

June 29 (Saturday) 16:50-17:50 Room 1 (Auditorium)

**8th Asia Pacific Intraocular Inflammation Study Group Meeting**

Chairs / Moderators: Hiroshi Takase (*Japan*)

Bahram Bodaghi (*France*)

Carl P. Herbort Jr. (*Switzerland*)

- 16:50-17:00 **Perplexity of a Challenging Uveitis Case**  
Mafruha Afrin (*Bangladesh*)
- 17:00-17:10 **A challenging case**  
Samanthila Waduthantri (*Singapore*)
- 17:10-17:20 **The Utility of Liquid-based Cytology in Diagnosis of Intraocular Lymphoma and Sarcoidosis**  
Yutaka Kaneko (*Japan*)
- 17:20-17:30 **Long term result of treating CMV iritis-----Seeing the whole picture**  
Chang-Ping Lin (*Taiwan*)
- 17:30-17:40 **Diagnostic dilemma and challenges of VKH versus Multiple -leak CSR**  
Shishir Narain (*India*)
- 17:40-17:50 **Invited Talk**  
**How to suspect and diagnose the Masquerade Syndromes**  
Hyeong Gon Yu (*South Korea*)

Panelists: Hyeong Gon Yu (*South Korea*)

Moncef Khairallah (*Tunisia*)

Joyce Hisae Yamamoto (*Brazil*)

## Perplexity of a Challenging Uveitis Case

Mafruha Afrin

Department of Ophthalmology, Greenlife Medical College, Dhaka, Bangladesh

Uveitis, being an enigmatic clinical entity, often leads to diagnostic dilemma due to its variable clinical presentations. Therefore, appropriate diagnosis as well as proper management of uveitis is complicated and challenging. In order to reduce ocular morbidity, a tailored diagnostic and therapeutic approach should always be considered.

A 40 years-old male developed floaters and blurring of vision in right eye for 15 days. His visual acuity in right eye was 20/40 and left eye was 20/20. There was 2+ cells in the anterior chamber and 3+ cells in the vitreous, snow balls associated with peripheral retinal vasculitis and elevated intra-ocular pressure in right eye. The patient was given an initial diagnosis of intermediate uveitis with secondary glaucoma. His initial laboratory work up revealed Mantoux test '00' mm induration, normal chest X-ray, negative QuantiFERON with raised ACE level and was discovered to have healed lymphnode in right paratracheal region on CT scan. Although he was treated with adequate immunosuppressive agents, inflammation did not subside as expected. The patient was re-evaluated and PCR of vitreous aspirates was found to be positive for Mycobacterium tuberculosis. Hence, anti tuberculosis treatment was initiated and significant clinical improvement was noted within first 3 months. While on continuation phase of anti tuberculosis regime, his condition deteriorated with bilateral involvement which was refractory to treatment resulting doubtful diagnosis.

This case illustrates an unusual presentation of intermediate uveitis where diagnosis still remained ramified.

## The Utility of Liquid-based Cytology in Diagnosis of Intraocular Lymphoma and Sarcoidosis

Yutaka Kaneko

Faculty of Medicine and Graduate School of Medicine, Yamagata University, Yamagata, Japan

Purpose: Cytology in vitreous biopsy has a low diagnostic rate as the cells are destroyed with conventional direct smear methods. Attempts have been made to improve the diagnostic rate by preparing cell block specimens. However, it is often difficult to prepare cell block specimens due to only small amounts of samples. Liquid-based cytology (LBC) can achieve a high cell accumulation rate by depositing samples into a small bottle of preservative liquid. As a result, little cell destruction occurs. We investigated the utility of LBC for vitreous biopsy. Subjects and Methods: Vitreous biopsy was performed on 28 eyes in 21 cases (Intraocular lymphoma: 14 eyes in 10 cases, Sarcoidosis: 14 eyes in 11 cases) for refractory vitreous opacity between January 2015 and April 2019 at the Department of Ophthalmology, Yamagata University Hospital. Diluted vitreous samples were obtained with 25-gauge vitreous surgery system (5,000 cut rate/m) and LBC specimens were prepared (BD SurePath™). Cell block specimens were prepared from diluted fluid containing shredding vitreous. Results: In intraocular lymphoma cases, atypical lymphocytes were confirmed in 9/14 eyes (85.7%) using LBC and in 9/14 eyes (64.2%) with cell block specimens. In Sarcoidosis cases, epithelioid cells were confirmed in 9/14 eyes (64.3%) using LBC and in 4/14 eyes (28.6%) using cell block specimens. Conclusions: LBC for vitreous biopsy with diluted vitreous samples is a safe and reliable method of diagnosis that can achieve pathological diagnosis at level not inferior to cell block specimens.

## A challenging case

Samanthila Waduthantri<sup>1,2</sup>

<sup>1</sup>Singapore National Eye Centre, Singapore, Singapore, <sup>2</sup>Singapore Eye Research Institute, Singapore, Singapore

A 33 years old female with a history of chronic sinusitis presented to us with blurred vision, pain, and redness in right eye for 3 months. She has been treated for presumed tuberculosis (TB) associated uveitis elsewhere. CXR was negative for pulmonary TB. Mantoux test was positive. TB Quantiferon and T-spot TB was reactive. Anterior segment examination revealed right inflamed sclera and infiltrated iris and ciliary body. Fundus examination revealed right optic disc swelling and inferior choroidal detachment. Left eye was quiet. Repeated post nasal biopsy was inconclusive. Uveitis was recalcitrant to anti-TB medication and systemic immunosuppressive therapy. She also developed optic disc swelling in left eye and right eye was prephthical due to severe inflammation. Diagnosis and management will be discussed.

## Long term result of treating CMV iritis-----Seeing the whole picture

Chang-Ping Lin

National Taiwan University Hospital, Taipei, Taiwan

Cytomegalovirus iritis (CMVI) presented with iritis, mutton fat KPs, elevated IOP, iris atrophy, and no posterior synechia. CMV could go latent and could not be totally eradicated, and to recurs, sooner or later, is the rule. The major morbidities are corneal decompensation and glaucomatous optic neuropathy. The goal of treatment is to preserve corneal endothelium and optic nerve.

Most referred cases were initially diagnosed as glaucomatocyclitic crisis. Most were referred when the attacks took place with shorter and shorter intervals or even without any quiescent period of normal IOP and/or no cells in anterior chamber in between.

Topical 2% ganciclovir (T2G) were used in all the 110 cases with CMV iritis in past 12 years. It was tolerated well in all cases except two with 1% and two with 0.5% ganciclovir. The topical ganciclovir could be tapered from every 2 hour for the first month to three times a day within 3-6 months and be discontinued with attack free period was longer than 6 months. We suggest continuous use of T2G if the patient has corneal endothelial cell density under 1000 cells/mm<sup>2</sup> (when pseudophakic) or 1200 (when phakic), status post penetrating keratoplasty or with advanced disc cupping.

The disease is supposed to be back to original condition with long attack-free intervals. If CMVI recurred after T2G being discontinued, topical antiviral treatment is resumed only when the second relapse occurs within 3 months of the first.

Under this regimen, corneal endothelial density and disc cupping could be preserved in all cases.

## Diagnostic dilemma and challenges of VKH versus Multiple-leak CSR

Shishir Narain

Shroff Eye Centre, New Delhi, New Delhi, India

A 43 years old immunocompetent female presented with blurring of vision for 2 weeks. She had been diagnosed left eye choroiditis and treated with moderate doses of systemic steroids. Patient worsened despite oral steroids and referred.

The VA both eyes was 6/12 with normal IOP. FFA showed multiple leaks in both eyes with late pooling. Swept source OCT shows pachy vessels with choroidal thickening OU (481 microns OD & 445 microns OS). Since both findings are common to MLCSR and VKH, diagnostic dilemma was created. OCTA showed hyper-flow areas in both eyes. OCTA OS showed sea fan pattern of vascular network with smaller vessels radiating from feeder (choriocapillaris slab) s/o active CNVM. OCTA OD showed a smaller vascular network corresponding to shallow irregular flat PED and network connected to feeder seen at level of choriocapillaris s/o early CNVM. So a diagnosis of bilateral CNVM secondary to either VKH or MLCSR was made.

As her condition was deteriorating systemic steroids were very rapidly tapered off and replaced with moderate doses of immunomodulatory treatment (Azathioprine) and Eplerenone 50mg too compensate for a possible CSR. There was rapid improvement in her clinical and imaging parameters over the next two weeks with decrease in choroidal thickening and pachy vessels on EDI OCT. Loading doses of antiVEGF were simultaneously given for the established CNVM first in the left and later in the right eye

The differential diagnosis and possible management strategies for VKH versus Multiple leak CSR are discussed to assist in establishing a definite diagnosis.

## How to suspect and diagnose the Masquerade Syndromes

Hyeong Gon Yu<sup>1,2</sup>

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Primary intraocular lymphoma (PIOL), one of neoplastic masquerade syndromes, is an ocular malignancy that is a subset of primary central system lymphoma (PCNSL). Approximately one-third of PIOL patients will have concurrent PCNSL at presentation, and 42–92% will develop PCNSL within a mean of 8–29 months. Intraocular lymphoma also may develop secondarily in association with extraocular lymphoma in the central nervous system (CNS) or systemic organs beyond the CNS.

Vitreoretinal lymphoma (VRL) is the most common type of ocular lymphoma related to intraocular lymphoma. Still, diagnosis remains challenging for ophthalmologists and pathologists. They can masquerade as noninfectious or infectious uveitis, white dot syndromes, or occasionally as other neoplasms such as metastatic cancers. Vitreous cytology is also very challenging. Although the diagnosis of VRL is primarily based on histopathologic confirmation, around one third of VRL patients have a history of false-negative cytology report. The false negative vitreous cytology arises from the paucity of malignant cells in the vitreous samples and the fragility of lymphoma cells. Previous use of corticosteroids also affects the false negative cytology reports. Furthermore, lack of expertise in pathologists due to the rarity of disease makes the cytological confirmation more difficult.

The prognostic factors for primary CNS lymphoma indicate that early treatment before CNS lesion involves deep brain or grows bigger, may be important for survival. Stage 3 or 4 CNS lymphoma had a poor prognosis compared to earlier stages. Therefore, it is important to have high level of suspicion in diagnosing intraocular lymphoma. for saving life as well as vision. This presentation will focus on clinical tips in the diagnosis of intraocular lymphoma.