AMERICAN O UVEITIS SOCIETY 26th Annual Winter Symposium

January 14-16, 2023 • Canyons Grand Summit Hotel, Park City, Utah



Program Co-Chairs:

ALAN G. PALESTINE, MD • AKBAR SHAKOOR, MD • ALBERT T. VITALE, MD

AUS 26th Annual Winter Symposium

GUEST SPEAKERS



Liron Caplan, MD, PhD

Associate Professor of Medicine/Rheumatology University of Colorado School of Medicine; Section Chief, Rheumatology, Denver Veterans Affairs Medical Center Aurora, CO



John A. Gonzales, MD

Associate Professor of Ophthalmology Francis I. Proctor Foundation University of California, San Francisco San Francisco, CA



Eric D. Hansen, MD Assistant Professor of Ophthalmology and Visual Sciences Director of Ocular Oncology John A. Moran Eye Center University of Utah Salt Lake City, UT



Joe S. Mendez, MD Assistant Professor, Department of Neurosurgery Investigator, Huntsman Cancer Institute University of Utah Salt Lake City, UT

PROGRAM CO-CHAIRS



Palestine, MD Professor of Ophthalmology and Rheumatology University of Colorado

Anschutz Medical

Alan G.

Campus

Aurora, CO



Akbar Shakoor, MD

Associate Professor, Ophthalmology and Visual Sciences Director of Uveitis Fellowship John A. Moran Eye Center University of Utah Salt Lake City, UT



Albert T. Vitale, MD Professor,

Ophthalmology and Visual Sciences Director of Uveitis Division John A. Moran Eye Center University of Utah Salt Lake City, UT

SATURDAY January 14, 2023

7:00 – 7:55 AM

Registration/Breakfast

7:00 – 9:35 AM Exhibits

7:55 – 8:00 AM **Opening Remarks** ALBERT T. VITALE, MD

8:00 – 9:34 AM CASE PRESENTATIONS, FREE PAPERS, & DISCUSSIONS

MODERATOR: ALBERT T. VITALE, MD 8:00 – 8:10 AM

Macular Edema Ranibizumab v. Intravitreal Anti-inflammatory Therapy (MERIT) Trial: Primary Outcome Results NISHA ACHARYA, MD, MS

8:10 – 8:13 AM Discussion

8:13 – 8:17 AM

Treatment of Posterior Uveitis in Patient with Migration of Steroid Implants IVAN J. SUÑER, MD, MBA

8:17 – 8:19 AM

Discussion

8:19 – 8:23 AM An Unusual Case of Neovascular AMD

MAURA DI NICOLA, MD 8:23 – 8:25 AM

Discussion

8:25 – 8:35 AM

Treatment and Imaging Preferences in Vogt-Koyanagi-Harada Disease JESSICA G. SHANTHA, MD, MSc

8:35 – 8:38 AM Discussion

8:38 - 8:48 AM

Outcomes of Early Immunomodulatory Therapy in Vogt-Koyanagi-Harada Disease D. WADE REDICK, MD Travel Grant Awardee

Purpose: To evaluate and compare outcomes of patients with Vogt-Koyanagi-Harada (VKH) disease treated with early immunomodulatory therapy (IMT) with patients treated with late IMT and corticosteroids only. **Methods:** Retrospective Consecutive Case Series. All charts of patients diagnosed with VKH disease seen at the Bascom Palmer Institute in the last decade were reviewed. Primary outcomes were visual acuity (VA) at last examination and presence of subretinal fluid (SRF) at last examination. Early IMT was defined as initiation of IMT within 3 months of onset of symptoms. Secondary outcomes included time to cessation of oral prednisone, time to 10mg of oral prednisone, and use of local steroids.

Results: 34 patients (68 eyes) were included. Mean duration of follow up was 3.7 years. 14 eyes received corticosteroids only, 26 eyes received early IMT, and 28 eyes received late IMT. At year 2, VA was significantly better in both eyes in the early IMT group in comparison with the late IMT group, which was statistically significant (OD p = 0.015; OS p = 0.030). At 1 year, no patients in the corticosteroid group and early IMT group had SRF while and 1 out of 14 patients (7.1%) in the late IMT group had SRF (p = 0.058). Patients in the early IMT group did have a shorter mean time to 10mg of oral prednisone and shorter mean time to cessation of oral prednisone in comparison with the late IMT group although this difference was not statistically significant (p = 0.57 and p = 0.25, respectively).

Conclusion: Overall, all 3 groups had generally favorable visual outcomes. Some patients did well with corticosteroids only. Mean VA at 2 years was better in the early IMT group in comparison with the late IMT group. A 1 year there were less patients with SRF in the early IMT group in comparison with the late IMT group. Starting IMT early in VKH may be beneficial in some patients.

8:48 – 8:51 AM

Discussion

8:51 – 8:55 AM

Outcome of Surgical Management for Rhegmatogenous Retinal Detachment in Ocular Toxoplasmosis: One Case Report MARIE HELENE ERRERA, MD, PharmD, PhD

8:55 – 8:57 AM Discussion

8:57 – 9:07 AM

Incidence and Presentation of Vogt-Koyanagi-Harada Disease Before and After the COVID-19 Pandemic CHRISTOPHER R. ROSENBERG, MD

9:07 – 9:10 AM Discussion

9:10 – 9:14 AM

Choroidal Mass in a Patient with Rectal Carcinoid Tumor TEDI BEGAJ, MD

9:14 – 9:16 AM

Discussion

9:16 – 9:20 AM

We Were Surprised... and You Will Be Too AMIT REDDY, MD

9:20 – 9:22 AM

Discussion

9:22 – 9:26 AM

Diagnosis and Assessment of Recurrence in Intraocular Lymphoma JOSEPH JULIANO, MD

9:26 - 9:28 AM

Discussion

9:28 – 9:32 AM Neuroretinitis in a Patient with Marfan Syndrome JULIA SHULMAN, MD

9:32 – 9:34 AM

Discussion 9:34 – 9:35 AM

Wrap Up ALBERT T. VITALE, MD

9:35 – 9:45 AM

Break

9:45 – 10:45 AM Suprachoroidal Injection Training Wet Lab hosted by Bausch + Lomb

12:00 - 2:00 PM Lunch on Own

2:00 - 3:30 PM CASE DISCUSSION WITH EXPERTS MODERATOR: ALAN G. PALESTINE, MD

3:30 – 4:00 PM

Break 3:30 – 7:30 PM

Exhibits

4:00 – 6:05 PM SCIENTIFIC SESSION 1: LOCAL AND SYSTEMIC INFLAMMATORY DISEASE MODERATOR: ALAN G. PALESTINE, MD

4:00 – 4:05 PM

Introduction ALAN G. PALESTINE, MD

4:05 - 4:50 PM

Hard and Soft (Σκληρό και μαλακό): The Sclera as Inflammation's Clay JOHN A. GONZALES, MD

It has been hypothesized that the whiteness of the sclera is an evolutionary feature that developed to enhance the visibility of eyegaze conspecific communication, particularly in visually challenging conditions. The sclera's importance in communication, however, rarely receives the attention it deserves. That is, until it is inflamed. It is during scleritis that the lack of relative whiteness, replaced by a robust rouge, conveys damage to the wall of the eye. The violaceous hue that is left in the wake of resolved scleritis has traditionally been thought as the ability to see the underlying uveal tissue. Our research, however, suggests that this may not be entirely accurate, and that sufficient scleral tissue remains. Gaining an appreciation for the foundational components of the sclera, their destruction in scleritis, and their resilience will help deepen our appreciation for this tissue, particularly when we gaze upon our friends and loved ones.

4:50 – 5:05 PM Discussion

5:05 - 5:50 PM

Recent Advances in Spondyloarthritis: Mechanisms, Medications, and Merging of Care LIRON CAPLAN, MD, PhD

This lecture will begin by highlighting the most crucial challenges facing patients and clinicians as they attempt to manage axial spondyloarthritis (axSpA) followed by a survey including a few recent advances in our understanding of the pathogenesis of axSpA, and the implications of these advances on our ability to secure a diagnosis and monitor disease activity. This will include a summary of potential biomarkers. The list of pharmacologic agents currently used for management of axSpA will be reviewed by examining existing and putative molecular targets. The effectiveness of these medications will be examined in the context of multiple spondyloarthritis-related conditions. Lastly, interdisciplinary, and shared approaches to management of patients with axSpA will be described. Opportunities for collaboration between rheumatologists and ophthalmologists around spondyloarthritis will be highlighted.

5:50 - 6:05 PM

Discussion

6:05 - 6:25 PM Break

6:25 – 7:09 PM CASE PRESENTATIONS, FREE PAPERS, & DISCUSSIONS MODERATOR: ALAN G. PALESTINE, MD

6:25 – 6:29 PM **Placoid Perplexity** MARK W. JOHNSON, MD

6:29 – 6:31 PM Discussion

6:31 – 6:41 PM Adalimumab and Pediatric Uveitis: Safety, Efficacy, and the Role of Anti-

Adalimumab Antibodies HAZEM MOUSA, MD

6:41 – 6:44 PM Discussion

Discussion

6:44 – 6:48 PM

A Sticky Situation: A Case of Refractory Occlusive Retinal Vasculitis BRIAN TOY, MD

6:48 – 6:50 PM

Discussion

6:50 – 7:00 PM Optical Coherence Tomography Angiography Findings in Juvenile Idiopathic Arthritis AYMAN G. ELNAHRY, MD, PhD Travel Grant Awardee

Purpose: To report optical coherence tomography angiography (OCTA) findings in pediatric patients with Juvenile Idiopathic Arthritis (JIA) and to correlate these findings with ocular and systemic disease activity.

Methods: This was a cross-sectional study of pediatric patients diagnosed with JIA at Cairo University Children's

Hospital. All patients underwent a full ophthalmic and rheumatologic exam as well as OCT and OCTA. Inclusion criteria included patients \leq 16 years old diagnosed with JIA according to the Pediatric Task Force of the International League of Associations for Rheumatology (ILAR) with ocular involvement. All subtypes of JIA were eligible for inclusion regardless of anti-nuclear antibody status. Exclusion criteria included patients without a definitive diagnosis of JIA, patients with history of other ocular or systemic conditions or recent ocular surgery, and patients with media opacities precluding high quality imaging. Patients with consistently poor-quality images or excessive artifacts were also excluded. Patients were then divided into two groups according to their Juvenile Arthritis Disease Activity Score (JADAS): inactive to low disease activity group (Group 1), and moderate to high disease activity group (Group 2). OCTA findings were compared between both groups and an age-matched healthy control group and correlated with systemic findings. To compare groups, ANOVA or Kruskal-Wallis test was used. Spearman or Pearson correlation was used to correlate continuous data with correction of p-value due to multiple comparison. A p-value ≤ 0.05 was considered significant.

Results: The study included 38 eyes of 20 patients with JIA and 11 eyes of 11 healthy controls after exclusion. Thirteen of the JIA patients (65%) were in group 1, while 7 (35%) were in group 2. Mean (±SD) age of group 1, group 2, and healthy group was 10.92 (±2.95), 10.43 (±2.14), and 11.18 (\pm 2.27) years, respectively (p = 0.757). Three (23.1%), 6 (85.7%), and 6 (54.5%) subjects were females in group 1, group 2, and healthy group, respectively (p = 0.001). Mean (±SD) central macular thickness (CMT) of group 1, group 2, and healthy group was 251 (±22), 223 (±19), and 240 $(\pm 21) \mu m$, respectively (p = 0.001). There was no significant difference between the signal strength index of OCTA images of the 3 groups (p = 0.939). Mean (±SD) foveal avascular zone (FAZ) area of group 1, group 2, and healthy group was 0.247 (±0.105), 0.433 (±0.144), and 0.268 (±0.063) mm2, respectively (p < 0.001). Mean (±SD) foveal superficial capillary

plexus vascular density (VD) of group 1, group 2, and healthy group was 20.6 (\pm 6.8), 12.4 (\pm 6.0), and 18.8 (\pm 4.7) percent, respectively (p = 0.001), while in the foveal deep capillary plexus (DCP) it was 36.2 (\pm 7.1), 24.5 (\pm 7.5), and 34.1 (\pm 4.7) percent, respectively (p < 0.001). FAZ, CMT, and foveal DCP VD significantly correlated with the visual analogue scale even following Bonferroni correction (R = 0.583, p < 0.001, R = -0.502, p = 0.014, and R = -0.583, p < 0.001, respectively).

Conclusion: OCTA-derived vascular parameters, particularly of the fovea, may be useful biomarkers to predict the level of systemic activity of patients with IIA.

7:00 – 7:03 PM

Discussion

7:03 – 7:07 PM

Bilateral Optic Nerve Involvement with Diffuse Large B-cell Lymphoma Presenting upon Completion of CAR-T Therapy ABDULLAH ABOU-SAMRA, MD

7:07 – 7:09 PM Discussion

7:09 – 7:24 PM INDUSTRY PARTNER PRESENTATIONS

> 7:09 – 7:16 PM Allergan, An AbbVie Company

7:16 – 7:21 PM Apellis Pharmaceuticals

7:21 – 7:24 PM Coherus BioSciences

7:24 – 7:30 PM Wrap Up ALAN G. PALESTINE, MD

7:30 PM

End of Session 7:45 – 10:00 PM

Dinner at The Canyons Grand Summit Hotel

SUNDAY January 15, 2023

7:00 – 7:55 AM

Breakfast 7:00 – 9:40 AM

Exhibits 7:55 – 8:00 AM

Opening Remarks AKBAR SHAKOOR, MD

8:00 – 9:36 AM CASE PRESENTATIONS, FREE PAPERS, & DISCUSSIONS MODERATOR: AKBAR SHAKOOR, MD

8:00 – 8:10 AM

Quantification of Emotional Distress Experienced in Uveitic Retinal Degenerations by the Michigan Vision-Related Anxiety Questionnaire THIRAN JAYASUNDERA, MD, MS

8:10 – 8:13 AM

Discussion

8:13 - 8:23 AM

Repeat Directed PCR of Aqueous Fluid in Cytomegalovirus Anterior and Intermediate Uveitis CHRISTINE BENADOR-SHEN, MD

8:23 – 8:26 AM

Discussion

8:26 – 8:36 AM **Mouse Model of Acute Retinal Necrosis** CHRISTOPHER CONRADY, MD, PhD

8:36 – 8:39 AM Discussion

8:39 – 8:43 AM **A Series of Unfortunate Events** ANJUM KOREISHI, MD

8:43 – 8:45 AM Discussion

8:45 - 8:55 AM

The Effect of Hyperreflective Inner Layer Line (HIRL) on Intravitreal Corticosteroid Treatment Response in Patients with Chronic Posterior Uveitis DANIEL F. KIERNAN, MD, FACS

8:55 – 8:58 AM Discussion

8:58 - 9:08 AM

Risk of Elevated Intraocular Pressure in Children with Non-Infectious Uveitis Undergoing Treatment with Difluprednate SHANI PILLAR, MD

9:08 – 9:11 AM

Discussion 9:11 – 9:15 AM

Two Cases of Disk Edema JENNIFER LEE, MD

9:15 – 9:17 AM Discussion

9:17 – 9:27 AM

Use of Intracameral Tissue Plasminogen Activator during Uveitic Cataract Surgery WEN F. HU, MD, PhD

9:27 – 9:30 AM

Discussion

9:30 – 9:34 AM

Cutter Based Choroidal Biopsy for Diagnosis of Choroidal Small B-cell Lymphoma GRANT JUSTIN, MD

9:34 – 9:36 AM

Discussion

9:36 – 9:40 AM Wrap Up AKBAR SHAKOOR, MD

12:00 – 2:00 PM Lunch on Own

2:00 – 3:30 PM CASE DISCUSSION WITH EXPERTS MODERATOR: RAMANA S. MOORTHY, MD

3:30 – 4:00 PM

Break 3:30 – 7:30 PM

Exhibits

4:00 – 6:05 PM SCIENTIFIC SESSION 2: CONTROVERSIES IN THE DIAGNOSIS OF MANAGEMENT OF INTRAOCULAR LYMPHOMA, THE OCULAR ONCOLOGY AND NEURO-ONCOLOGY INTERFACE MODERATOR: ALBERT T. VITALE, MD

4:00 – 4:05 PM

Introduction ALBERT T. VITALE, MD

4:05 - 4:50 PM

Primary Central Nervous System Lymphoma Through the Lens of a Neuro-Oncologist JOE S. MENDEZ, MD

Primary central nervous system lymphoma (PCNSL) is an aggressive form of non-Hodgkin's lymphoma confined to the central nervous system, including the eyes. Unlike other primary brain tumors, PCNSL is very chemosensitive leading to potentially prolonged progressionfree survival with curative intent. There has been significant process in extending survival in patients with PCNSL through advances in treatment strategies. PCNSL is currently treated with induction therapy consisting of a polychemotherapy regimen with methotrexate as a backbone, followed by consolidation therapy. Recent advances in PCNSL include the utilization of myeloablative chemotherapy followed by autologous stem cell rescue as consolidation. Basic science advances have led to a better understanding of the molecular underpinnings of PCNSL, including oncogenic pathways that could be exploited in the treatment of PCNSL. This has led to the incorporation of targeted therapies in the setting of recurrent/refractory PCNSL with positive findings leading to additional therapeutic options for patients. Immunotherapy in the form of CAR T-cell therapy and checkpoint blockade, is being explored in PCNSL clinical trials.

4:50 – 5:05 PM Discussion

5:05 – 5:35 PM

Updates and Controversies in Intraocular Lymphoma: Perspective from an Ocular Oncologist ERIC D. HANSEN, MD

Intraocular lymphoma is a malignancy with various ocular manifestations as well as systemic associations. Classically a masquerading and fastidious disease process, lymphoma presents challenges in its effective diagnosis and management, particularly vitreoretinal lymphoma. Novel and emerging diagnostic tools focusing on genotyping, molecular testing and improved cytologic processing are increasing diagnostic efficiency for ophthalmologists. Still,

the sensitivities of available tests remain suboptimal and there is great need for accurate prognostic biomarkers. Controversies still exist surrounding the management of vitreoretinal lymphoma, relating to local and systemic chemotherapeutic protocols as well as the role of radiation therapy in treatment. Additionally, new treatment modalities for systemic and primary central nervous system lymphoma are highlighting a need for greater collaboration amongst oncologists, neuro-oncologists and ophthalmologist in the form of well-designed prospective trials with appropriate outcome metrics. Probing the interface between specialties provides unique insight into opportunities for improving patient outcomes, as well as existing blind spots in our understanding of this challenging disease.

5:35 – 6:05 PM

Where Worlds Collide: Collaborative Management of Intraocular Lymphoma PANEL DISCUSSION: ERIC D. HANSEN, MD AND JOE S. MENDEZ, MD

Vitreoretinal specialists and neurooncologists often co-manage patients with Primary CNS Lymphoma and Primary Vitreoretinal Lymphoma given the overlap of these entities. Though advancements have been made in the treatment of PCNS and PVR lymphoma, recurrence is common, and controversies exist around the best management for particular clinical scenarios. Aligning current approaches and understanding emerging developments in each other's field are important for continued progress and improvements in patient survival.

6:05 - 6:25 PM

Break

6:25 – 7:09 PM CASE PRESENTATIONS, FREE PAPERS, & DISCUSSIONS MODERATOR: ALBERT T. VITALE, MD

6:25 – 6:35 PM

Multimodal Imaging Biomarkers in Vitreoretinal Lymphoma: An Analysis of 58 Eyes of 36 Patients OGUL E. UNER, MD 6:35 – 6:38 PM

Discussion

6:38 - 6:42 PM

Just Another Stubborn Uveitis Case ANA SUELVES, MD, PhD

6:42 – 6:44 PM

Discussion

6:44 - 6:54 PM

Anterior Segment Involvement in Vitreoretinal Lymphoma: Clinical Manifestations, In Vivo Confocal Microscopy, and Molecular Findings ALESSANDRO MARCHESE, MD Travel Grant Awardee

Purpose: Intermediate and posterior manifestations of vitreoretinal lymphoma (VRL) are well characterized. However, there is limited information on anterior segment involvement in VRL. This study aimed to describe the anterior manifestations of VRL, and their association with molecular testing.

Methods: Retrospective analysis of patients with biopsy-proven VRL consecutively seen at two tertiary referral centers for uveitis. Study variables included anterior segment findings, slit-lamp photos and *in vivo* confocal microscopy (IVCM) when available. MYD88 L265P mutation and cytology in the aqueous humor, retinal and systemic findings were also analyzed.

Results: The analysis included one hundred and eight eyes of 55 VRL patients (mean age 67±12 years; 34 females, 62%). Anterior segment involvement was present in at least one visit in 55 eyes (51%) of 33 patients (60%); it included keratic precipitates (dendritiform with branching and irregular margins in 33 eyes, dust-like in 16 eyes, and mutton fat in 12 eyes), cells in the anterior chamber (51 eyes), and posterior synechiae (2 eyes). IVCM was available for 41 eyes and showed different morphologies of keratic precipitates, including floral, spikes, and mulberry patterns (66%, 56%, and 20%, respectively). MYD88 L265P mutation in the aqueous humor was detected in 10/21 (48%) eyes with no anterior segment involvement and 24/37 (65%) eyes with anterior segment involvement (p-value = 0.3).

Conclusions: Anterior segment manifestations can be associated with active VRL and include dendritiform and dust-like keratic precipitates. IVCM in VRL can identify different patterns associated with keratic precipitates. MYD88 L265P mutation in the aqueous humor of VRL patients can also be found in eyes with no apparent anterior segment involvement.

6:54 – 6:57 PM

Discussion

6:57 – 7:01 PM **"I Didn't See That Coming"** GLENN J. JAFFE, MD

7:01 – 7:03 PM

Discussion

7:03 – 7:07 PM **Atypical Lymphoma** ERICK M. RIVERA-GRANA, MD

7:07 – 7:09 PM

Discussion

7:09 – 7:22 PM INDUSTRY PARTNER PRESENTATIONS

7:09 – 7:16 PM

Bausch + Lomb 7:16 – 7:19 PM

EyePoint Pharmaceuticals

7:19 – 7:22 PM Regeneron Pharmaceuticals, Inc.

7:22 - 7:30 PM

Wrap Up ALBERT T. VITALE, MD

7:30 PM End of Session

MONDAY January 16, 2023

7:00 – 7:55 AM Breakfast

7:00 – 9:15 AM Exhibits

7:55 – 8:00 AM **Opening Remarks** AKBAR SHAKOOR, MD

8:00 – 9:09 AM CASE PRESENTATIONS, FREE PAPERS, & DISCUSSIONS MODERATOR: AKBAR SHAKOOR, MD

8:00 – 8:10 AM

Readability and Suitability of Online Uveitis Patient Education Materials ERIC L. CROWELL, MD, MPH

8:10 – 8:13 AM Discussion

8:13 – 8:17 AM **Pharyngitis, Floaters, and Frosting** JULIA L. XIA, MD

8:17 – 8:19 AM Discussion

8:19 - 8:29 AM

Tacrolimus as a Second Immunosuppressive Agent CARL S. WILKINS, MD

8:29 – 8:32 AM

Discussion

8:32 - 8:36 AM

Uveitis Associated with Bispecific T-cell Engagers EDMUND TSUI, MD

8:36 – 8:38 AM Discussion

8:38 – 8:42 AM

A Case of Unilateral Choroidopathy GEORGIA KAMBOJ, MBBS, PhD

8:42 – 8:44 AM Discussion

8:44 - 8:48 AM

CNS Lymphoma with Unknown Maculopathy ANDREW W. ELLER, MD

8:48 – 8:50 AM Discussion

8:50 - 9:00 AM

Screening Utility of Beta-2 Microglobulin and Serum Creatinine in New-Onset Uveitis TIMOTHY M. JANETOS, MD, MBA

9:00 – 9:03 AM Discussion

9:03 – 9:07 AM

Yin and Yang: Opposite but Complementary Disease in Each Eye of a Single Patient THELLEA K. LEVEQUE, MD, MPH

9:07 – 9:09 AM

Discussion

9:09 - 9:15 AM

Closing Remarks ALAN G. PALESTINE, MD; AKBAR SHAKOOR, MD; ALBERT T. VITALE, MD

9:15 AM Meeting Adjourns

Save The Date

AUS 27th Annual Winter Symposium Canyons Grand Summit Hotel, Park City, Utah January 13-15, 2024

SPECIAL THANKS

The American Uveitis Society gratefully acknowledges the following companies for their support:

DIAMOND

Allergan, an AbbVie Company Bausch + Lomb

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