

Abstracts for the 6th Conjoint Ophthalmology Scientific Conference

Dyslexia and Vision: Current Evidence and Clinical Interventions

Reading involves a wide range of cognitive skills and vision is one of the core components of the process of reading and learning. Certain vision problems are particularly prevalent and can contribute to a child's reading difficulty. For example, some children suffer from an unstable coordination of their two eyes and others suffer from a reduced ability for their eyes to focus close up. These visual functions will be explored during the lecture in reference to the current evidence in treating these anomalies.

Vision Assessment for Children with Dyslexia – Tools and Strategies

Visual perceptual issues are related to higher visual functions that are often beyond the scope of a routine eye examination. The assessment process entails a battery of functional tests to evaluate how efficiently a child uses their two eyes together as a team – this includes accommodation, convergence and oculomotor skills. Discomfort may also arise from visual stress (Meares-Irlen Syndrome) which may hinder reading and/or may discourage children from prolonged reading. Some children may complain of headaches, eyestrain or discomfort when coping with a large amount of reading especially in the run-up to school exams.

Traumatic Brain Injury: Why it matters?

Visual problems resulting from traumatic brain injuries (TBI) are often overlooked during the treatment of the initial injury during acute and emergency care in hospitals. Whilst the priority is to get the patient well and back to work, visual and vestibular symptoms can continue to persist even after the patient has been discharged from the hospital and may affect the patient's ability to concentrate and focus on their work. In neuro-optometric vision rehabilitation and vision therapy, various techniques and strategies can be applied to help post-TBI patients with vision problems.

Peripheral Prisms for Hemianopia: From Fitting to Training

Hemianopia occurs in the brain – it is not a bad right eye or left eye. Patients who lose their visual field may find themselves running into objects, losing their place in reading or startled by people and/or objects moving at them suddenly from their lost field. The rehabilitation process entails a combination of scanning training, compensatory/adaptive strategies and optical field awareness. Whilst there are many methods available, this lecture will focus primarily on the fitting of peripheral prisms and the training of a more efficient scanning process.

Yap Tiong Peng

From private practice in Singapore, Yap Tiong Peng is best known locally for his work on vision therapy and neuro-optometric rehabilitation. His passion for the special-needs population and children can be seen in the numerous awards and accolades that he and his team at IGARD has received over the years. Trained in the U.K., Tiong-Peng is a graduate of the UMIST (Manchester) and Imperial College of Science, Technology and Medicine in London. He has lectured in optometry for many years (e.g. Singapore Polytechnic and University of Manchester) and his current research at UNSW (The University of New South Wales, Sydney, Australia) focuses on the neurodevelopment, electrophysiology and psychophysics of children with amblyopia. Besides work, Tiong-Peng actively contributes to the community through voluntary activities. A year ago, he was part of a team of four local optometrists and other volunteers from the Lions Club to conduct eye checks and dispense glasses in the rural villages in Siem Reap, Cambodia. He has also worked on a house building project in Indonesia and numerous community vision screening projects locally.