## Editorial

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# A neuro-ophthalmology banquet: A selection of topics from authors worldwide

Te were honored last year to have been invited by the Taiwan Ophthalmological Society as their guests at the 60<sup>th</sup> Anniversary Meeting, an extraordinary professional, academic, intellectual and social event. We were doubly honored when we were asked by the Editor-In-Chief David Hui-Kang Ma and his Editorial Board of the Taiwan Journal of Ophthalmology to co-edit this special edition in the journal on neuro-ophthalmologic topics. Neuro-ophthalmology has always been an essential part of the training of every ophthalmologist worldwide. Irrespective of how specialized an ophthalmologist becomes in even the most tiny of portions of the eye, there can always be a neuro-ophthalmologic cause lurking behind a patient's seemingly straightforward presentation. Ophthalmologists are skilled in direct inspection of the eye and are used to actually seeing pathology rather than inferring it. Not seeing does not mean not knowing, however, and ophthalmologists can overcome their concerns by remembering their training in neuro-ophthalmology and continuing to refresh their education throughout their careers. Indeed, every ophthalmologist should be not only comfortable but also interested in that part of the visual system that lets the eye do what it needs to do so well.

This special issue contains four important review articles on basic topics in neuro-ophthalmology, a cutting-edge original research article, and a potpourri of

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms. case reports that run the gamut from unusual manifestations of common disorders, such as cataract and choroidal neovascularization, to common manifestations of less frequently encountered diseases, such as perineural spread of skin cancer.

Sharma *et al.* critically examine the evidence behind the use of the so-called "conservative" pharmacologic and nonpharmacologic treatment options for acute central retinal artery occlusion, and conclude that no intervention has been convincingly shown to alter the natural history of this visually devastating disorder, and that management of these patients should especially focus on reducing their risk for subsequent ischemic events in both the eyes and the brain.

Lock *et al.* review the most common ophthalmological presentations of mitochondrial disorders, in particular progressive external ophthalmoplegia, macular pattern dystrophy, pigmentary retinopathy, optic neuropathy, and retrochiasmal visual field loss. Recognition of these symptoms and signs by ophthalmologists can facilitate accurate diagnosis of serious systemic and potentially life-threatening conditions. Furthermore, ophthalmologists can often provide helpful symptomatic treatment for many of these manifestations.

Optical coherence tomography (OCT) has revolutionized diagnosis and management in ophthalmology. The subspecialty of neuro-ophthalmology now relies heavily on OCT of the optic nerve and various layers

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Submission: 13-09-2020 Accepted: 16-11-2020 Published: 10-02-2021 of the retina for localizing and identifying a variety of pathologies and for following the course of a disease and its response to therapeutic interventions. The use of OCT measurements as an anatomic marker of the progression of various neurologic disorders has also led to its use in providing end points for clinical trials. Lo *et al.* provide a thorough appraisal of the recent advances and future directions in the use of OCT in neuro-ophthalmology.

All ophthalmologists are expected to recognize the classic symptoms and signs of idiopathic intracranial hypertension (IIH), especially headaches, papilledema, diplopia, and pulsatile tinnitus. Chen *et al.* provide a comprehensive review of the many rare atypical presentations of IIH, including asymmetric papilledema; cranial nerve palsies and even internuclear and supranuclear causes of diplopia; olfactory, facial nerve, trigeminal nerve, auditory/acoustic nerve, and lower cranial nerve dysfunction; and cerebrospinal fluid leak and seizures, raising awareness among clinicians that although other serious neurologic conditions should be investigated in these settings, unusual manifestations can and do occur.

In an original report of whether presenting demographic or clinical features of patients with IIH can predict papilledema severity, Micieli *et al.* studied 240 IIH patients and concluded that age, race, sex, and body mass index were similar in those patients with mild versus severe papilledema. Because severe papilledema was associated with a higher risk of visual acuity and visual field loss at follow-up, funduscopic examination assessing the degree of papilledema remains essential in identifying at presentation those IIH patients who require closer follow-up and potentially more aggressive management. However, beyond the topic of neuro-ophthalmology, what ties together every one of these manuscripts written by authors originally hailing from all around the world is that these contributors have each spent some of their training in the Neuro-Ophthalmology Unit at Emory University. Over the past more than 30 years, Emory's neuro-ophthalmology service has proudly trained hundreds of medical students and residents in ophthalmology, neurology, and neurosurgery and more than seventy neuro-ophthalmology fellows, now practicing neuro-ophthalmology across six continents. We wish to thank all our authors for their superb work on these important contributions to this edition of the *Taiwan Journal of Ophthalmology*. They do us proud!

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### **Conflicts of interest**

Nancy J. Newman is a consultant for GenSight, Santhera/ Chiesi, Neurophoenix, and Stealth. Valérie Biousse is a consultant for GenSight and Neurophoenix.

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