SOCIETY TIDINGS

Proceedings of the 37th Annual Upper Midwest Neuro-Ophthalmology Group Meeting, July 22, 2016, Chicago, Illinois, USA

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This year, the 37th annual meeting of the Upper Midwest Neuro-Ophthalmology Group (UMNOG) was held on July 22, 2016, at Northwestern University, Chicago, Illinois. A diverse group of neuro-ophthalmologists from Wisconsin, Minnesota, Missouri, Michigan, Kentucky, and Illinois (with guests from New Hampshire and Virginia), including 6 fellows (3 current, 2 recently graduated, 1 future), 6 residents, and 1 medical student gathered to discuss interesting cases and advances in the field (Figure 1). The meeting was organised and chaired by Dr. Heather Moss, University of Illinois at Chicago. Our host at Northwestern University was again Dr. Nicholas Volpe, whom we would like to thank for welcoming us at this beautiful institution.

The meeting started with a warm welcome from Dr. Heather Moss, then followed by the first talk from Dr. Yair Ivanir, who recently completed neuro-ophthalmology fellowship at the University of Michigan, Ann Harbor, Michigan. He presented his research comparing hypertropia in upgaze and downgaze to distinguish congenital from acquired fourth cranial nerve palsies. The conclusion of the study was hypertropia greater in upgaze never occurred in an acquired palsy.

Dr. Talal Derani, who is a neurology resident at Michigan State University, East Lansing, Michigan, and will be starting neuro-ophthalmology fellowship in 2017, presented a case with complete pupil-sparing third nerve palsy as the cardinal symptom in a patient with diffuse large B-cell lymphoma.

Dr. Jorge Kattah, University of Illinois College of Medicine at Peoria, presented an interesting case of a 63-year-old male with history of alcohol abuse who presented with confusion and imbalance. His workup revealed anti-Hu antibodies; which reminds clinicians to be mindful of various presentations of paraneoplastic processes.

Dr. Marilyn C Kay, University of Wisconsin–Madison, Madison, Wisconsin, presented a personal case with new-onset double vision and several similar cases from the literature all diagnosed as “smartphone esotropia” provoked by prolonged use of smartphones.

Dr. Tatiana Deveney, an ophthalmology resident at the University of Michigan, Ann Arbor, Michigan, presented a research study regarding prevalence of thymoma by chest imaging in ocular myasthenia gravis. The result showed that the prevalence of thymoma by chest imaging was 7% and suggested that the presence of thymoma increased likelihood for disease to generalise.

Dr. Siri Khalsa, a neurosurgery resident at the University of Michigan, Ann Arbor, Michigan, presented a case of spontaneous subarachnoid haemorrhage from rupture of a radiographically intracavernous internal carotid aneurysm in a patient with history of large prolactinoma status post cabergoline treatment. It was thought that the distortion of normal dural and cerebrovascular anatomy from the prolactinoma and its shrinkage allowed for communication between the extradural intracavernous and intradural subarachnoid space.

Dr. Stuart Ball, an ophthalmology resident at the University of Kentucky, Lexington, Kentucky,

Figure 1. The Upper Midwest Neuro-Ophthalmology Group Annual Meeting attendees.

presented a case an interesting case of optic disc oedema in a critically ill child with venous sinus thrombosis, ultimately diagnosed with Wegener's granulomatosis.

Dr. Steven Roth, anaesthesiologist at the University of Illinois, Chicago, Illinois, presented a study of trends in incidence and risk factors of ischaemic optic neuropathy (ION) in cardiac surgery. It was found that ION incidence in open heart surgery has not changed over 16 years. Diabetic retinopathy may be a novel biomarker associated with increased risk of ION in cardiac surgery. Being female and having diabetes type 2 without complications was associated with decreased incidence of ION.

Dr. Lindsey DeLott, from the University of Michigan, Ann Arbor, Michigan, presented a study about non-arteritic ischaemic optic neuropathy and long-term stroke risk. The study suggested that there was association between NAION and future ischaemic stroke. Discussion followed regarding how this might influence neuro-ophthalmic recommendations for our patients with NAION.

Dr. Sangeeta Khanna, from Saint Louis University, St. Louis, Missouri, presented an unusual case of a 69-year-old male with multiple myeloma who presented with insidious-onset decline vision on the right eye due to optic neuropathy and right jaw pain for several months, both related to administration of the intravenous (IV) bisphosphonate zoledronic acid.

Dr. Susiani Intan, neuro-ophthalmology fellow at University of Illinois, Chicago, Illinois, presented a case of 22-year-old female with increasing headache and vision loss found to have papilloedema with markedly elevated opening pressure on lumbar puncture and cerebrospinal fluid (CSF) positive for Epstein-Barr virus (EBV). Magnetic resonance imaging (MRI) orbit showed hyperintense signal on the right retrobulbar optic nerve and possibly on the right optic nerve head. Inflammatory of optic nerve from EBV infection superimposed on bilateral papilloedema due to elevated intracranial pressure (ICP) was believed to be the cause of the vision loss.

Dr. Robert Tomsak, Kresge Eye Institute, Detroit, Michigan, discussed treatment options for patients with idiopathic intracranial hypertension who are acetazolamide intolerant.

Methazolamide has less severe side effects than acetazolamide. Clinicians also may consider steroids in fulminant/high-grade papilloedema in combination with carbonic anhydrase inhibitors. Topiramate has been shown to be non-inferior in patients with mild to moderate papilloedema.

Ms. Shravani Mikkilineni, a medical student at University of Michigan, Ann Arbor, Michigan, presented research study regarding visual outcome in idiopathic intracranial hypertension. Study showed that if initial Humphrey visual field had mean deviation (HVF MD) of -6 dB or better, the patient nearly always had a favourable visual outcome; if initial HVF MD was -10 or worse, they almost always had unfavourable visual outcome.

Dr. John Pula, NorthShore University HealthSystem, Chicago, Illinois, presented 2 interesting cases who presented with signs and symptoms atypical for their diagnoses of idiopathic intracranial hypertension (no papilloedema) and anterior ischaemic optic neuropathy (AION; decreased foveal threshold as only abnormality on visual field testing).

After venturing off campus for lunch on Michigan Avenue, the afternoon session started with Dr. John Chen, Mayo Clinic, Rochester, Minnesota, who presented an interesting case of a 32-year-old female who initially presented with papilloedema and constricted visual fields, which were clarified to be ring scotomata on Goldman visual field testing. Optical coherence tomography (OCT) and electroretinogram (ERG) confirmed visual loss from outer retinopathy. She was later diagnosed with lupus. There was significant improvement in the papilloedema in response to immunosuppressive treatment, suggesting that the raised intracranial pressure was due to the underlying lupus.

Dr. Sang Hong, Medical College of Wisconsin, Milwaukee, Wisconsin, presented a rare case of choroidal melanoma extending to wrap around the optic nerve and cause optic disc swelling. The diagnostic challenges along with both biopsy and gross pathology were presented.

Dr. Daniel Albertus, ophthalmology resident at University of Michigan, Ann Arbor, Michigan, presented a patient with Horner syndrome from traumatic carotid artery dissection who evolved over 2 weeks to experience transient monocular vision loss and hemiparesis. Patient had rapid improvement after carotid stenting.

Dr. Bahareh Hassanzadeh, University of Illinois, Peoria, Illinois, presented a case of pituitary hypophysitis and orbital inflammatory syndrome after treatment with ipilimumab for multiple myeloma.

Dr. Nathan Kung, neuro-ophthalmology fellow at Washington University, St. Louis, Missouri, presented a poignant video in which a patient with Creutzfeldt-Jacob disease (CJD) described her evolving visual symptoms, including visual illusion and difficulty with processing complex visual scenes. Dr. Kung also emphasised on the new test for CJD with reverse transcription controls (RTC assay), which has high sensitivity and sensitivity for detecting prion seeds in CSF specimens from CJD patients.

Dr. Erica Acher, neuro-ophthalmology fellow at University of Michigan, Ann Arbor, Michigan, presented 4 cases of cortical visual loss in systemic hypotension with normal-appearing brain MRI in the acute phase. However, months later, MRI brain displayed occipital lobe cortical volume loss. Possible reasons behind lack of acute imaging findings were discussed.

Dr. Cherie Farkash, from University of Michigan, Ann Arbor, Michigan, presented a case of a 61-year-old female with a chronic right homonymous hemianopia from lesion on the left lateral geniculate region who presented with temporary blindness after undergoing biopsy of a right parietal lesion. It was thought that her blindness was likely a combination from pre-existing right homonymous hemianopia and transient left hemispatial neglect.

The last talk was given by Dr. Steve Newman, University of Virginia, Charlottesville, Virginia, who presented a retrospective study of 31 patients with meningioma involving the optic nerve sheath, clinoid, or anterior visual pathways and showed

that OCT of the macula offers a significant useful tool to quantitate the anatomical effect of meningiomas on the anterior visual pathways. He illustrated that fractionated radiation therapy can be extremely effective in preventing further damage and improving visual outcomes.

A brief business meeting was held after the last talk. As Dr. Heather Moss is leaving the Midwest, Dr. John Chen and Dr. Susan Ksiazek will assume the role as co-chairs for UMNOG 2017. For the third year, we closed the day with multiple brief case presentations in exciting and energetic session called “flea circus”. Cases this year included smart-phone-induced blindness, eyelid myokymia from cranial nerve VII synkinesis, an infiltrating tumour causing multiple cranial neuropathies, and visualization of CSF extravasation on MRI following optic nerve sheath fenestration. Every case was followed by spirited discussions.

Once again, we would like to thank all the attendees for joining us for another UMNOG meeting! We were glad to see everyone enthusiastically participating in relaxed but extremely educational atmosphere. The 2017 meeting of the Upper Midwest Neuro-ophthalmology Group is tentatively scheduled for Friday, July 28, 2017. For those interested in attending next year or being included on the UMNOG mailing list, please contact Dr. John Chen (chen.john@mayo.edu) or Dr. Susan Ksiazek (sksiazek@bsd.uchicago.edu).

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.