SOCIETY TIDINGS

Proceedings of the Neuro-ophthalmology Symposium in the 54th Annual Meeting of the Ophthalmological Society of Taiwan, November 30, 2013, Taipei, Taiwan

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The Neuro-Ophthalmology Symposium of the 54th Annual Meeting of the Ophthalmological Society of Taiwan was held on November 30, 2013, at National Taiwan University Hospital International Convention Center (NTUH ICC), Taipei, Taiwan. About 80 participants, including fellows, residents, and practising ophthalmologists, were present.

The symposium was divided into four sections. The topic of the first section was “Optic Neuropathy”.

Dr. Ta-Ching Chen, Taiwan University Hospital, Taipei, Taiwan, discussed the relationship of myopia, optic disc, and peripapillary structures. High myopia leads to tilted disc, peripapillary atrophy, and peripapillary structural weakness. Intrachoroidal cavitation may subsequently develop in the peripapillary area. It is usually stable but may cause macular complications.

Dr. Jieh-Ren Jou, Changhua Christian Hospital, Changhua, Taiwan, discussed neuroretinitis. Neuroretinitis is characterised by inflammation in the optic nerve and retina. There are numerous entities that can cause a picture similar to neuroretinitis, including vascular, infectious, autoimmune diseases, and idiopathic causes. A complete workup is needed in these patients with a thorough history and general medical evaluation.

Dr. Rong-Kung Tsai, Buddhist Tzu Chi General Hospital, Hualien, Taiwan, discussed steroid treatment in non-arteritic anterior ischaemic optic

neuropathy (NA-AION). Debate persists on the role of steroid treatment in patients with NA-AION. Dr. Tsai presented a case of NA-AION treated with intravitreal injection of triamcinolone (IVIT), who had visual improvement 1 week after injection. Dr. Tsai and his colleagues then investigated the influence of IVIT on a rat model of NA-AION (rAION). They reported that both systemic corticosteroid and IVIT have neuroprotective effects in rAION, as evidenced by retinal ganglion cell (RGC) morphometry and visual function assessment. Dr. Tsai concluded that intravitreal steroid treatment can decrease optic disc oedema and lessen damage, but further randomised studies are needed.

The second section of the Neuro-Ophthalmology Symposium was “Visual Loss”.

Dr. Walter Jay, Loyola University, Maywood, Illinois, USA, began this section with the topic of visual loss in pregnancy. Dr. Jay first presented a case of a pregnant woman who was seen in an emergency department for sudden visual loss and then developed a seizure. The fundus examination was normal. Subcortical oedema without infarction in the occipital lobes was noted on magnetic resonance imaging (MRI). Posterior reversible encephalopathy syndrome was diagnosed and her vision recovered after delivery. The second case was a woman with eclampsia who developed bilateral visual loss after delivery. The fundus examination showed Purtscher’s-like

retinopathy. Dr. Jay concluded his presentation by stating that visual loss occurring in pregnancy associated with cerebral cortical changes is usually temporary, in contrast to visual loss with retinal findings, which is often permanent.

Dr. Ling Yuh Kao, Chang Gung Memorial Hospital, Taipei, Taiwan, gave a talk on "Retrograde Trans-synaptic Degeneration of Retinal Ganglion Cells Easily Identified with OCT". Retrograde trans-synaptic degeneration of the visual pathway is a well-recognised phenomenon, but could easily be overlooked on the clinical examination. Dr. Kao reported two cases each with a congenital geniculocalcarine lesion. Spectral domain optical coherence tomography (OCT) was used to document the nerve fibre layer (NFL) thickness around the disc. In both cases, the eye ipsilateral to the lesion side of the posterior pathway showed NFL thinning of the temporal hemiretina, whereas the eye contralateral to the lesion site demonstrated thinning of NFL at the nasal and temporal hemiretina.

Dr. An-Guor Wang, Taipei Veterans General Hospital, Taipei, Taiwan, discussed "Functional Visual Loss". Dr. Wang presented a 41-year-old woman who suffered from several episodes of bilateral visual loss and visual field (VF) defects with variable patterns. With each attack, the patient was admitted to the neurology ward and steroid pulse therapy was given, despite no definite lesions on MRI. During a 10-year span with several steroid treatments, she developed avascular necrosis of her lumbar spine and suffered from compressive fractures. Conversion disorder was finally diagnosed. The second case was a 38-year-old male who claimed visual loss in the right eye after ocular trauma. VF showed general depression and pupil response showed no relative afferent pupillary defect (RAPD). No remarkable findings were noted on fundus examination and brain MRI. Malingering was proved by the fogging test. Dr. Wang then presented a 9-year-old boy who had bilateral visual loss after head trauma. No remarkable findings were noted after serial examinations except for general depression on VF. His vision improved after instillation of "magic eyedrops" (0.25% chloramphenicol) and a bottom-up visual acuity test. Visual rest therapy with avoidance of television recommended to the parents in front of the child. Two weeks later, the vision of this boy recovered completely.

The third section of the Neuro-Ophthalmology Symposium was "Systemic Disease".

Dr. Tzu-Lun Huang, Buddhist Tzu Chi General Hospital, Hualien, Taiwan, presented three important topics in thyroid-associated orbitopathy (TAO) and neuropathy. First: How to deal with TAO in your busy outpatient service? Second: Showing several cases of lid deformity that were treated with medication (steroid or botulinum toxin) or surgery intervention.

The last: Introduction of rituximab in mild to moderate TAO.

Dr. Sharon Tow, Singapore National Eye Centre, Singapore, presented a cohort study of conversion rate of ocular myasthenia gravis (MG) to generalised myasthenia gravis in Singapore. Dr. Tow reported low conversion rate from ocular to generalised MG in Singapore, with average time to conversion of 2.6 years. Positive findings in acetylcholine receptor antibody, repetitive nerve stimulation, and computed tomogram (CT) of thorax were associated with conversion to generalised MG. Dr. Tow also reported no association found between steroid treatment and conversion to generalised MG in this study.

Dr. Lin-Chung Woung, Taipei City Hospital, Taipei, Taiwan, presented a pilot study of the relationship of Alzheimer's disease (AD) and ocular disease. AD was related to some systemic diseases, such as diabetes, hypertension, and cardiovascular disease. Based on the Taiwan National Health Insurance research database, AD was also related to age-related macular disease, glaucoma, and diabetic retinopathy. The relationship may be based on the sharing features of amyloid deposition, pTau protein, and genetics.

Dr. Jay returned to the podium to present "Idiopathic Intracranial Hypertension". With a predilection to obese women of childbearing age, patients with idiopathic intracranial hypertension often have symptoms of headaches, transient visual obscurations, intracranial noises, and double vision. Papilloedema, visual acuity loss, VF loss, and abducens palsy may be noted. Opening pressure of cerebrospinal fluid above 250 mm H₂O establish the diagnosis. Dr. Jay emphasised the possibility of permanent visual loss due to atrophic chronic papilloedema and the importance of treatment, including weight loss and medical and surgical interventions.

The final section of the symposium was the "Challenging Cases".

Dr. Zhao-wen Lin, Ophthalmology resident, Taiwan University Hospital, Taipei, Taiwan, presented a case of bilateral visual loss and elevated intraocular pressure. Retinal examination revealed subretinal fluid in the posterior pole and MRI disclosed thickening of posterior sclera. The final diagnosis was posterior scleritis.

Dr. Shao-Jun Chen, Ophthalmology resident, Taipei City Hospital, Taipei, Taiwan, presented a young man with mild ptosis and an internuclear ophthalmoplegia-like ocular movement disorder. The brain MRI and acetylcholine receptor antibody was negative. However, myasthenia gravis was still a possibility and further studies including ice pack test and Tensilon test were recommended by the audience.

Dr. Ming-Hui Sun, Chang Gung Memorial Hospital, Linkou Medical Center, presented a case of optic

neuritis with progressive multifocal leukoencephalopathy (PML) as presenting symptom of untreated human immunodeficiency virus infection (HIV). PML is a kind of severe demyelinating disease of central nervous system and occurs in immunocompromised patients. Typical MRI of brain in PML shows hyperintensity on diffusion-weighted image (DWI) and apparent diffusion coefficient (ADC) map. This radiological finding along with the progressive clinical course in the patient favoured PML instead of posterior reversible encephalopathy syndrome (PRES).

Dr. Shi-Lin Chen, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, presented a case of suprasellar meningioma with compressive optic neuropathy.

Dr. Yi-qing Li, Ophthalmology fellow, Buddhist Tzu Chi General Hospital, Hualian, Taiwan, presented a case with lacrimal gland enlargement in whom

sarcoidosis was diagnosed from the lacrimal gland biopsy.

Dr. Li-tzu Yang, Neuro-ophthalmology fellow, Taipei Veterans General Hospital, Taipei, Taiwan, gave the final presentation. Dr. Yang presented a challenging case of occult macular dystrophy. A 32-year-old female suffered from gradual visual loss since 18 years old. Ophthalmoscope examination and full-field electroretinography was negative. The diagnostic clues relied on subtle macular findings, disruption of inner segment/outer segment junction on OCT, and focal suppression on multifocal electroretinography. The diagnosis was confirmed via genetic sequencing of RP1L1 gene which revealed c.133 C→T mutation.

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