



Weill Cornell Medical College

**Department of
Ophthalmology**

Annual Alumni Meeting

Friday, May 13, 2011

George L. Spaeth, MD

John Milton McLean Lecturer

Course Directors

R.V. Paul Chan, MD

St. Giles Assistant Professor of Pediatric Retina
And Assistant Professor of Ophthalmology

Donald J. D'Amico, MD

The Betty Neuwirth Lee and Chilly Professor
in Stem Cell Research and Chairman

1305 York Avenue, 2nd Floor
Selma Ruben Conference Center
New York, NY 10021

PROGRAM AGENDA

Time	Topic	Presenter
7:30am	Registration and Breakfast	
8:15am	Opening Remarks	Donald J. D'Amico, MD
8:30am	Color Blindness	Naomi Hayashi, MD (Res '06)
8:50am	Peripheral Retinal Ischemia, as Evaluated by Ultra-Widefield Fluorescein Angiography, is Associated with Macular Edema in Patients with Diabetic Retinopathy	Matthew Wessel, MD (Res '11, Fel '13)
9:05am	The Pre-operative Work Up of the Refractive IOL Patient	J. Kevin Belville, MD (Res '86)
9:25am	Mast Cells Mediate Laser-Induced Choroidal Neovascularization Through Fibroblast Activation	Dimitra Skondra, MD (Res '11)
9:40am	Digital Ultrasound And Optical Coherence Tomography-guided Measurement Of Choroidal Perfusion And Thickness Following Systemic Sildenafil	David Kim, MD (Res '11)
10:00am	Break	
10:20am	CSTIP* vs. CSTIP and Intravitreal Ranibizumab in the Treatment of Small and Medium-size Choroidal Melanomas	Peter Liggett, MD (Res '79)
10:40am	Three Dimensional "Cast" of the Choroid Using Enhanced Depth Optical Coherence Tomography	Ryan St. Clair, MD (Res '12)
10:55am	Pop & Prechop Surgical Technique	Christopher Starr, MD Brandon Rodriguez, MD (Fel '11)
11:15am	Incidence Of Post-operative Tearing And Complications After Endoscopic Versus External Approach Dacryocystorhinostomy	Anne Barmettler, MD (Res '12)
11:30am	Education Update	Program Directors
12noon	Lunch at Griffis Faculty Club	
1:00pm	Department Tour, Group Photo	
2:00pm	Adjunctive Re-dilation For Early Cicatrization After Punctoplasty	Claire Fraser, MD (Res '12)
2:15pm	Dyson Lab Update	Mark Rosenblatt, MD, PhD
2:30pm	In Memory: William C. Cooper, MD	Sangwoo Lee, MD (Res '02, Fel '03)
2:45pm	Ask the Expert	George L. Spaeth, MD
3:30pm	Break	
4:00pm	What sort of a person are you - a witch, barber, surgeon, technician, physician, healer? Or something else?	George L. Spaeth, MD



Weill Cornell Medical College

We are delighted to welcome you to our annual WCMC Department of Ophthalmology Alumni Day. This year's program will be highlighted by the presentation of the John Milton Mclean Medal to Dr. George L. Spaeth.

Over the years, our department has had a strong tradition of training future ophthalmologists and vision researchers. Previous faculty and trainees have gone on to be academic leaders and prominent clinician scientists. Therefore, we alumni would like to recognize our young researchers and clinician scientists with the introduction of the WCMC Department of Ophthalmology Alumni Association resident research award for excellence in Research and Scholarship.

The Weill Cornell Medical College Department of Ophthalmology Alumni Association was developed to connect alumni to the Department and to each other. Its mission is to support the Department's commitment to teaching, research, clinical care, and public service. All alumni are encouraged to remain involved as the Alumni Association consists of all current and previous WCMC Department of Ophthalmology faculty and graduates of the residency and fellowship (research and clinical) programs.

The Alumni Association steering committee consists of both current faculty and previous graduates of the program who continue to be actively involved with resident and fellow education. Throughout the year, alumni are notified by email or mail of the grand rounds schedule, special lectures, annual alumni events, fellow and resident graduation invitations, and departmental updates.

We are very happy that you are able to join us this year and we look forward to your continued support of the department and our future alumni through involvement with continuing education programs as well as via philanthropic support for residency, fellowship, and alumni activities.

If you would like to be involved in the alumni association, please contact Anna Marquardt (anm2105@med.cornell.edu) for more information.

The John Milton McLean Medal

John Milton McLean was Professor and Chairman of the Division of Ophthalmology at The New York Hospital-Cornell University Medical College from 1939 to 1968. He initiated the residency training program at The New York Hospital with a combined full-time and voluntary staff.

Among notable departmental achievements during this period were the establishment of the first Eye Bank (later moved to Manhattan Eye, Ear and Throat Hospital), the introduction of steroids in the treatment of ophthalmic disease as well as cryopexy and numerous other innovations in the treatment of retinal disease.

Dr. McLean was universally recognized as one of the leading educators of his era. The John Milton McLean Chair for the Department of Ophthalmology was established in 1979 and grateful patients and alumni established the McLean Medal in 1981. It is awarded annually by the alumni to an ophthalmologist who has made significant contributions in teaching, research and clinical practice. This year, we honor George L. Spaeth, MD, for his work in the field of ophthalmology.



Past McLean Medal Recipients

Edward W.D. Norton, MD	1981	Bartly J. Mondino, MD	1997
A. Edward Maumenee, MD	1982	David Guyton, M.D.	1998
A. Gerald DeVoe, MD	1983	Frederick Jakobiec, MD	1999
Harvey A. Lincoff, MD	1984	W. Richard Green, MD	2000
Edward A. Dunlap, MD	1985	Philip Zweifach, MD	2001
Phillip Knapp, MD	1986	David K. Berler, MD	2002
David G. Cogan, MD	1987	Stuart I. Brown, MD	2003
Lorenz E. Zimmerman, MD	1988	Joan W. Miller, MD	2004
D. Jackson Coleman, MD	1989	Mario Stirpe, M.D.	2005
John T. Flynn, MD	1990	Richard Muchnick, MD	2006
Robert M. Ellsworth, MD	1991	Donald J. D'Amico, MD	2007
Stanley Chang, MD	1993	Carmen A. Puliafito, MD	2008
Richard Troutman, M.D.	1994	C. Stephen Foster, MD	2009
Victor T. Curtin, M.D.	1995	<i>Postponed</i>	2010
Paul C. Wetzig, M.D.	1996	George L. Spaeth, MD	2011

George L. Spaeth, MD



George L. Spaeth MD is the Louis J. Esposito Research Professor of Ophthalmology at Wills Eye Institute/Thomas Jefferson Medical College. He is a luminary figure and pioneer in the field of glaucoma and his tremendous body of work has led him to become one of the most recognizable names in ophthalmology worldwide. Despite a multitude of accomplishments, Dr. Spaeth has maintained an unwavering dedication to caring for his patients in the truest sense of the word, and we are delighted to award him the John Milton McLean Medal of Weill Cornell Medical College.

Dr. Spaeth was born in Philadelphia, Pennsylvania, and later attended Yale College, graduating magna cum laude in 1954 with a degree in History. He continued at Harvard Medical School from 1954 to 1959 and subsequently completed his internship in internal medicine at University Hospital in Ann Arbor, Michigan in 1960. While at Harvard, he married his wife Ann Ward on May 17, 1958. After the completion of his ophthalmology residency at the Wills Eye Institute in 1963, he was appointed as a clinical fellow in glaucoma at the National Institutes of Health.

For his first three years of practice, Dr. Spaeth worked with his father, Edmund B. Spaeth, MD, who was an internationally recognized eye surgeon whose practice attracted some of the most complex cases from around the world. In his obituary published in the British Journal of Ophthalmology, Dr.

Edmund Spaeth was acknowledged for his “enthusiasm, fearlessness, honesty, and capacity for hard work,” attributes that are equally applicable to his son George.

After working with his father, Dr. Spaeth returned to the Wills Eye Hospital in 1968 where he was appointed as the Director of the Glaucoma Service, a position that he maintained for almost 40 years. Throughout his career, Dr. Spaeth has achieved some truly fantastic things. It was Dr. Spaeth who first reported homocysteinuria and described one of its causes (cystathionine synthase deficiency) and its successful treatment with Pyridoxine (vitamin B-6). While his research interests are focused on the history of glaucoma, the anterior chamber angle, the visual field and the optic nerve, there are few areas of glaucoma that have not been touched by Dr. Spaeth’s insights. His recent work on glaucoma and quality of life highlights his continued effort to close the understanding gap between the clinician’s diagnosis of glaucoma and the patient’s experience of this disease. He has written over 400 peer-reviewed publications, 100 book chapters and 18 books. Dr. Spaeth has been invited to write well over 200 editorials for major ophthalmic publications because his colleagues highly value his ability to evaluate, synthesize, and simplify information. In 2000, Dr. Spaeth received the American Academy of Ophthalmology’s Lifetime Achievement Award and just last year he received the Weisenfeld Award from the Association of Research and Vision in Ophthalmology for his work in gonioscopy and ophthalmic education.

Dr. Spaeth has trained two generations of ophthalmic physicians and his fellowship has produced glaucomatologists who are themselves tremendous assets and leaders to the glaucoma community. His fellows can be found in 34 countries on six continents and include such physicians as Joseph Caprioli, Roger Hitchings, Rohit Varma, Carlo Traverso, L. Jay Katz, Ronald Fellman, Marlene Moster, Mark Sherwood, Thomas Samuelson, Jamie Brandt and Richard Wilson.

Dr. Spaeth lives his life in service to those around him. He has served our country in the military. He has served on numerous committees for the American Academy of Ophthalmology, the American Medical Association and the National Eye Institute. Dr. Spaeth was a founding member and the first President of the American Glaucoma Society. He has served as the chair of the Ethics committee at the Wills Eye Hospital and for the American Academy of Ophthalmology and is widely sought to lecture on the topic of ethics. Dr. Spaeth is a servant to his communities around him and beyond our ophthalmic world, from Chestnut Hill, Pennsylvania to Squirrel Island, Maine, where he is the President of the Grandfathers’ Club.

Dr. Spaeth is a teacher who has taught his colleagues how to better care for their glaucoma patients. His efforts have put patient quality of life at the center of the care paradigm and his teachings have informed his colleagues how to best care for the patient, not just for his or her disease. Finally, Dr. Spaeth believes in taking the time to teach our patients about their condition, and to hold their hand and look them in the eye while doing so.

We are deeply honored to have George L. Spaeth, MD, as the 2011 John Milton McLean Medal Lecturer.

— Nathan M. Radcliffe, MD

Alumni Speakers



Naomi Hayashi, MD received her undergraduate degree from Princeton University and her medical degree from Cornell University Medical College. She is currently an attending in ophthalmology in private practice at Mitsugu Shimmyo, MD PC and affiliated with New York Eye and Ear Infirmary and New York University.



J. Kevin Belville, M.D., a Nebraska native, obtained both his bachelors and medical degrees from the University of Nebraska, and completed his Ophthalmology Residency as Chief Resident at Cornell Medical Center. He then traveled with the international non-profit relief organization ORBIS and worked with many of the best Ophthalmologists in the world.

He is certified in LASIK, PRK, and Conductive Keratoplasty (CK). Dr. Belville has served as the Refractive Surgery Director for Kaiser Permanente in Los Angeles and teaches other doctors his techniques as an Assistant Clinical Professor of Ophthalmology at UCLA / Jules Stein Eye Institute. He also has served as medical director for one of Colorado's premier Laser Vision Centers and as a civilian staff ophthalmologist at the United States Air Force Academy in Colorado Springs.

Dr. Belville has performed over 30,000 successful surgical procedures, which include: Refractive, Cataract, Glaucoma, Corneal, and many others. All of these make up a wealth of experience in Comprehensive Eye Care and lectures nationally on many of these procedures that he is performing .



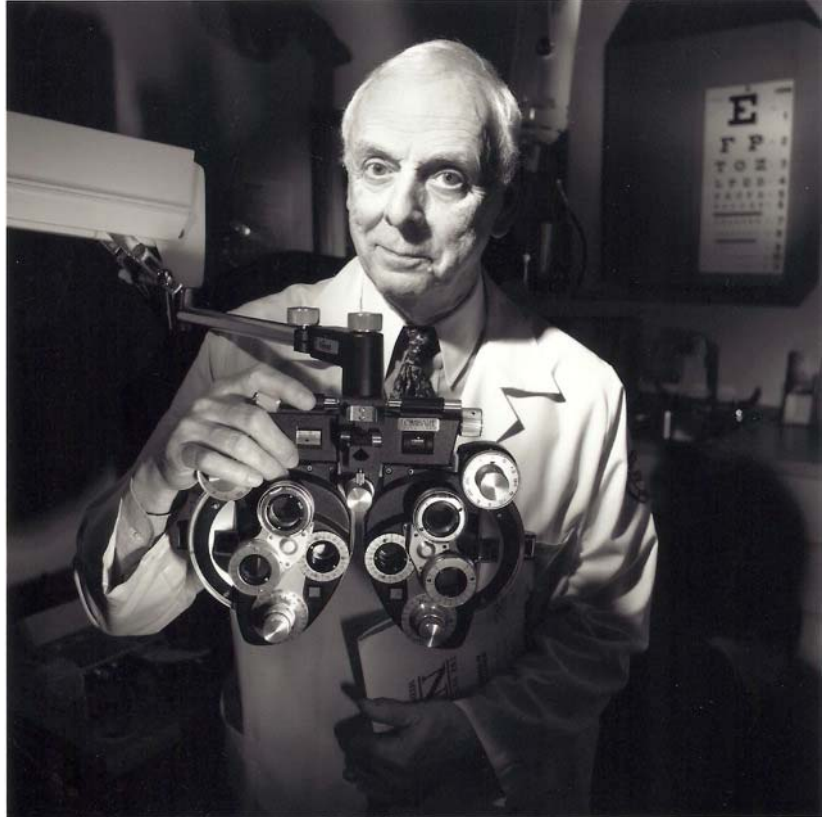
Peter E. Liggett, M.D. is a nationally recognized expert in the evaluation and treatment of retinal disease and injury. He is a clinical professor of ophthalmology at Cornell Medical Center. Dr. Liggett was a professor of ophthalmology at Yale University and director of the Retina/Vitreous Service and Ocular Oncology Department.

Prior to his appointment at Yale, Dr. Liggett was the director of the Ocular Oncology Service and Retina-Vitreous Fellowship program at the University of Southern California. Dr. Liggett has also taught at Johns Hopkins University, Georgetown University and the Doheny Eye Institute at USC.

Dr. Liggett received his medical degree from Columbia University. He completed his internal medicine and ophthalmology residencies at Cornell University Medical Center in New York City. He completed his vitreo-retinal surgery fellowship from the University of Southern California.

In Memory: William C. Cooper, MD

Dr. Cooper received his undergraduate degree from Franklin and Marshall College and his medical degree from Cornell University Medical College. He completed his internship at the University Hospitals of Cleveland and subsequently served in the United States Army Medical Corps as a Captain for two years in Kaiserslautern, Germany. Upon discharge from the military, he completed his residency in ophthalmology at the Edward S. Harkness Eye Institute, Columbia University.



After graduating from the residency program, Dr. Cooper joined the practice of Drs. Algeron Reese and Ira Snow Jones, one of the most renowned ocular oncology and plastics group in the country. He was truly a gifted plastic surgeon. He was also appointed as the Director of the Orbit and Plastics Clinic at the Edward S. Harkness Eye Institute from 1970-1984. Wishing to be more active in teaching,

he joined the staff at The New York Hospital-Cornell University Medical Center in 1984 as Professor of Clinical Ophthalmology. As a gifted scholar and clinician, he trained countless medical students and residents. He served as the Director of the Ophthalmology Residency program from 1991-1994 and was a member of the medical school admissions committee from 1984-2010.

In 1998, under the auspices of Dr. D. Jackson Coleman, Dr. Cooper started the ophthalmology division at New York Hospital Queens as a partner with The New York Hospital Department of Ophthalmology to incorporate residency training. In its first year of existence, the ophthalmology clinic was located in the basement of the hospital with one lane and one diagnostics room. In thanks to Dr. Cooper's tireless efforts, the ophthalmology program at New York Hospital Queens currently treats over 10,000 patients per year and contributes over 300 surgical cases for the Cornell Ophthalmology Residents. Dr. Cooper would often refer to the NYHQ project as his most challenging, yet most rewarding endeavor.

In memory of his lifelong passion for teaching, the William C. Cooper, M.D. Resident Education Fund for the NYHQ Eye Center has been established. Donations may be made via www.nyhq.org/ways_to_give.

Third-Year Resident Research Abstracts

Peripheral Retinal Ischemia, as Evaluated by Ultra-Widefield Fluorescein Angiography, is Associated with Macular Edema in Patients with Diabetic Retinopathy—Matthew M. Wessel

Purpose: To determine the relationship between peripheral retinal vascular nonperfusion and the presence of macular edema (ME) in patients with diabetic retinopathy (DR) using ultra-widefield fluorescein angiography (UWFA) imaging.

Methods: A retrospective review of 122 eyes of 70 treatment-naïve diabetic patients who underwent diagnostic UWFA using the Optos Optomap Panoramic 200A imaging system. Two independent, masked graders quantified the area of retinal ischemia using the UWFA images and Adobe software. Based on clinical examination, each patient was given a binary classification as either having ME or no ME. McNemar's Test and a two-sample test of proportions were used to determine the relationship between ME and ischemia for binary and proportional data, respectively. Linear and logistic models were constructed using generalized estimating equations to test relationships between independent variables, covariates and outcomes while controlling for inter-eye correlation, age, gender, hemoglobin A1c, mean arterial pressure, and dependence on insulin.

Results: 76 eyes (62%) exhibited areas of peripheral nonperfusion. There was a significant direct correlation between ME and peripheral ischemia as seen on UWFA ($p < 0.001$). Additionally, patients with retinal ischemia had a 3.75 times increased odds of having ME compared to those without ischemia (CI 1.26 to 11.13, $p < 0.02$).

Conclusions: Retinal ischemia is significantly correlated with ME in treatment-naïve patients with DR. UWFA is a useful tool for detecting peripheral vascular nonperfusion which may have direct implications in the diagnosis, follow-up, and treatment such as targeted peripheral photocoagulation.



Originally from New Orleans, Louisiana, **Matthew Wessel, MD** completed his undergraduate studies at Harvard College, followed by medical school at Columbia College of Physicians and Surgeons. A third-year resident at Weill Cornell Medical College, he will be remaining with the department after completing his residency as a vitreo-retinal fellow. He is a Saints fan, reef enthusiast, and championship sprinter.

Mast Cells Mediate Laser-Induced Choroidal Neovascularization Through Fibroblast Activation —Dimitra Skondra, MD

Introduction: The release of local mediators is largely thought to be responsible for the development of choroidal neovascularization (CNV). This process includes fibroblast (FB) proliferation and extracellular matrix deposition though the mechanism responsible for this is unknown. Mast cells (MC) are also associated with fibrosis but their role in CNV is not known. **We hypothesize that activation of resident MCs within the choroid during CNV produces mediators of fibrosis and plays a role in the underlying pathogenesis of the disease.**

Methods: CNV was induced in C57BL/6 mice by laser photocoagulation and eyes were collected at days 3 and 5 days post-laser treatment. MC and FB infiltration was evaluated by immunohistochemistry in cryosections. MCs were stained with avidin conjugated to fluorescein and FBs with an antibody against prolyl-4-hydroxylase, an enzyme involved in collagen production. To study MC mediators on FB proliferation and collagen synthesis isolated rodent FBs were grown to confluence and exposed to ANG II (100 nM) or histamine (1 μ M). FB counts were performed with a hemacytometer and culture media were assayed for hydroxyproline and pepsin-soluble collagen. Controlled release pumps (sustained delivery for 2 weeks) eluting either the MC stabilizer Cromolyn (treatment group) or saline (control group) were placed in C57BL/6 mice intraperitoneally 1 day prior to laser injury. Laser-induced choroidal neovascular membranes were assessed 2 weeks after laser injury for lesion size in FITC-dextran perfused choroidal flatmounts.

Results: MC infiltration of injury sites and surrounding retina was observed 5 days, but not 3 days, after laser application. MC infiltration seen at day 5 correlated with FB presence at the sites of laser injury, and positive staining of these FBs for prolyl-4-hydroxylase indicated increased activity. Application of ANG II or histamine caused significant proliferation of isolated FBs by 148% and 257% respectively ($p < 0.05$). Application of a selective ANG II AT1R blocker (EXP3174) blunted the proliferative response to ANG II by 37% ($p < 0.05$), while a histamine H1R blocker (pyrilamine) decreased the response to histamine by 60% ($p < 0.05$). Treatment of FBs with ANG II or histamine increased the expression of collagen by 52% and 99% ($p < 0.001$) and hydroxyproline by 90% and 80% respectively ($p < 0.05$). Sustained systemic application of MC stabilizer cromolyn during the 2 weeks following laser injury significantly decreased CNV lesion size by 44% ($p < 0.05$).

Conclusion: Our data suggest a role for MCs in the early stages of CNV formation in the laser-induced murine model. We propose that the release of soluble mediators by resident MCs leads to activation of FBs with resultant fibrosis. Our work identifies mast cells as potential new therapeutic targets in the treatment of CNV, a potentially blinding manifestation of age-related macular degeneration.

After graduating medical school at University of Crete in Greece and spending more than one year of medical studies in Berlin, London, New York and Boston, **Dimitra Skondra, MD** completed a 3-year research fellowship at Massachusetts Eye and Ear Infirmary at Harvard Medical School. She then continued to do her internship at University of Illinois at Chicago and is currently completing her ophthalmology residency at Weill Cornell Medical College in New York. Starting July 2011, she will return to Massachusetts Eye and Ear Infirmary to do her Vitreoretinal Fellowship. Born and raised in Patras in Greece, she is a fan of sailing, traveling, gourmet dining, electronic house music, modern dance as well as classic ballet.



Digital Ultrasound And Optical Coherence Tomography-guided Measurement Of Choroidal Perfusion And Thickness Following Systemic Sildenafil —David Kim, MD

Purpose: To demonstrate anatomic and flow changes in the human choroid following systemic sildenafil citrate (Viagra®) using enhanced depth imaging spectral domain-optical coherence tomography (EDI-OCT) and swept-scan high frequency digital ultrasound.

Methods: Seven healthy male subjects (mean age 32.7 years) were evaluated at baseline and two hours after ingesting 50 mg of sildenafil. Choroidal perfusion measurements were made using swept-scan high frequency digital ultrasound. Choroidal thickness measurements were made using EDI-OCT. Results were read by masked observers. One patient underwent fluorescein angiography. The Wilcoxon signed-rank test and paired *t*-test were used to analyze differences in choroidal flow and thickness at baseline and two hours after ingestion of sildenafil.

Results: Two hours following sildenafil, increased choroidal perfusion was observed in 11 of 12 eyes measured by swept-scan high frequency digital ultrasound (Figures A-D). The mean increase was 3.46 (± 2.00) times baseline with a range of 0.47 to 7.80 times baseline ($p=0.004$). Choroidal thickness measured with EDI-OCT showed increased thickness for all eyes (Figures E-F). The average choroidal thickness for all eyes increased by 11.6% temporal to the fovea, 9.3% nasal to the fovea, and 10.7% underneath the fovea ($p<0.001$ for all values). Fluorescein angiography showed no significant variation in fill time or vessel caliber.

Conclusions: This study demonstrates an increase in choroidal perfusion and thickness in response to sildenafil. These changes could secondarily affect retinal function, explain previously reported clinical symptoms, and potentially be a useful adjunct for treatment of ocular diseases that would benefit from increased choroidal blood flow.



David Kim, MD received his undergraduate degree from Binghamton University and his medical degree from Columbia University. He is currently a senior ophthalmology resident at Cornell and will be going to Massachusetts Eye and Ear Infirmary for his Vitreoretinal Fellowship.

Second-Year Resident Research Abstracts

Three-Dimensional Volumetric ‘Cast’ of the Choroid Using Enhanced Depth Imaging Optical Coherence Tomography—Ryan St. Clair, MD

Purpose: Despite advances in choroidal imaging using enhanced depth imaging (EDI) optical coherence tomography (OCT), measurements of the choroid have until now been limited to estimating thickness from single two-dimensional (2D) OCT slices. Here, we describe a novel method for reconstructing 2D EDI OCT data for three-dimensional (3D) choroidal analysis and volumetric measurement.

Methods: The retinas of two male patients, (ages 52 and 65) with no known retinal or choroidal pathology were imaged with the Heidelberg Spectralis® spectral-domain OCT using the EDI protocol. 145 retinal slices were obtained from a 20 x 15 degree area centered around the fovea, at a distance of 30 micrometers between sections. Choroidal blood vessels were identified and outlined in each section, and 3D images were generated with Avizo® (Visualization Sciences Group, Burlington, MA) using a custom built plug-in. Choroidal volume was then calculated using these 3D reconstructions.

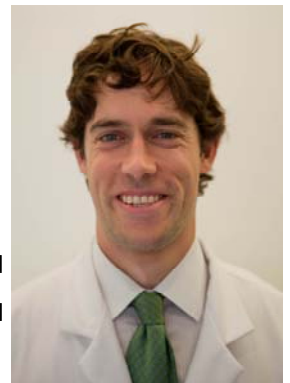
Results: (Image, patient 1) Choroidal volume of patient 1 was calculated at 1.6833 mm³

(Image, patient 2) Choroidal volume of patient 2 was calculated at 1.7510 mm³

EDI OCT images with segmented choroidal vessels were reconstructed into 3D volumetric images. The resulting 3D images were equivalent to a “cast” of choroidal vascular channels.

Conclusions: With the ever-increasing evidence for the role of choroidal abnormalities in retinal disorders such as age-related macular degeneration and central serous choroidopathy, 3D volumetric rendering of EDI OCT images offer a novel method for quantifying and qualifying the choroid. Unlike previous attempts that use a single slice to quantify choroidal thickness, 3D reconstruction of the macular choroidal vessels as a whole may lead to better understanding of the underlying pathophysiology in these diseases.

Ryan St.Clair, MD, born and raised in Westfield, NJ, earned a BA in Biology from Cornell University, and attended New Jersey Medical School before starting Ophthalmology residency at Weill Cornell Medical College, where he is a second-year resident.



Incidence Of Post-operative Tearing And Complications After Endoscopic Versus External Approach—Anne Barmettler, MD

Purpose: Dacryocystorhinostomy is the procedure of choice for nasolacrimal duct obstruction and can be performed externally and endoscopically. We investigated the preferences for surgical approach, reasoning behind approach chosen, and reported success amongst American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) members.

Methods: A one page questionnaire was sent to ASOPRS members via an online survey service. Responses were tabulated for: total number of cases performed, surgical approach preferred, reasons for surgical preferences, incidence of post operative tearing and dacryocystitis, and surgeon experience level.

Results: Five hundred and fifty-eight ASOPRS members were asked to complete the one page survey, of whom, 214 (38%) responses were received, collectively representing well over 7,054 cases performed in the last year. Among respondents, 201 (93.9%) offer an external DCR option and 13 (6.1%) do not offer an external DCR option. 133 members (62.1%) offer an endoscopic option and 81 (37.9%) do not offer an endoscopic DCR option. A significantly greater proportion of surgeons report <10% rate of post-operative tearing with external DCR (94.2%), compared to endoscopic DCR (64.4%), $p < 0.001$. Also, a significantly greater proportion of surgeons report fewer post-operative complications with external DCR over endoscopic DCR. Surgeons reported < 5% rate of dacryocystitis with external DCR (99.0%) compared to endoscopic DCR (86.8%) $p < 0.001$. Members performing both surgical approaches tended to perform external DCR, only 29% performed endoscopic DCR's more than 50% of the time. The top reasons for choosing endoscopic DCR were patient preference, no visible scar, and prior failed DCR. The top reasons for choosing external DCR were higher success rate, physician preference, and more long-term data on outcome. The majority of members use a bicanalicular Crawford tube (76%) and tubes were most commonly removed during postoperative months 2 (34.6%) and 3 (36.4%). There was a good range in experience with a slightly greater number of members with over 20 years responding.

Conclusions: Despite multiple recent papers reporting equivalent or higher success rates between external and endoscopic DCR more ASOPRS members responding to this survey prefer external DCR and report a higher success rate with this approach.



Anne Barmettler, MD is a second year ophthalmology resident, who recently matched into a two year oculoplastics fellowship accredited by the American Society of Ophthalmic Plastic and Reconstructive Surgery at the Kresge Eye Institute in Detroit. Anne graduated from Bowdoin College in Brunswick, Maine, and Jefferson College of Medicine in Philadelphia. She enjoys running, downhill skiing, and going to research conferences.

Adjunctive Re-dilation For Early Cicatrization After Punctoplasty

Claire E. Fraser, MD, PhD; Gary J. Lelli, MD

Purpose: Punctoplasty is commonly performed for epiphora due to punctal stenosis, although failures from this procedure occur anatomically (9% of patients) and functionally (36% of patients).¹ To date, rates of punctoplasty failure have not been evaluated with adjunctive in-office probing for early post-procedure cicatricial changes. The purpose of this study is to evaluate punctoplasty outcomes with adjunctive in-office probing of early post-procedure cicatricial changes.

Methods: A retrospective review was conducted on all patients undergoing punctoplasty for punctal stenosis by a single surgeon (GL) between 8/1/08-8/1/09. Charts were culled for demographics, medications, allergies, blepharitis, surgical technique, postoperative visits, cicatricial changes, re-dilation, patient satisfaction, and anatomical and functional success.

Results: Thirteen punctoplasties were performed on 12 patients during the study interval. Three were excluded for inadequate follow-up, and two for preoperative diagnosis (canalculitis, eyelid retraction). Six women (75%) and two men (25%) with an average age of 65 years (range, 40-88) were analyzed. No patients had been previously treated with chemotherapy, two (25%) were on ocular medications and six (75%) had blepharitis. All patients underwent a 3-snip punctoplasty. On average, patients were seen for three post-procedure visits (range, 1-4) with in-office re-dilation performed on six (75%) patients. All patients reported satisfaction with the procedure at last follow-up (average 102 days; range, 21-166). Functional success was rated at "100%" in three patients (38%) and ">75%" in five (62%). Anatomic success was present in all patients.

Conclusions: Functional and anatomical success rates after punctoplasty may be improved by close post-procedure follow-up with in-office re-dilation for recurrent punctal cicatrization. Additional prospective evaluation is warranted to define efficacy for this adjunctive procedure.

Claire Fraser, MD, PhD received her undergraduate education at Princeton University where she graduated magna cum laude. She then completed the Tri-Institutional MD-PhD Program of Weill Cornell Medical College, Memorial Sloan Kettering Cancer Center, and Rockefeller University, receiving her PhD from Rockefeller University in Molecular Neuro-Oncology, and her MD from Weill Cornell Medical College. Claire continued her training with an internship in medicine at St. Vincent's Hospital in New York, and is now a second year resident in ophthalmology at Weill Cornell. After residency, Claire plans to pursue a fellowship in vitreoretinal surgery at the University of Kentucky in Lexington. Former hobbies include playing the harp, running, traveling, and reading. Current hobbies include early childhood education, diaper management systems, and lullaby composition.



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Notes

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Annual Alumni Meeting
and John Milton McLean Lecture

Friday, May 18, 2012

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Anna Marquardt at anm2105@med.cornell.edu

Or call 646-962-2053