

**AMERICAN UVEITIS SOCIETY
FALL MEETING
SUNDAY, NOVEMBER 15, 2015
7:00 PM**



**AAO 2015
LAS VEGAS, NV**

**TREASURE ISLAND
HOTEL & CASINO**

SCHEDULE – AMERICAN UVEITIS SOCIETY – SUNDAY NOVEMBER 15, 2015

7:00 PM

Social Hour

8:00 PM

Plenary Session

Controversies in Uveitis: Case-based comments from a non-consensus panel of experts

Moderator: Emmett Cunningham

8:40 PM

Business Meeting and Break

9:00 PM

Free papers

9:00 PM

Kendra Klein: Bilateral Acute Simultaneous Onset of Anterior Uveitis Secondary to Erlotinib: A Report of Two Cases

9:07 PM

Harish Raja: Prevalence of MYD88 L265P Mutation in Histologically-Confirmed Diffuse Large B-Cell Lymphoma of the Vitreous and Central Nervous System

9:16 PM

Oren Tomkins-Netzer: Outcome of Treatment of Uveitic Macular Edema; the Multicenter Uveitis Steroid Treatment Trial 2-Year Results

9:25 PM

Meghan K Berkenstock: Chronic Anterior Uveitis in Children: Management of Glaucoma and Intraocular Pressure

9:34 PM

Wei Wang: Genetic Tests to Identify Ocular Pathogens

9:43 PM

John H. Kempen: Factors Predicting Visual Acuity Outcome in Intermediate, Posterior and Panuveitis: The Multicenter Uveitis Steroid Treatment (MUST) Trial

9:52 PM

Daniel V Vasconcelos-Santos: Clinical and Multimodal Imaging Characterization of Ocular Manifestations in an Outbreak of Waterborne Toxoplasmosis in Southeastern Brazil

10:01 PM

Shree Kurup: Suprachoroidal Drug Administration For Macular Edema (ME) Associated With Uveitis

SCHEDULE – AMERICAN UVEITIS SOCIETY – SUNDAY NOVEMBER 15, 2015

10:10 PM **Brian Madow:** Design and Implementation of Uveitis Reading Center for Clinical Trials

10:19 PM **Free papers (short)**

10:19 PM **Nika Bagheri:** Deep Choroid En Face Optical Coherence Tomography of Birdshot Chorioretinopathy

10:26 PM **Arjun Sood:** Bilateral Acute Retina Necrosis in a Patient with Multiple Sclerosis on Natalizumab

10:33 PM **Jayanth Sridhar:** Complement-Mediated Post-Viral Purtscher Like Retinopathy with Paracentral Acute Middle Maculopathy

10:40 PM **Abtin Shahlaee:** En-face Optical Coherence Tomography in Multiple Evanescent White Dot Syndrome

Bilateral Acute Simultaneous Onset of Anterior Uveitis Secondary to Erlotinib: A Report of Two Cases

Klein, Kendra MD; Azzoli, Christopher MD; Rifkin, Lana MD

Institutions: New England Eye Center, Tufts Medical Center
Massachusetts General Hospital, Harvard Medical School

Purpose: Erlotinib, an epidermal growth factor receptor (EGFR) inhibitor, has gained widespread use in the treatment of patients with advanced EGFR mutant non-small cell lung carcinoma (NSCLC). Previously reported ocular side effects of erlotinib include conjunctivitis, keratoconjunctivitis sicca, keratitis, eyelash abnormalities, corneal ulceration, and corneal perforation. We report two new cases of erlotinib-associated bilateral acute simultaneous onset anterior uveitis effectively treated with topical steroid therapy.

Methods: A retrospective case review of two patients with non-small cell lung carcinoma who developed bilateral anterior uveitis after starting erlotinib.

Results: Two patients presented to the uveitis clinic with new ocular complaints of painless blurred vision and floaters, approximately 6 weeks after starting erlotinib. Both patients were found to have significant anterior chamber reaction. Lab workup for both patients was unrevealing and it was determined that their uveitis was secondary to recent erlotinib therapy. Both patients were treated with frequent topical steroids, tapered over two months, with complete resolution of inflammation with no recurrence to date.

Conclusions: Bilateral acute simultaneous onset anterior uveitis is a potential ocular complication associated with erlotinib that should be considered in patients on this therapy who complain of ocular symptoms. We present two cases in which inflammation resolved completely with topical therapy with no recurrence. We further postulate that erlotinib-associated uveitis may be treated locally without discontinuation of the chemotherapeutic agent.

Disclosures: None.

Prevalence of MYD88 L265P Mutation in Histologically-Confirmed Diffuse Large B-Cell Lymphoma of the Vitreous and Central Nervous System

Raja, Harish MD¹; Salomão, Diva R. MD^{1,2}; Viswanatha, David S. MD³; Giannini, Caterina MD, PhD²; Pulido, Jose S. MD, MS, MPH, MBA¹

Institutions: 1. Department of Ophthalmology, Mayo Clinic
2. Department of Anatomic Pathology, Mayo Clinic
3. Department of Hematopathology, Mayo Clinic

Purpose: MYD88 is a universal adaptor protein in the innate immune system. A single amino acid mutation at position 265 of the gene results in a proline for leucine substitution (L265P) and constitutive activation of the adaptor protein, turning on pro-inflammatory cascades within the cell. This mutation is present in ~90% of cases of Waldenström's Macroglobulinemia and 15% of systemic diffuse large B-cell lymphoma. More recently, our group reported two cases of vitreoretinal lymphoma (VRL) that were positive for the mutation. The purpose of this study was to determine prevalence of the L265P mutation in a series of histologically-confirmed VRL and central nervous system lymphoma (CNSL).

Methods: Retrospective chart review of 25 patients with VRL and 33 patients with CNSL evaluated at Mayo Clinic, Rochester with histologic confirmation of the diagnosis. Paraffin-embedded blocks of respective tissue were submitted for MYD88 L265P mutation testing using an amplification-refractory mutation system (ARMS) PCR based assay.

Results: The L265P mutation was present in 82.4% of total VRL cases (primary plus secondary VRL), 86.7% of primary VRL cases, 52% of patients with total CNSL cases (primary plus secondary CNSL), and 47.4% of primary CNSL cases.

Conclusions: MYD88 L265P mutation analysis is a promising ancillary tool for diagnosis of lymphoma. We report a high rate of the L265P mutation in cases of VRL, but only about half of cases of CNSL were positive for the mutation in our study.

Disclosures: None

Outcome of Treatment of Uveitic Macular Edema; the Multicenter Uveitis Steroid Treatment Trial 2-Year Results

Tomkins-Netzer, Oren; Lightman, Susan; Drye, Lea; Kempen John H.; Holland, Gary N.; Rao, Narsing; Stawell Richard; Vitale, Albert; Jabs, Douglas A.; for the Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group

Institutions: Institute of Ophthalmology, University College London, London, UK; Department of Epidemiology, The Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD; Departments of Ophthalmology & Epidemiology, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA; UCLA Stein Eye Institute and Department of Ophthalmology, David Geffen School of Medicine at UCLA, Los Angeles, CA; Department of Ophthalmology, USC Eye Institute, Los Angeles, CA; Department of Ophthalmology, Royal Victoria Eye & Ear Hospital, East Melbourne, Australia; Department of Ophthalmology, University of Utah, Salt Lake City, UT; Departments of Ophthalmology & Medicine, Icahn School of Medicine at Mount Sinai, New York, NY

Purpose: To evaluate the 2-year outcomes of uveitic macular edema (ME)

Methods: Longitudinal follow-up of patients with ME, identified on optical coherence tomography (OCT), participating in the MUST Trial. Participants in the trial were randomized to either systemic therapy (oral corticosteroids and immunosuppression) or the fluocinolone acetonide implant (Retisert). Improvement in ME was defined as a >20% decrease in macular thickness on OCT and resolution as normalization of macular thickness.

Results: At baseline (BL), 148 eyes of 117 participants had ME; 134 eyes of 108 participants completed 2 years follow-up. During follow-up, 62% and 25% of eyes in systemic and implant groups, respectively, required at least 1 supplemental regional corticosteroid injection. There were no differences between treatment groups in the percent of eyes with improved ME (systemic vs implant, 65% vs 77%, $P=0.20$) or resolved ME (52% vs 68%, $P=0.28$). Implant treated eyes had a greater decrease in macular thickness (median decrease 180 vs 109 μm , $P=0.04$). Eyes with BL leakage on fluorescein angiography were more likely to improve than eyes without (76% vs 58%, $P=0.03$). Mean changes in best corrected visual acuity from BL to 2 years were: ME resolved, +10 letters; ME improved without resolution, +10 letters; ME little to no change, +6 letters; and ME worsening, -16 letters ($P=0.0003$).

Conclusions: ~2/3 of eyes with ME experienced improvement in ME and visual acuity by 2 years, with a similar percent of eyes improving with both treatment approaches. Implants were associated with a greater decrease in macular thickness. BL fluorescein angiographic leakage was associated with a greater likelihood of improvement.

Disclosures: Allergan (SL); Alcon, Allergan, Clearside, Can-FIte, Lux Biosciences, Xoma, Sanofi-Pasteur, Roche, Abbvie, Vitae, EyeGate (JHK); Genentech, Novartis, Santen, Xoma (GNH); Aciont (AV); Santen, DSMC for Applied Genetic Technologies Corporation and Novartis (DAJ).

Chronic Anterior Uveitis in Children: Management of Glaucoma and Intraocular Pressure

Berkenstock, Meghan K; Chen, Andrew; Holland, Gary N; Kapamajian, Michael A; Sousa, Carlos; Yu, Fei; Law, Simon K; Coleman, Anne L; Caprioli, Joseph

Institutions: Ocular Inflammatory Disease Center, UCLA Stein Eye Institute and the Doheny Eye Institute, and the Department of Ophthalmology, David Geffen School of Medicine at UCLA, University of California, Los Angeles, USA

Purpose: Glaucoma is a common complication of chronic anterior uveitis (CAU) in children, thought to be caused solely by elevated intraocular pressure (IOP). To understand challenges in the treatment of this population, we undertook review of IOP management in a well-characterized cohort of 115 children (206 eyes) with CAU.

Methods: Retrospective review of all children with CAU (age <16 years at disease onset), first examined by 1 clinician during 1993-2006, with up to 19 years follow-up (through 2012). Those with steroid-induced ocular hypertension were excluded. Successful IOP control was a 20% reduction and an IOP<21mmHg. We used the definition of glaucoma/elevated IOP described by Holland, Denove, and Yu (AJO 2009;147:667-78). The following intervals were determined: time to initial IOP control with medical therapy; to escalation of medical therapy; to first glaucoma surgery; to additional surgery. Host- and disease-associated characteristics were investigated as risk factors for loss of IOP control.

Results: Glaucoma/elevated IOP was diagnosed in 38 patients (58 eyes). Prevalence at presentation was 18.3% of patients (13.7% of eyes); incidence during follow-up through 2008 was 7.8/100 eye-years. No cases were identified where anti-inflammatory medication alone resulted in decreased IOP. Control with medical therapy was achieved in 80% of eyes within 6 months (95% CI, 3.8-32.4%). Surgery was required in 27 eyes during follow-up (Ahmed valves in the majority); cumulative risk of surgery was 63.6% (95% CI, 49.2-77.9%) at 1317 days (3.6 years), the time of the last-recorded initial surgery. Median time to first surgery was 627 days.

Conclusions Glaucoma/elevated IOP is a common complication of CAU in children. Elevated IOP does not improve with anti-inflammatory therapy alone, suggesting permanent damage to outflow as the causal mechanism in all cases. In the majority of patients, IOP can be controlled initially with medications, but most eventually require surgery."

Disclosures: None

Genetic Tests to Identify Ocular Pathogens

Wang, Wei, Hajrasouliha, Amir R, Kapan, Henry J.

Institution: Department of Ophthalmology & Visual Science, University of Louisville

Purpose: To report the results of gene testing in aqueous and vitreous humor specimens collected from suspected intraocular infections and correlated with microbiologic cultures at the University of Louisville from 8/2013 to 8/2015.

Methods: Patients with clinically suspected intraocular infection were enrolled in the study. After informed consent was obtained, ocular fluid samples (either aqueous humor or vitreous) were collected. Genomic DNA of bacteria, fungi, and viruses in collected intraocular samples were examined by comprehensive polymerase chain reaction (PCR) or Next Generation Sequencing (NGS). For quantitative PCR, samples were analyzed for viruses including HSV1-2, CMV, VZV, EBV, and HHV-6. In addition, samples were examined for bacterial 16S and fungal or parasite 18S/28S ribosomal DNA (rDNA).

Results: 43 patients enrolled in the study. Based on genetic testing 19 different pathogens were identified compared to only 2 pathogens with culture. With genetic testing 53% of specimens were bacteria +, 9% viral +, 2% fungal + and 2% parasite +. The majority of bacterial endophthalmitis cases were caused by staph. Epidermidis (n=15), followed by strep. Pneumonia (n=7). There was a strong correlation between bacterial copy number and the results of culture.

Conclusions: Use of genetic assays to examine ocular samples in patients with infectious endophthalmitis can result in identification of a presumed infectious pathogen more frequently than standard culture methods. Genetic test methods should be considered for both screening of inflammatory ocular disorders of unknown etiology and possible definitive diagnosis in patients with presumed infectious endophthalmitis."

Disclosures: None.

Factors Predicting Visual Acuity Outcome in Intermediate, Posterior and Panuveitis: The Multicenter Uveitis Steroid Treatment (MUST) Trial

Kempen, John H.,^{1,3} Van Natta, Mark L.,^{4,5} Altaweel, Michael M.,⁶ Dunn, James P.,^{7,8} Jabs, Douglas A.,^{4,5,9,10} Lightman, Susan L.,^{11,12} Thorne, Jennifer E.,^{4,5,13} and Holbrook, Janet T.^{4,5} for The Multicenter Uveitis Steroid Treatment (MUST) Trial Research Group

Institutions: From the Ocular Inflammation Service and the Center for Preventive Ophthalmology and Biostatistics, Department of Ophthalmology/Scheie Eye Institute,¹ and 2 the Center for Clinical Epidemiology and Biostatistics,² Department of Biostatistics and Epidemiology, The University of Pennsylvania, Philadelphia, Pennsylvania; the Discovery Eye Institute,³ Myung Sung Christian Medical Center, Addis Ababa, Ethiopia, the Center for Clinical Trials⁴ and the Department of Epidemiology;⁵ The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland; the Fundus Photograph Reading Center,⁶ Department of Ophthalmology and Visual Sciences, University of Wisconsin, Madison, Wisconsin; Mid-Atlantic Retina⁷ and Wills Eye Hospital,⁸ Philadelphia, Pennsylvania; the Departments of Ophthalmology⁹ and Medicine,¹⁰ The Icahn School of Medicine at Mount Sinai, New York, New York; University College London Institute of Ophthalmology¹¹ and Moorfields Eye Hospital,¹² London, United Kingdom; and the Department of Ophthalmology,¹³ The Johns Hopkins University School of Medicine, Baltimore, Maryland.

Purpose: To identify factors associated with best-corrected visual acuity (BCVA) presentation and two-year outcome in 479 intermediate, posterior, and panuveitic eyes.

Methods: In the Multicenter Uveitis Steroid Treatment (MUST) Trial, masked BCVA measurement at baseline and 2 years' follow-up used gold standard methods. Characteristics documented per study protocol at the 23 clinical centers were evaluated as potential predictive factors for baseline BCVA status and change in BCVA during follow-up.

Results: Baseline risk factors significantly associated with reduced BCVA included: age \geq 50 vs. <50 years; posterior vs. intermediate uveitis; uveitis duration $>$ 10 vs. $<$ 6 years; anterior chamber (AC) flare $>$ grade 0; cataract; macular thickening; and exudative retinal detachment. Over two years, eyes better than 20/50 and 20/50 or worse at baseline improved, on average, by 1 letter ($p=0.52$) and 10 letters ($p<0.001$) respectively. Both treatment groups and all sites of uveitis improved similarly. Factors associated with improved BCVA included resolution of active AC cells, of macular thickening, and cataract surgery in an initially cataractous eye. Factors associated with worsening BCVA included longer duration of uveitis (6-10 or $>$ 10 vs. $<$ 6 years), incident AC flare, cataract at both baseline and follow-up, pseudophakia at baseline, persistence or incidence of vitreous haze, and incidence of macular thickening.

Conclusions: Intermediate, posterior and panuveitis have a similarly favorable prognosis with both systemic and fluocinolone acetonide implant treatment. More prolonged inflammation, more severe inflammatory damage and/or inflammatory findings initially or during follow-up are factors associated with worse visual acuity. The results indicate the value of implementing best practices in managing inflammation in order to minimize inflammation and its complications.

Disclosures: Allergan (SL); Alcon, Allergan, Clearside, Can-FIte, Lux Biosciences, Xoma, Sanofi-Pasteur, Roche, Abbvie, Vitae, EyeGate (JHK); Santen, DSMC for Applied Genetic Technologies Corporation and Novartis (DAJ); AbbVie, Gilead Sciences, Xoma Allergan (JET).

Clinical and Multimodal Imaging Characterization of Ocular Manifestations in an Outbreak of Waterborne Toxoplasmosis in Southeastern Brazil

Vasconcelos-Santos, Daniel V; Santos, Helena H; Oliveira, Simone L; Cunha, Leandro H M; Marino, Ana Paula, Dutra, Jacqueline S, Gazzinelli, Ricardo T, Campos, Wesley R.

Institutions: Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Purpose: To characterize clinical and multimodal imaging aspects of ocular manifestations in a cohort of individuals from an outbreak of waterborne toxoplasmosis in Southeastern Brasil.

Methods: Prospective interventional study of patients with postnatally acquired waterborne toxoplasmosis diagnosed between March and May 2015 in Gouveia (a city with 12,000 inhabitants in Minas Gerais state, Brazil). Disease was confirmed upon positive serology (high titers of IgM and IgG antibodies for *Toxoplasma gondii*, the latter with low avidity). All patients underwent complete ophthalmologic assessment, as well as multimodal imaging (fundus photography, autofluorescence, near-infrared and red-free reflectance, fluorescein angiography and spectral-domain optical coherence tomography).

Results: Fifty-four patients were confirmed with postnatally acquired toxoplasmosis, 46 men and 8 women, with a mean age of 32.1 years. All had drunk water from a single presumably contaminated source. Systemic symptoms/signs (fever, malaise, headache, lymphadenopathy, weight loss, among others) were reported by all of them. Twelve (21.8%) displayed retinochoroidal lesions consistent with toxoplasmosis, all of them being active. Visual acuity ranged from 20/800 to 20/20. In four patients (33.3%) these lesions were bilateral, in six (50%) multiple and in two (16.7%) macular. Six patients (50%) had large necrotizing lesions, but four (33.3%) had multiple subtle/punctate lesions, more easily depicted on multimodal imaging. All lesions regressed after classical therapy with sulfadiazine, pyrimethamine, folinic acid and prednisone for 6 weeks.

Conclusion: Postnatally-acquired waterborne toxoplasmosis may be associated with high prevalence of bilateral, multiple and large retinochoroidal lesions. Multimodal imaging helps to more objectively delineate these posterior segment changes, as well as to follow them after therapy.

Disclosures: None.

Suprachoroidal Drug Administration for Macular Edema (ME) Associated with Uveitis

Kurup, Shree, Toledo, Allison

Institutions: Wake Forest University Eye Ctr.

Purpose: Suprachoroidal administration of preservative-free CLS-TA, is being developed as a local treatment for non-infectious uveitis. Pertinent data from animal models, along with promising preliminary human trial data is presented.

Methods: Efficacy studies were conducted in pigs; rabbits were used for ocular distribution. In an open label first in human (FIH) study, following a single suprachoroidal injection of TA (4 mg in 100 μ L) administered to the study eye, patients with non-infectious uveitis were followed for 26 weeks. A Phase 2 randomized, masked, study for ME in non-infectious uveitis subjects following suprachoroidal injection of 4.0 mg or 0.8 mg is ongoing.

Results: Data in a pig model of uveitis showed efficacy both at 2 mg and at 0.2 mg doses, while only the 2 mg intravitreal dose was efficacious. In the same model, a single suprachoroidal injection of CLS-TA resulted in more rapid effect than oral prednisone, was as effective as high dose (1 mg/kg/day) oral prednisone and was superior to maintenance dose prednisone (0.1 mg/kg/day) in its anti-inflammatory effect. In a kinetics study in rabbits comparing suprachoroidal and intravitreal administrations in parallel groups of animals showed 12-fold higher levels of TA in the retina and choroid, equivalent levels in the neural retina and lower levels in the anterior region and the lens.

The FIH safety study enrolled 9 uveitis subjects and showed favorable safety and efficacy. The ongoing Phase2 study of suprachoroidal CLS-TA has enrolled 20 uveitis patients. Human case studies demonstrate sustained profound reduction in ME.

Conclusion: Promising preclinical data led to the FIH study that continued to provide promising data for further development. Human case studies from the ongoing Phase2 study demonstrate sustained profound reduction in ME. Targeted administration of corticosteroid via suprachoroidal administration may provide a useful local therapy for treating inflammatory ocular disease.

Disclosures: Dr Kurup is on advisory board for 1. Allergan 2. Abbott 3. Clerarside (this study impacts) 4. Regeneron 5. Xoma.

Design and Implementation of Uveitis Reading Center for Clinical Trials

Madow, Brian

Institutions: University of South Florida, Tampa, FL

Purpose: To establish Reading Center for centralized, standardized evaluation of digital photographs with vitreous haze for use in uveitis clinical trials. Currently the activity of posterior uveitis is judged by the amount of the vitreous haze. However no central grading has been utilized yet. An analog and digital algorithmic scales for vitreous haze grading have been described and are suitable for computerized evaluation of fundus digital images from patients with vitreous opacification. We aimed to develop central reading center structure in order to facilitate the vitreous haze image analysis and also to evaluate optical coherence tomography and other multimodal imaging.

Methods: We evaluated, designed and implemented a remote secure central server in order to handle large volume of secure image uploads and storage. Assessed were multiple upload paradigms. Secure transfer protocol via web portal was implemented. Reading facility was also established at USF Eye Institute in Tampa. Special considerations were made to the reading room's location, wall color, absence of ambient light. Computer hardware, monitors, network storage were carefully selected. Electronic calibration of the monitors was performed. Software was developed to query the images for quality and complete submission, as well as for archiving and grading the images. Graders were selected and trained.

Results: The Uveitis Reading Center currently is evaluating fundus and OCT images from several international multicenter prospective randomized clinical trials in uveitis. Image transfer capabilities via the secure server were robust and effective not only from domestic clinical sites, but also from sites as far as in Asia and Australia. Image query remains the most challenging part of the reading center operations with all other aspects flawlessly implemented. Graders achieved very high rate of agreement through training, practice, adjudication and frequent conferences. The grading was performed according to the Miami and NIH scales for vitreous haze.

Conclusions: Central Reading center was designed and successfully implemented for the purposes of centralized evaluation patients with uveitis for clinical trials. Since the outcome measures for uveitis clinical trials are disease specific, we are expanding our expertise in reading OCT, fluorescein and ICG angiograms, as well as in visual field tests and ERGs.

Disclosures: None.

Deep Choroid En Face Optical Coherence Tomography of Birdshot Chorioretinopathy

Bagheri, Nika; Sridhar, Jayanth; Shahlaee, Abtin; Mehta, Sonia; Dunn, James P

Institutions: Mid-Atlantic Retina, The Retina Service of Wills Eye Hospital, Thomas Jefferson University, Philadelphia, PA

Purpose: To describe the findings of birdshot chorioretinopathy on en face optical coherence tomography (OCT) at the level of the deep choroid.

Methods: A non-comparative case series of four patients with birdshot chorioretinopathy and available en face OCT of the deep choroid. Clinical records and imaging were reviewed.

Results: In all cases lesions at the level of the deep choroid were appreciable on en face OCT of the macula. Hypocyanescent spots on ICGA, available for two patients, correlated with the lesions seen on en face OCT.

Conclusions: En face OCT at the level of the deep choroid may show similar ability to ICGA to detect the subclinical lesions of birdshot chorioretinopathy. Further evaluation is warranted to determine if this new non-invasive technology could ultimately substitute for ICGA to improve the sensitivity of diagnosing and following patients with birdshot chorioretinopathy.

Disclosures: None.

Bilateral Acute Retina Necrosis in a Patient with Multiple Sclerosis on Natalizumab

Sood, Arjun; Kumar, Gokul; Robinson, Joshua

Institutions: Emory University, Emory Eye Center

Purpose: To describe the first case of bilateral acute retinal necrosis in a patient with multiple sclerosis treated with natalizumab.

Methods: Case Report.

Results: A 34-year-old woman on natalizumab for multiple sclerosis was referred to the Emory Eye Center for viral retinitis in both eyes. The patient was found to have bilateral varicella zoster virus (VZV) associated acute retinal necrosis. She was managed acutely with natalizumab discontinuation, intravenous acyclovir and multiple intravitreal injections of foscarnet and ganciclovir. The retinitis improved in both eyes after several months of treatment; however, she developed a localized macula on combined tractional rhegmatogenous retinal detachment in the left eye. The patient underwent pars plana vitrectomy, sclera buckle and silicon oil with successful reattachment of the retina.

Conclusions: Natalizumab is commonly used in the treatment of multiple sclerosis. The medication is a strong immunosuppressant and has been known to cause herpetic infections in the central nervous system. Ophthalmologists and neurologists should be aware of the potential for retinal necrosis in patients being treated with this medication.

Disclosures: None.

Complement-Mediated Post-Viral Purtscher Like Retinopathy with Paracentral Acute Middle Maculopathy

Sridhar, Jayanth; Shieh, Wen-shih; Shahlaee, Abtin; Rahimy, Ehsan

Institutions: Mid-Atlantic Retina, The Retina Service of Wills Eye Hospital, Thomas Jefferson University, Philadelphia, PA

Purpose: To report the imaging findings of a single case of paracentral acute middle maculopathy associated with complement-mediated bilateral Purtscher like retinopathy in the setting of recent viral illness

Methods: Single case report

Results: A 21-year-old woman who awoke with sudden-onset bilateral finger count vision in the setting of a recent viral illness. Initial examination and imaging was consistent with a bilateral Purtscher like retinopathy with evidence of paracentral acute middle maculopathy and ellipsoid layer edema on spectral-domain optical coherence tomography (OCT). Baseline fluorescein angiography and OCT angiography revealed normal perfusion and flow, respectively. All laboratory investigation was negative for possible causative etiology. The patient was followed for six months with steady visual improvement to 20/20 OU. En face OCT demonstrated near complete restoration of the ellipsoid layer. The patient still noted bilateral scotomas which were mapped out on microperimetry and found to correlate to en face OCT findings.

Conclusions: Purtscher like retinopathy in the setting of recent viral illness is a rare cause of vision loss that may be complement-mediated and associated with the finding of paracentral acute middle maculopathy on spectral-domain OCT. Despite poor presenting vision, in the presence of normal perfusion near total visual recovery is possible.

Disclosures: None.

En-Face Optical Coherence Tomography in Multiple Evanescent White Dot Syndrome

Shahlaee, Abtin; Sridhar, Jayanth; Bagheri, Nika; Hong, Bryan; Mehta, Sonia; Dunn, James

Institution: Retina Service of Wills Eye Hospital, Mid Atlantic Retina, Thomas Jefferson University, Philadelphia, PA

Purpose: To show characteristics of en-face optical coherence tomography (OCT) in patients with Multiple Evanescent White Dot Syndrome.

Methods: Clinical histories, high-resolution digital color imaging, spectral-domain OCT images, fluorescein angiography (FA), fundus autofluorescence (FAF), and en-face OCT images of four patients with MEWDS were evaluated.

Results: Four patients (3 females and 1 male) were evaluated. Mean age at presentation was 28 (range 17-35). All cases presented with unilateral symptoms and signs. Presenting best-corrected visual acuity in the affected eye ranged from 20/70 to 20/20. In all cases, en-face OCT imaging showed lesions at the level of the outer retina. These corresponded to white dots observed clinically as well as punctate hyperfluorescence on FA and hyperautofluorescence on FAF. One patient had follow-up images showing resolution of outer retinal lesions and clinical improvement 6 weeks after initial presentation.

Conclusions: En-face OCT is a non-invasive technology, capable of visualizing specific attenuation of the outer retina and subsequent recovery in MEWDS. The lesions obtained using this imaging modality correspond to those observed clinically and to FA, and FAF. Subsequent studies evaluating the relative sensitivity and specificity of this technique would be of potential interest.

Disclosures: None.

SAVE THE DATE

American Uveitis Society Winter Symposium

Dear Colleagues,

Please save the date for the **2016 AUS Winter Symposium, January 16-18th, 2016 at Canyons Grand Summit Hotel in Park City, Utah.**

Registration and Hotel Information is available at www.regonline.com/AUS2016.

Make your plans to attend!

Glenn J. Jaffe, MD
AUS Winter Symposium Program Chairman