June 30 (Sunday) 9:30-13:00 Room 1 (Auditorium)

11th International Workshop on Vogt-Koyanagi-Harada Disease and Sympathetic Ophthalmia

Chairs / Moderators: Kalpana Babu Murthy *(India)*
Russell Read *(USA)*
Hiroshi Goto *(Japan)*

9:30-9:40 **The Past, Present, and Future of the International Workshops on Vogt-Koyanagi-Harada Disease**
Russell Read, MD *(USA)*

9:40-9:50 **Treatment of acute VKH in Italy**
Massimo Accorinti *(Italy)*

9:50-10:00 **Treatment and visual outcome of Vogt-Koyanagi-Harada (VKH) from a tertiary centre of south India**
Jyotirmay Biswas *(India)*

10:00-10:10 **Vogt-Koyanagi-Harada in Thailand**
Kessara Pathanapitoon *(Thailand)*

10:10-10:20 **Treatment of VKH in Singapore**
Soon Phaik Chee *(Singapore)*

10:20-10:30 **Treatment of VKH in Japan**
Manabu Mochizuki *(Japan)*

10:30-10:45 **Unanswered Questions in the Treatment of Vogt-Koyanagi-Harada Disease**

10:45-11:00 **Outcomes of VKH from the First-line Antimetabolites for Steroid-sparing Treatment Uveitis Trial**
Nisha Acharya *(USA)*

11:00-13:00 **Study Planning**

Panelists: Kenichi Namba *(Japan)*
Hiroshi Keino *(Japan)*
Moncef Khairallah *(Tunisia)*
Shwu-Jiuan Sheu *(Taiwan)*
SR. Rathinam *(India)*
Thomas Albini *(USA)*
Somsiri Sukhavatcharin *(Thailand)*
Joyce Hisae Yamamoto *(Brazil)*
Mudit Tyagi *(India)*

Vogt-Koyanagi-Harada disease is a chronic bilateral panuveitis which requires prompt aggressive treatment to control. Prior VKH Workshops addressed treatment, but unanswered questions remain, including the preferred route of corticosteroid administration, whether to initiate systemic immunosuppression at the time of initial treatment, and quality data on geographic and ethnic variations in outcome from a single well designed study. The goals of the 2019 VKH Workshop will be to determine current opinions and practices on corticosteroid treatment regimens for acute VKH from a wide range of geographic areas; study the time course of disease and vision improvement and subsequent development of complications of VKH based on corticosteroid treatment route and addition or not of immunosuppression at initial presentation from widely ranging geographic areas with diverse ethnic populations; and to analyze outcome disparities in the same data for gender, ethnic, and other grouping characteristics.

Treatment of acute VKH in Italy

Massimo Accorinti[1], for the VKH acute therapy treatment group[2]
[1]Sapienza University of Rome, Rome, Italy,
[2]VKH acute therapy treatment group (participants in alphabetic order):
P. Allegri (Rapallo), L. Cimino (Reggio Emilia), B. Iaccheri (Perugia),
L. Latanza (Napoli), P. Mora (Parma), E. Miserocchi (Milano),
M.S. Tognon (Padova), L. Vannozzi (Firenze)

Purpose: to assess the most used therapeutic strategy for acute Vogt-Koyanagi-Harada (VKH) disease in Italy.
Methods: a questionnaire on the preferred therapeutic choice for the treatment of acute VKH was sent to referral centre for uveitis in Italy. Results: 9 centres participated in the study, comprising a mean of 67 cases of acute VKH examined in one year. Intravenous corticosteroids (1 gr methylprednisolone for 3-5 days) were used at VKH onset in 89% of the centres, only one giving a combination of oral corticosteroids and azathioprine. No periocular corticosteroids, neither other therapies are added in 89% and 66.6% of the cases, respectively. The ideal duration of systemic corticosteroid therapy is 3 to 6 months for 44.4% of the responders, longer for 33.3%. In those patients showing active posterior uveitis despite a corticosteroids course, azathioprine or mycophenolate are suggested (77.7%). The preferred treatment for anterior uveitis, if needed, is topical corticosteroids and short-acting mydriatics in 55.5% of the centres. Patients showing an ocular relapse despite a chronic therapy with systemic prednisone (7.5 mg/day) receive always a conventional immunosuppressive drug, while those affected by extraocular manifestations only, a conventional immunosuppressive drug in 44.4% of the cases, a biologic in 33.3% and an increase in corticosteroid therapy in 22.2%.
Conclusion: intravenous systemic immunosuppressive corticosteroids are the preferred therapy for acute VKH in Italy. If an immunosuppressive therapy is need, either azathioprine or mycophenolate are suggested.

Vogt-Koyanagi-Harada in Thailand

Kessara Pathanapitoon
Department of Ophthalmology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

Vogt-Koyanagi-Harada is one of the commonest noninfectious clinical entities in Thailand. According to our study on 48 VKH patients with median follow-up time of 1.75 years demonstrated that most of patients (40/48; 83%) were diagnosed with probable VKH. The most common initial clinical presentation was acute uveitic stage (37/48, 77%); convalescent stage was noted in 9/48 (19%) and chronic/recurrent stage in 2/48 (4%). Majority of patients (28/48; 58%) received a combination of oral corticosteroids and immunosuppressive agents; most common azathioprine. Cataract and glaucoma were the most frequent complication. No association was found between development of ocular complications during follow-up and the stage of disease at presentation (p =.654) and treatment modalities (p =.261). There is no universal agreement with regard to treatment regimens for VKH. We surveyed 21 uveitis specialists in Thailand by questionnaires. In acute uveitic stage, 57% of the experts would start with oral corticosteroids (1 mg/kg) while 43% would administer IV pulse methylprednisolone for 3 days followed by oral corticosteroids. In maintenance phase, combined oral corticosteroids with immunosuppressive agents is often used. Azathioprine (48%) and methotrexate (26%) are the drugs which are favored first. The most common reason for using immunosuppressive agents is patients require prednisone more than 10 mg/d to control inflammation. Most will maintain the drugs at least one year and found that VKH patients have a good visual prognosis.

Treatment and visual outcome of Vogt-Koyanagi-Harada (VKH) from a tertiary centre of south India

Jyotirmay Biswas
Medical Research Foundation, Sankara Nethralaya, Chennai, India

Purpose: To describe the clinical profile, management, complications and visual outcome of VKH in a cohort of patients from south India. Methods: Medical records of 64 patients (124 eyes) who were diagnosed as VKH between 2008 and 2018 with a minimum follow-up of 3 months were reviewed by a single ophthalmologist. Results: Mean age was 38.17±12.75 years with a female predominance (57.1%). Multisystemic involvement of VKH disease was seen in 36.93‰ cases. Uveitis was mostly nongranulomatous (74.20%). The mean visual acuity was 0.76±0.86 and 0.43 ± 0.76 log MAR units at the first and final visit. Majority of the patients were treated with immune-modulatory therapy along with steroid (74.60‰), azathioprine (69.84%), methotrexate (1.59%, mycophenolate (3.17%). Anti-VEGF (6.45%) cases. Optic disc changes (51.6%), vitritis (41.1%), exudative retinal detachment (33.1‰), sunset glow fundus (28.2%), subretinal fibrosis (11.3%) and peripapillary atrophy (3.23%) were noted. Complications such as cataract (24.19), glaucoma (21.8%), CNVM (15.3%), CME (13.70%) developed during follow-up visits. Statistically significant improvement in visual acuity (p <0.0001) was noted in the combination of treatment; 21.76% with steroid alone, 61.29‰ with azathioprine+ steroids; and of 1.63% with methotrexate + steroid; and of 2.42% with mycophenolate + steroid. 12.9% eyes had deteriorated vision with the major cause of Cataract (43.75%) and CNVM (31.25%). Conclusion: Visual improvement was achieved in the majority of cases (87.10%) of VKH.

Treatment of VKH in Singapore

Soon Phaik Chee
Singapore National Eye Centre, Singapore, Singapore

PURPOSE
To study the outcome of combined systemic steroids with immunosuppressive agents as a first line in the management of Vogt Koyanagi Harada disease (VKH).

METHODS
Retrospective review of all VKH patients from 2008 to 2018 at the Singapore National Eye Centre. Treatment consisted of high dose systemic steroid therapy followed by the addition of immunomodulatory therapy within 3 months. Demographics, clinical signs, optical coherence tomography findings and outcomes were collected and analysed.

RESULTS
70 eyes of 35 patients were studied. Majority were Chinese and female. Mean age was 44.02+14.3 years. Median follow-up 4.86 years. Mean time to treatment 5.65 days. Mean logMAR vision improved at all time points compared to baseline. Mean time of resolution of SRF was 41 days. Sunset glow fundus was increased from baseline (n=5) at 6months (n=12, 35.3%). There was no significant increase in the number at all other time points. No increase nummular chorioretinal scarring and RPE changes. Central macula thickness change was statistically significantly different at all time points for the right eye. At presentation, 5 (14.7%) patients were in the chronic phase, and this number increased to 35.3% (n=12 of 34) at 6 months and 57.1% (n=12 of 21) at 5 years of follow up. At 5 years, 47.6% (10 of 21) were still on immunosuppressive therapy, of which 14% (4 of 10) were still on low dose prednisolone.

CONCLUSION
The early addition of immunomodulatory therapy to corticosteroid therapy is unable to prevent VKH patients from developing chronic disease in Singapore.

Treatment of VKH in Japan

Manabu Mochizuki[1,2]

[1]Department of Ophthalmology & Visual Science, Tokyo Medical and Dental University, Tokyo, Japan, [2]Miyata Eye Hospital, Miyakonojo, Japan

VKH is an autoimmune disease specific to melanocyte presenting unique clinical manifestations involving tissues containing melanocyte which include the eye, ear, skin and meninges. In the eye it induces bilateral uveitis and can cause serious ocular complications resulting in poor visual prognosis. Therefore, there is international agreement for the management of VKH, i.e. it is essential to treat the patients aggressively to control acute inflammation at its acute stage with high dose of systemic corticosteroids and to suppress immune response at its chronic stage with various immunosuppressive agents for long periods of time.

In Japan, a steroid pulse therapy, i.e. 500-1000mg/day of methylprednisolone for 3 days, followed by oral prednisolone (60mg/day or 1mg/Kg daily) and gradual dose reduction/discontinuation for the next 6-8 months is a standard therapy for acute stage of VKH disease. However, in Europe or US, a combination therapy with oral prednisolone and immunosuppressive agents such as cyclosporine, mycophenolate mofetil or methotrexate is the first option of the therapy for acute VKH, while steroid pulse therapy like in Japan is not commonly used. It has been discussed which therapy is better and safer for the acute VKH disease. However, no control clinical studies have been conducted comparing efficacy to prevent recurrence of VKH and its safely. Therefore, we started a prospective randomized multicenter clinical trial in Japan in 2014 to compare the efficacy and safety of steroid pulse therapy vs. oral prednisolone + cyclosporine in patients with acute VKH, and completed the study in February 2019. The results of the study will be discussed in the workshop.

Outcomes of VKH from the First-line Antimetabolites for Steroid-sparing Treatment Uveitis Trial

Nisha Acharya

Department of Ophthalmology, F.I. Proctor Foundation, University of California San Francisco, CA, USA

BACKGROUND: Vogt-Koyanagi-Harada (VKH) syndrome usually requires aggressive high-dose corticosteroid treatment with immunosuppressive therapy. Long-term treatment with corticosteroids is associated with well-known local and systemic side effects, so corticosteroid-sparing agents are recommended for long-term control of inflammation. Antimetabolites are often utilized as first-line, corticosteroid-sparing treatments for VKH disease.

METHODS: A sub-analysis was conducted on patients with active uveitis due to VKH enrolled in the First-line Antimetabolites for Steroid-sparing Treatment (FAST) Uveitis Trial to compare clinical outcomes between patients treated with methotrexate and mycophenolate. Patients were randomized to receive 25mg weekly oral methotrexate or 1.5g twice daily oral mycophenolate mofetil, along with a standardized oral corticosteroid taper. Masked examiners assessed the primary outcome of treatment success at 6 months. Additional outcomes included change in best spectacle-corrected visual acuity, resolution of macular edema and serous retinal detachments, and adverse events.

RESULTS: Out of 216 patients enrolled in the FAST Uveitis Trial, 93 had VKH. Forty-nine patients were randomized to methotrexate and 44 were randomized to mycophenolate mofetil. A total of 85 patients with VKH (46 methotrexate, 39 mycophenolate mofetil) contributed to the primary outcome at 6 months. Results for visual acuity, macular thickness and control of uveitis will be presented. Outcomes will also be compared between acute and chronic VKH.