is underway for a new clinical trial for the treatment of wet (exudative) age-related macular degeneration (AMD). The trial is sponsored by Theragenics Corporation(r) and will investigate the safety and feasibility of using the TheraSight™ Ocular Brachytherapy System for treatment of sub-foveal choroidal neovascularization associated with wet AMD. The one-time brachytherapy treatment compares 3 doses of radiation using patients at 6 clinical sites. Criteria for retinal and vision status at baseline include lesion size < 6 mm greatest linear dimension, submacular blood < 75% of lesion, subretinal fibrosis < 25% of lesion, study eye acuity 20/100 or poorer, and fellow eye acuity at least 1 line better than that of the study eye.

There are 6 participating centers located in the following states Georgia (2), Indiana (1), Massachusetts (1), New Jersey (1); North Carolina (1). Additional info about the trial may be accessed via Clinicaltrials.gov or via the [CenterWatch](http://CenterWatch.com) website.

Sharon Atkin, OD

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Not Just A Programming Language

All conventional tonometers rely on measuring the force required for applanating or indenting the cornea by a specified amount. This force, however, does not only depend on the IOP but also, in a complex manner, on the physical dimensions and properties of the cornea. The cornea is not uniform, and hence force tonometry is hampered with systematic errors, which can be significant in many "non-standard" eyes.

A contour-matched tonometer tip has a concave



surface which allows the cornea to assume the shape which it naturally assumes when pressure on both sides of the cornea are equal and hence no net bending forces are acting on the cornea.

Applanation tonometry requires an exact amount of applanation to be achieved and the required force to be determined precisely, a procedure prone to substantial uncertainty, operator bias and ambiguity. Contour matching is independent of contact diameter and appositional force. Contour matching establishes itself, accommodating differences in corneal shape automatically.

Ocular haemodynamics causes IOP to fluctuate, at the patient's cardiac rate, by several mmHg (typically ca. 3 mmHg; but often up to 9 mmHg). From a static IOP measurement, you will never know where exactly on the pulse pressure curve the measurement was taken. PASCAL records the entire pressure curve with a time resolution of 100 data points per second and hence captures the full dynamics of IOP.

<http://smtag.ch/index.php>

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Pfizer and Eyetech Join Forces

Eyetech Pharmaceuticals, Inc. and Pfizer Inc., announced December 17, 2004, that the U.S. Food and Drug Administration (FDA) approved Macugen® (pegaptanib sodium injection) for the treatment of neovascular (wet) age-related macular degeneration (AMD).

"Macugen is the first anti-angiogenic treatment approved in ophthalmology and represents the beginning of a new era. The anti-angiogenic approach specifically addresses, for the first time, an underlying cause of blindness in age-related macular degeneration. Anti-angiogenesis has evolved from theory to therapy," said Judah Folkman, M.D., Julia Andrus Dyckman Professor of Pediatric Surgery at Children's Hospital in Boston and Harvard Medical School.

Macugen is a pegylated anti-VEGF aptamer, a single strand of nucleic acid that binds with specificity to a particular target. Macugen specifically binds to VEGF 165, a protein that plays a critical role in angiogenesis (the formation of new blood vessels) and increased permeability (leakage from blood vessels), two of the primary pathological processes responsible for the vision loss associated with neovascular AMD.

Macugen is administered in a 0.3 mg dose once every six weeks by intravitreal injection. Eyetech and Pfizer plan to make the treatment available in the first quarter of 2005.

Eyetech and Pfizer are partnering to develop and market Macugen. With the approval of Macugen, Pfizer will pay Eyetech a \$90 million license fee payment. In addition, Pfizer will make an additional investment of \$15 million in Eyetech's common stock within 35 business days.

http://biz.yahoo.com/bw/041217/175584_1.html

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Billion Dollar Deal Unites Lens Companies

A division of Carl Zeiss AG is combining with San Diego-based SOLA International in a \$1.1 billion merger that will create one of the world's leading providers of ophthalmic lenses.

Both companies share a base in eyeglass lens sales. SOLA focuses on the plastic lens segment, with lenses made of hard resin plastic, polycarbonate, or thin plastic (Spectralite). The company also makes coatings and treatments, and sells its products mostly through North American retail chains under the SOLA and American Optical brand names. It has 6,600 employees serving 50 markets in 27 countries, and reported 2004 sales of \$650.1 million with sales growth of 15.5%.

<http://www.opthalmologytimes.com/opthalmologytimes/article/articleDetail.jsp?id=144995>

<http://www.zeiss.de/C12567A100537AB9/Contents-Frame/1C0E32851722D09241256A79002A2CA7>

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ASCRS Announces Flomax Working Group

American Society of Cataract and Refractive Surgery (ASCRS) Executive Committee formed the ASCRS Flomax Working Group to further investigate problems associated with the drug Flomax and provide information that can be used to develop appropriate recommendations for clinicians and the US Food and Drug Administration (FDA).

The action follows the January 13 issuance of an ASCRS physician advisory concerning Intraoperative Floppy Iris Syndrome (IFIS) – a new small pupil syndrome described by Drs. Chang and John Campbell – that appears to be associated with the use of Flomax.

Flomax, according to many in the urological community, is one of the most effective and widely prescribed drugs for the treatment of benign prostatic hypertrophy (BPH) a common condition that affects men in the same age group as those likely to develop cataracts. The drug is also prescribed off-label to women with urinary retention, whose symptoms are ameliorated by the drug, which relaxes muscles in the bladder neck.

Dr. Chang is organizing a multi-center investigation of cataract surgery outcomes in patients taking Flomax. "Urologists and their patients will want to know whether Flomax can still be safely prescribed for those that may need cataract surgery," said Dr. Chang. "In our original study, the surgeons did not have prior knowledge of when IFIS would occur." This prospective study, involving approximately 10 practices, will evaluate whether there is an increased complication rate with cataract surgery in patients on Flomax. The surgeons will manage the pupil using one of three methods at their own discretion – iris

retractors, pupil expansion ring, or Healon 5 (with low flow/low vacuum parameters). “These are methods that most practicing surgeons would be able to use. We hope to be able to report the complication rate and operative results in 100 consecutive pooled Flomax cases fairly quickly,” said Dr. Chang.

http://www.ascrs.org/advocacy/pressrelease_020305.html

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Multiple Treatment Options Recommended

The following article appeared in the February 24, 2005 issue of the New England Journal of Medicine. From clinical experience, this appears to be a more common problem within the VA population. Excerpts are included below:

A constellation of clinical symptoms and signs are included under the broad rubric of rosacea. These consist of facial flushing, the appearance of telangiectatic vessels and persistent redness of the face, eruption of inflammatory papules and pustules on the central facial convexities, and hypertrophy of the sebaceous glands of the nose, with fibrosis (rhinophyma).¹

Ocular changes are present in more than 50 percent of patients and range from mild dryness and irritation with blepharitis and conjunctivitis (common symptoms) to sight-threatening keratitis (rare).² Patients with rosacea may report increased sensitivity of the facial skin³ and may have dry, flaking facial dermatitis, edema of the upper face,⁴ or persistent granulomatous papulonodules.⁵ There is often an overlapping of clinical features, but in the majority of patients, a particular manifestation of rosacea dominates the clinical picture. As a useful approach to the guidance of therapy, the disease can thus be classified into four subtypes — erythematotelangiectatic (subtype 1), papulopustular (2), phymatous (3), and ocular (4)⁶ — with the severity of each subtype graded as 1 (mild), 2 (moderate), or 3 (severe).⁷ The psychological, social, and occupational effects of the disease on the patient should also be assessed and factored into treatment decisions.

Systemic or topical antibiotics, or both, are the mainstays of therapy for subtype 2 rosacea. On the basis of an analysis that pooled data from two randomized trials, van Zuuren and colleagues concluded that there was strong evidence of the efficacy of topical metronidazole and azelaic acid cream.²⁶ Sixty-eight of 90 patients (76 percent) treated with topical metronidazole for eight or nine weeks considered their rosacea to be improved, as compared with 32 of 84 patients (38 percent) in the placebo group.²⁶ Significant reductions in the number of inflammatory lesions and in erythema were reported in two large placebo-controlled, double-blind studies of a 15 percent azelaic acid gel applied twice daily.

Oral isotretinoin in low doses has been reported to be effective in the control of rosacea that was otherwise resistant to treatment, but the ocular and cutaneous drying effects of this agent are poorly tolerated, and its potential for serious adverse effects (including teratogenic effects) contradicts its use in routine care. Topical tretinoin has been reported to be as effective as oral isotretinoin after 16 weeks of treatment³⁶ and may be helpful in the treatment of patients with papulopustular rosacea who also have oily skin.

Data from randomized trials of therapies for rhinophyma and long-term follow-up studies of recurrence rates are lacking. Clinical experience suggests that grades 2 and 3 rhinophyma respond well, at least initially, to surgical excision, electrosurgery, or carbon

dioxide–laser therapy. A case series of 30 patients who were treated with carbon dioxide lasers and followed for one to three years showed good cosmetic results in almost all the patients.

Artificial tears, eyelid hygiene (i.e., cleaning the lids with warm water twice daily), fucidic acid, and metronidazole gel applied to lid margins are treatments that are frequently used to treat mild ocular rosacea. Systemic antibiotics are often additionally required for grade-2-to-3 disease.

Anecdotal reports have suggested that *Cucumis sativus* (cucumber), applied in a cooled yogurt paste, is helpful in reducing facial edema of rosacea that is otherwise resistant to treatment³⁸ and that facial massage involving rotatory movements of the fingers from the central to the peripheral face may improve papulopustular and edematous skin changes.³⁹ However, data that support the effectiveness of either of these treatments are lacking.

<http://content.nejm.org/cgi/content/full/352/8/793>

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Regulation Ammendments Proposed

Two new contact lens-related amendments have been introduced, one in the House and the other in the Senate. H.R. 371 and S. 172 amends the “Federal Food, Drug, and Cosmetic Act” to recognize and regulate both corrective and non-corrective contact lenses as medical devices, regardless of their intended use.

“The unsupervised, unregulated and unmonitored use of contact lenses is a recipe for disaster,” said Thomas L. Steinemann, MD, a member of the American Academy of Ophthalmology and associate professor of ophthalmology at Case Western Reserve University. Dr. Steinemann authored a case report of six patients treated for complications related to these lenses that appeared in the October 2003 issue of *Eye & Contact Lens*. Two of his patients developed blinding complications, requiring lengthy hospital stays. One 14-year-old patient needed a corneal transplant after wearing cosmetic lenses without the supervision of an eye care professional; the other patient remains legally blind. Dr. Steinemann recently documented another 11 cases, and three of those patients developed blinding complications requiring hospitalization. Dr. Steinemann presented these findings earlier this month at a meeting of the Contact Lens Association of Ophthalmologists.

There is nationwide concern over this issue. Florida recently declared it a felony to sell any contact lens without a prescription. The specifics of the bills can be read below:

SECTION 1. FINDINGS.

Congress finds as follows:

- (1) All contact lenses have significant effects on the eye and pose serious potential health risks if improperly manufactured or used without appropriate involvement of a qualified eye care professional.
- (2) Most contact lenses currently marketed in the United States, including certain plano and decorative contact lenses, have been

approved as medical devices pursuant to premarket approval applications or cleared pursuant to premarket notifications by the Food and Drug Administration ('FDA').

(3) FDA has asserted medical device jurisdiction over most corrective and noncorrective contact lenses as medical devices currently marketed in the United States, including certain plano and decorative contact lenses, so as to require approval pursuant to premarket approval applications or clearance pursuant to premarket notifications.

(4) All contact lenses can present risks if used without the supervision of a qualified eye care professional. Eye injuries in children and other consumers have been reported for contact lenses that are regulated by FDA as medical devices primarily when used without professional involvement, and noncorrective contact lenses sold without approval or clearance as medical devices have caused eye injuries in children.

SEC. 2. REGULATION OF CERTAIN ARTICLES AS MEDICAL DEVICES.

Section 520 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360j) is amended by adding at the end the following:

'Regulation of Contact Lens as Devices

`(n)(1) All contact lenses shall be deemed to be devices under section 201(h).

`(2) Paragraph 1 shall not be construed as having any legal effect on any article that is not described in that paragraph.'

<http://www.aao.org/news/release/20050127.cfm>

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Researchers Find Link to Polar Cataracts

British authors recently identified three large genetically unrelated families with an identical 17 base pair duplication mutation in exon 4 of the PITX3 gene. In all three families, an identical 17 base pair duplication mutation in PITX3 was identified which co-segregated with disease status in the family. All affected individuals had bilateral progressive posterior polar cataracts. In one family, posterior polar cataract was the only clinical abnormality but in the other two families, one of 10 affected individuals and four of 11 affected individuals also had anterior segment mesenchymal dysgenesis (ASMD).

<http://bjo.bmjournals.com/cgi/content/abstract/89/2/138>

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Crushed Optic Nerve Grows

Scientists successfully grew the optic nerves of mice following optic nerve injury. A team led by Dong Feng Chen, at the Schepens Eye Research Institute in Boston, combined two genetic modifications to regrow the optic nerve after it was damaged. First they turned on a gene called BCL-2, which promotes growth and regeneration of the optic nerve in young mice. This gene is normally turned off shortly before birth. They then bred those animals with other mice carrying genetic mutations that reduce scar tissue in injured nerves.

The researchers crushed the optic nerves shortly after birth, and found that in young mice - less than 14 days old - between 40% and 70% of the injured optic nerve fibres regrew to reach their target destinations in the brain. No regrowth was seen in injured mice without the genetic modifications. However, the approach did not work on mice more than two weeks old.

<http://www.newscientist.com/article.ns?id=dn7061>

<http://jcs.biologists.org/cgi/content/full/118/5/863>

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2005 Dietary Guidelines Released

Nearly two-thirds of Americans are overweight or obese, and more than half get too little physical activity, according to the 2005 *Dietary Guidelines* announced by HHS Secretary Tommy G. Thompson and Agriculture Secretary Ann M. Veneman.

The sixth edition of *Dietary Guidelines for Americans* places stronger emphasis on reducing calorie consumption and increasing physical activity.

The *Dietary Guidelines*, based on the latest scientific information including medical knowledge, provides authoritative advice for people two years and older about how proper dietary habits can promote health and reduce risk for major chronic diseases. The 2005 *Dietary Guidelines* were prepared in three stages. In the first, a 13-member Dietary Guidelines Advisory Committee prepared a report based on the best available science. In the second stage, government scientists and officials developed the *Dietary Guidelines* after reviewing the advisory committee's report and agency and public comments. In the third stage, experts worked to translate the *Dietary Guidelines* into meaningful messages for the public and educators.

<http://www.hhs.gov/news/press/2005pres/20050112.html>

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Congestive Heart Failure Risk Increased

Retinopathy is an independent predictor of CHF, even in persons without preexisting coronary heart disease, diabetes, or hypertension. This suggests that microvascular disease may play an important role in the development of heart failure in the general population. Some asymptomatic persons with retinopathy on an ophthalmologic examination may benefit from further assessment of CHF risk.

Researchers participants with retinopathy had a higher incidence of CHF compared with those without retinopathy (15.1% vs 4.8%, $P < .001$). After controlling for age, sex, race, preexisting coronary heart disease, mean arterial blood pressure, diabetes, glucose level, cholesterol level, smoking, body mass index, and study site, the presence of retinopathy was associated with a 2-fold higher risk of CHF (relative risk, 1.96; 95% confidence interval, 1.51-2.54). Among participants without preexisting coronary heart disease, diabetes, or hypertension, retinopathy was associated with a 3-fold higher risk of CHF (relative risk, 2.98; 95% confidence interval, 1.50-5.92).

<http://jama.ama-assn.org/cgi/content/abstract/293/1/63>

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Billed Per Procedure

Code 67820, correction of trichiasis using forceps, is intended to be reported per procedure, not per eyelash or per eyelid, according to the CPT Assistant. Remember, the regulations only apply to procedures performed on the same day, so if possible, scheduling the other side for a different day will facilitate payment.

<http://www.eyeworld.org/article.php?sid=2344>

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Medicare Updates 2005

Ophthalmic ultrasound. The ophthalmic ultrasound codes were revised to distinguish between B-scans that merely have a superimposed A-scan on the screen and a true diagnostic A-scan that is used for measurement and evaluation of ocular pathology such as intraocular tumors.

The new/revised codes now read:

76510 Ophthalmic ultrasound, diagnostic: B-scan and quantitative A-scan per formed during the same patient encounter

76511 quantitative A-scan only

76512 B-scan (with or without superimposed non-quantitative A-scan)

Please make sure you understand when all the ultrasound codes should be billed. Diagnostic quantitative A-scan is a special test performed in a few centers primarily by those that specialize in ultrasonography. It is usually used in evaluating intraocular lesions and a few other problematic diagnoses. It is **not** to be used when an IOL measurement and B-scan are both performed on the same day. There has already been a lot of confusing advice and interpretations on this. The new code emerged from some bundling issues that recurred, but its utilization should be limited to when those specific services are performed.

Category III (emerging technology) codes

0065 T Ocular photoscreening, with interpretation and report, bilateral.

(Do not report 0065T in conjunction with 99172 or 99173)

Please note that this is a screening code and is not to be used in conjunction with the Eye Codes or Evaluation and Management (E&M) Codes when an ophthalmic examination is performed by an eye care provider. Another new Category III code that you might want to take a look at is:

0074T Online evaluation & management service, per encounter, provided by a physician, using the Internet or similar electronic communications network, in response to a patient's request, established patient.

There is further explanation of what constitutes an Online Medical Evaluation and it makes for interesting reading.

Remember, for Medicare and all other insurers the granting of a Category III code does not equate to payment—the decision whether or not to pay for a service is the prerogative of the individual insurer.

<http://www.eyeworld.org/article.php?sid=2307>

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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.**

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Winter	December 15	January 1
Spring	March 15	April 1
Summer	June 15	July 1
Fall	September 15	October 1

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