

Inside Retina

Volume IX

December 2012

News from the California Retina Research Foundation

REFLECTIONS: 30 DAYS IN THE CENTRAL VALLEY

My new position with California Retina Consultants has been fantastic and my wife, Raji, and I are excited to be starting our lives and new suburban lifestyle in Bakersfield. I'm no stranger to the Valley, having grown up in the Central Valley. I had left California 10 years ago for medical school and the start of a career that would lead me through Chicago, Portland and Cleveland.

Coming from a tertiary referral center like the Cleveland Clinic, I treated patients with a wide variety of medical and surgical conditions from more common entities like age related macular degeneration to rare disease states like paraneoplastic vitelliform retinopathy. Perhaps the most surprising thing about my time in Bakersfield so far is that the level of pathology is strikingly similar to what I saw in Cleveland. In fact, at a recent meeting I planned on presenting interesting cases compiled from my fellowship, but after having spent just 30 days in the Valley I managed to accumulate a great variety of local cases, which I presented instead. I have truly enjoyed my recent move to California and I look forward to what lies ahead.



Dr. Dilsher Dhoot with his wife Raji.

CRC ANNUAL MEETING EDUCATES HUNDREDS OF LOCAL EYE CARE PROFESSIONALS KEYNOTE SPEAKERS: DRS. SUSAN AND NEIL BRESSLER



Faculty members and guest speakers at 11th Annual CRC Educational Meeting.

Now in its 11th year, the California Retina Consultants' Annual Education Meeting has become one of the leading local sources for eye care professionals to receive the latest information on new technologies and cutting edge research in treating a variety of vitreoretinal diseases. And the meeting this past October 20 did not disappoint, featuring the husband and wife retinal specialists, Drs. Susan and Neil Bressler as our keynote speakers.

Dr. Susan Bressler is the Julia G. Levy Professor of Ophthalmology at the Wilmer Eye Institute, Johns Hopkins School of Medicine. She is the recipient of a Senior Achievement Award from the American Academy of Ophthalmology and the Gertrude Pyron Award for Lifetime Achievement of Outstanding Research.

Dr. Neil Bressler is the James P. Gills Professor of Ophthalmology and Chief of the Retina Division at the Wilmer Eye Institute, Johns Hopkins School of Medicine, where he has been on staff for nearly 25 years. The recipient of numerous prestigious awards and accolades, Bressler is a highly sought after speaker, lecturing worldwide on the latest advancements in common retinal diseases. Dr. Neil Bressler currently serves as chair for the Diabetic Retinopathy Clinical Research Network's Operations Center, the National Eye Institute's Data and Safety Monitoring Committee and

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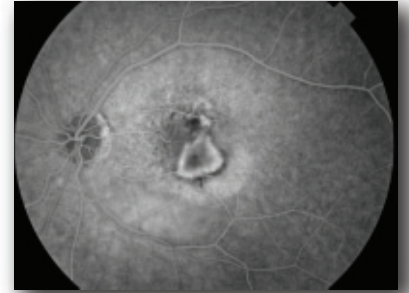
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CLINICAL RESEARCH UPDATE

AGE-RELATED MACULAR DEGENERATION

Retina specialists now have multiple options to improve vision in patients with wet macular degeneration. But despite these advancements, the frequency of injections continues to pose a challenge to physicians and patients. Most patients require re-treatment every 4-6 weeks, which can create a burden to care providers, patients and physicians. In addition, some of the medications employed, such as intravitreal anti-vegf injections, are not effective in all patients, so there is also room to improve overall efficacy.

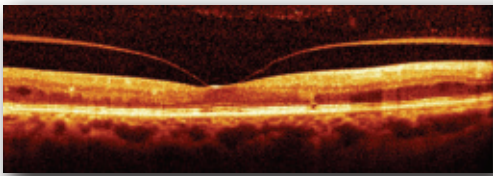
To address these shortcomings, California Retina Consultants and numerous companies are working on what we hope to be the next generation of treatments for wet AMD. Genentech, a member of the Roche group, is developing a long-acting drug delivery device that can provide sustained drug delivery in patients with retinal disease. The drug port can be refilled with ranibizumab for continuous delivery of small amounts of drug for months at a time. Ohr Pharmaceuticals has developed a topical eye drop solution that, when combined with ranibizumab, may reduce the frequency of injections over time compared to ranibizumab alone. In addition, Allergan Inc., is currently developing a designed ankyrin repeat protein product (DARPin), that is intended to inhibit all relevant forms of vascular endothelial growth factor-alpha for the treatment of wet AMD. The investigational compound has demonstrated high efficacy and stability in the eye according to results from phase I and phase II clinical trials. California Retina Consultants continues to lead the way in developing innovative therapies for AMD.



Extensive research has advanced our understanding about the development and progression of dry AMD as well. At the University of California, Santa Barbara, top scientists from the U.S. and Britain have come together to open a state-of-the art research lab on campus. Researchers are developing stem cells from skin, called induced pluripotent cells, which could replace the use of embryonic stem cells to treat eye conditions like macular degeneration, diabetic retinopathy and retinitis pigmentosa.

CentraSight Inc., has developed a monocular telescopic implant for patients with end-stage AMD which received FDA approval last year. With the implant, images are magnified to reduce the impact of the central blind spot that is characteristic of patients with advanced dry AMD. California Retina Consultants is currently evaluating patients for consideration of this telescope.

VITREOMACULAR TRACTION



A new medication, called Jetrea (ocriplasmin, ThromboGenics), has been approved by the FDA for symptomatic vitreomacular adhesion (VMA), the first non-surgical treatment for VMA. Symptomatic VMA is a condition resulting from the breakdown of the vitreous (the jelly-like substance that fills the inside of the eye). When the vitreous moves away from the retina, small sections of the vitreous adhere too strongly to the retina and cause areas of traction, tugging or pulling on the retina which can result in vision loss.

Jetrea, an enzyme that dissolves the proteins that cause VMA, is injected into the affected eye and designed to separate the vitreous from the retina allowing for the retina to regain its normal position along the back of the eye. The California Retina Consultants and Research Foundation were investigators in this novel trial. Dr Nasir, an investigator, stated, "We thank our patients who participated in this study, as it has greatly advanced our management options for patients with symptomatic vitreomacular adhesion."

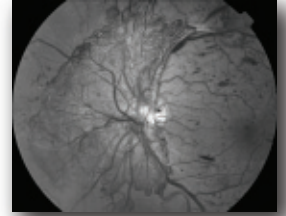
DIABETIC RETINOPATHY

Laser, intravitreal steroid and intravitreal anti-vegf injections are commonly used treatments in the clinical setting for diabetic macular edema (DME). Ranibizumab 0.3 mg received FDA approval in August 2012 adding to the treatment options available for patients with DME. Other trials, including the ongoing phase III trials by Regeneron Pharmaceuticals, Inc., will continue to broaden the treatment choices for patients. However, some patients continue to lose vision despite these therapies.

The California Retina Consultants is part of a large network of retina physicians/researchers that conduct cutting-edge clinical trials for patients with diabetic eye-related conditions called the Diabetic Retinopathy Clinical Research Network based in Tampa,

Florida. Established in 2002 over 109 sites and 320 physicians participate in the network including multiple California Retina Consultants offices. The network is funded by the National Eye Institute, which is a part of the National Institute of Health (NIH), a government branch that funds medical research. Through this network, California Retina Consultants will investigate new pharmacotherapies as well as the role of combination therapies in patients with DME.

In a separate investigator-sponsored trial, Dr. Dante Pieramici is leading the research to evaluate the use of various doses of ranibizumab (Lucentis) in diabetic individuals with incomplete response to bevacizumab (Avastin) injections. The six-month interim data analysis suggests that in some patients there was more complete resolution of diabetic macular edema with intravitreal ranibizumab injections. The study highlights the importance of customizing care for our patients with diabetic macular edema. The results of this study were presented at the American Society of Retina Specialists' annual meeting earlier this year.

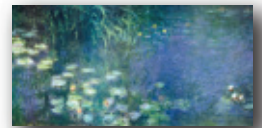


Pharmacokinetics includes the study of the absorption, distribution, metabolism and excretion of an administered drug. To date, few studies have compared the pharmacokinetics of medications commonly used to treat retinal diseases. Dr. Robert Avery and his colleagues are conducting exploratory analyses to compare the pharmacokinetics of ranibizumab, aflibercept and bevacizumab in patients with macular degeneration, diabetic retinopathy or retinal vein occlusion. Data from this trial may help isolate the similarities and differences in the pharmacokinetics of these medications and improve treatment for patients with various retinal diseases.

BAKERSFIELD EDUCATIONAL MEETING MIXES ART AND VISION



Edgar Degas, one of the founders of Impressionism, may in fact have a visual disorder to thank for his greatness. Similarly, fellow Impressionist Claude Monet could attribute his famed blurred water lilies to cataracts, while Vincent van Gogh can credit xanthopsia, an eye disturbance that distorts vision, for the yellow sunflowers that dominated many of his paintings. These artists represent a handful of case studies that Dr. Alessandro Castellarin presented this past summer at the Annual Retina Imaging Conference in Bakersfield. The conference, hosted by



California Retina Consultants, attracted more than 70 ophthalmologists and optometrists who also heard presentations by Drs. Pieramici, See, Steinle and Dhoot. Topics discussed included macular degeneration, diabetic retinopathy, ocular tumors, traumatic eye injuries, and uveitis. This successful educational event was coordinated by California Retina Consultants' event coordinator, Michelle Villanueva, and received sponsorship from Genentech, Regeneron, EVOA, and Bausch and Lomb.

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“On behalf of the California Retina Research Foundation, we would like to express our deepest gratitude to all of our donors for their continuing generosity and unwavering commitment to finding a cure for blinding retinal diseases . We are extremely proud to serve the communities across the Central Coast and Central Valley”.

- The Doctors and Staff of the CRRF

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California Retina Research Foundation (CRRF)

The California Retina Research Foundation is a non-profit organization based in Santa Barbara devoted to the prevention of blindness through the advancement of research in vitreoretinal diseases. The CRRF promotes collaborative and innovative research that demonstrates the potential for establishing effective new preventions, treatments and cures for many blinding retinal diseases. The CRRF is funded through the generosity of interested individuals and tax deductible donations can be submitted to California Retina Research Foundation at 515 E. Micheltorena Street, Suite G, Santa Barbara, CA 93103.

Phone: (805) 884-5185. email: crrf@californiaretina.com

NEW VISALIA OFFICE OPENS



California Retina Consultants' newest office in Visalia between S. Akers and W. Cypress streets is currently accepting new patients.

California Retina Consultants continues to expand in the Central Coast and Central Valley, opening a new office in Visalia this past September. This marks the practice's tenth location. "This is an exciting time at California Retina Consultants; we are thrilled to move into our new facility, which enables us to provide patients living in Visalia and surrounding areas with excellent retina care," stated Dr. Dilsher Dhoot, who joined California Retina Consultants to better serve patients in Visalia and Bakersfield.

The new medical office is nearly 3,500 square feet and features seven diagnostic and treatment rooms, three work-up rooms, and a spacious patient reception area. The office also features a certified visual acuity lane for clinical research studies. Patients living in Visalia will now have more convenient access to the latest technology and treatments for a variety of retinal diseases.

"We are excited to be able to work more closely with our eye-care colleagues in the Visalia area, performing diagnostic testing and surgical treatments locally," remarked Dr. Castellarin. "Since we've been in the area for over 15 years, we've cared for many patients traveling from Visalia, Porterville and Tulare to our Bakersfield office so we are delighted that these patients now have California Retina Consultants in their backyard."

New patients are always welcome and may call our friendly staff to set up an appointment at (559) 627-5200. The office is located at 5404 West Cypress Avenue, Suite 101.

EYE SIGHTINGS

- Dr. Avery and Dr. Pieramici were named top doctors in their field. Through a peer-nomination process, fellow physicians named Drs. Avery and Pieramici among the best doctors in Southern California and the Nation.
- Dr Avery presented research at the Macula Society in Jerusalem, Club Vit in Banff Canada, the Association for Research in Vision and Ophthalmology in Ft. Lauderdale, the American Society of Retina Specialists in Las Vegas, Surgical Retina Study Group in Turks and Caicos, and the American Academy of Ophthalmology in Chicago. He also gave the Garee Thomas Memorial lecture in LA, and attended the Bascom Palmer and Hawaiian Eye meetings.
- Dr. Pieramici was a guest speaker for the Yale Eye Center 50th Anniversary in New Haven, Connecticut. He was an international guest presenter for the 31st Retina Society Reunion in Mexico City, Mexico and the Macula Society in Jerusalem. Dr. Pieramici presented recent California Retina Consultants research at the Association for Research in Vision and Ophthalmology (ARVO) meeting in Ft. Lauderdale, the American Society of Retina Specialists (ASRS) meeting in Las Vegas, and at the recent American Academy of Ophthalmology (AAO) meeting in Chicago.
- Dr. Nasir attended the Hawaiian Eye in Maui; World Ophthalmology Congress in Abu Dhabi, United Arab Emirates; and ASRS in Las Vegas.
- Dr. Castellarin presented California Retina Consultant's research at the AAO meeting in Chicago. He also attended the Aspen Retina Detachment Society in Aspen and presented cases to medical residents in Verona, Italy.

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Dr. Dante Pieramici and Ron Werft, President and CEO of Cottage Health Systems hosted CNN resident physician Dr. Sanjay Gupta at UCSB Campbell Hall. Gupta spoke at Campbell Hall as part of the UCSB Arts & Lectures series.

Photo credit: Monie Photography



Left to right: Esther Pantoja, Yecenia Benitez, Dr. Robert See, Alison Ratliff, Laura Caballero, Tamara Banville, Andrea Guion and Monica Garcia are all smiles after the Santa Clarita 5K Run.

California Retina Research Foundation

CRC ANNUAL MEETING

Continued from front page

the Food and Drug Administration Ophthalmic Devices Panel.

“It’s nice to be able to invite our mentors, colleagues and good friends to beautiful Santa Barbara,” said Dr. Avery of the team with whom he worked during medical school and residency training in Baltimore.

California Retina Consultants is delighted to have these leading experts address our meeting this year where the latest advancements in treatments and diagnostic tools for retinal eye diseases were discussed. The next California Retina Consultants Annual Education Meeting will feature renowned retina physician Peter Kaiser, M.D. from the Cleveland Clinic. The date is tentatively scheduled for October 5, 2013. Registration opens to ophthalmologists, optometrists and other eye-care professionals in September.

EYE SIGHTINGS

Continued from page 5

- Dr. Couvillion attended the Bascom Palmer 50th Anniversary Scientific Meeting in Miami. He presented new clinical trial data on diabetic retinopathy in Houston and New Orleans on behalf of Genentech.
- Dr. Dhoot attended the Retinal Physician Symposium in Miami; the ASRS meeting in Las Vegas; and the Advanced Vitreoretinal Techniques and Technology meeting in Chicago.
- Dr. Steinle attended the ASRS Meeting in Las Vegas and the Cleveland Clinic Retina Symposium in Cleveland, and the OCTIPER OCT Course in Las Vegas.
- California Retina Consultants welcomes its newest Clinical Research Coordinator, Sarah Fishbein, to the practice. Originally from Pismo Beach, Sarah graduated from UC Santa Barbara with a degree in biopsychology.

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