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Advancing Pediatric Myopia Management in Asia-Pacific

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CooperVision spearheadsÂ 4th Asia-Pacific Myopia Management Symposium (APMMS)Â in Seoul, South Korea



The 4th Asia-Pacific Myopia Management Symposium (APMMS) delved into pediatric myopia dynamics with the theme "Myopia Reframed: Shaping the Future of Eye Health," on 27 October 2024 in Seoul, South Korea. Spearheaded by CooperVision, a global leader in myopia management, the symposium featured diverse perspectives on pediatric myopia management through three prime sessions: “Paradigm Shifts in Understanding Myopia”, “Gold Standard in Myopia Interventions”, and “The Future of Myopia Management”.

Dr. Seung-Hee Baek, Director of the Pediatric Ophthalmology and Strabismus Center at Kim’s Eye Hospital, and Kathy Park, President of CooperVision Asia Pacific delivered the opening remarks.

The event, in partnership with the Korean Association of Pediatric Ophthalmology and Strabismus (KAPOS), emphasized a unified vision to tackle the rising prevalence of myopia in South Korea and throughout the region. The forum drew over 2,200 participants, both in-person and virtually, from around the globe. The symposium also featured plenary presentations and interactive panel discussions featuring global experts.

Dr. Seung-Hee Baek, General Director of Korean Myopia Society for KAPOS, during her keynote address highlighted that, “Myopia is not just a refractive error that reduces uncorrected visual acuity, it also creates serious social and economic burdens. The burden of myopia goes beyond economic costs. More importantly, it is a major risk factor for serious vision-threatening diseases. In high myopes, the risk of retinal detachment, glaucoma, and macular degeneration increases significantly. As myopia becomes more common, the potential for irreversible vision loss from these conditions also rises. For rhegmatogenous retinal detachment, the age related incidence pattern is especially remarkable”.

The General Director continued, “Furthermore, it is concerning that the prevalence of retina detachment has increased in both younger and older populations in Korea. In the elderly population, age factors are important, while in young people only retinal detachment as a result of high myopia is a major factor. Data from Korea’s Health Insurance Review & Assessment Service (HIRA) shows two sharp upward trends, one around age 60 and the other around age 20. The peak in the 20s, by high chance will lead to serious irreversible vision loss in these young patients”.

“Hence, Myopia management should start early when it first develops and before progressing. That is why we are gathered here. Many efforts have been made worldwide to slow myopia progression, but one treatment may not work the same for all

children. For example, in Korea, the response to Low dose 0.01% atropine has been poor in slowing myopia progression".

"Myopia has been common in Korea for a long time. Recent clinical studies indicate that myopia often develops at a young age and progresses quickly and persistently. In response, the Korean Association of Pediatric Ophthalmology and Strabismus (KAPOS) established the Korean Myopia Society(KMS) in 2023. This year we formed a task force to create Korean style pediatric myopia management guidelines. We are currently conducting research and gathering domestic data to develop a comprehensive agreement. Over the past 10 months, Cooper Vision, KAPOS and the Korean Myopia Society for KAPOS have worked together to prepare for APMMS 2024 symposium. Symposium offers a valuable chance to share the latest developments in myopia and explore better management options, with opportunities to connect and collaborate with international professionals" concludes *Dr. Seung-Hee Baek.*

Globally, myopia management is experiencing rapid advancements, introducing a variety of treatment modalities but lacking a unified clinical protocol and standardized guidelines for bringing awareness, monitoring, and treating the core concerns associated. APMMS has established itself as the foremost forum for pioneering research and collaborative initiatives that convene global ECP leaders, practitioners, researchers and policy makers along the ophthalmic spectrum to close these gaps.

APMMS 2024 was the steering podium uncovering the evidence-based futuristic myopia management with proactive initiatives that are effective in achieving long-term objectives in vision care connecting industry stakeholders while emphasisng on the parental engagments for early intervention of Childhood Myopia. Renowned experts evaluated the future of myopia management with regional clinical analyses and evidence-based treatment interventions and shared unparalleled insights.

The symposium featured a series of engaging sessions with distinguished speakers:

- **Paradigm Shifts in Understanding Myopia**: Session delved into the latest research on myopia's causes and its broader implications for vision health. Key presentations included real-world case studies by Professor Pei Chang Wu, Director of the Myopia Prevention and Treatment Center at Kaohsiung Chang Gung Memorial Hospital, Taiwan.
- **Gold Standard in Myopia Interventions**: Attendees discovered advanced strategies for myopia management, including innovative approaches and real-world applications. Dr. Maria Liu, Associate Professor at UC Berkeley School of Optometry, USA, shared insights on megatrends in myopia management and the rise of soft contact lenses. Professor Ian Flitcroft, Pediatric Ophthalmologist and Vision Scientist at the Centre for Eye Research in Dublin, Ireland, explored Western trials and the growing evidence for low-dose atropine in Asia.
- **The Future of Myopia Management**: Session highlighted the integration of digital tools and advanced strategies for myopia control. Dr. Li Lian Foo, Consultant in the Cataract and Comprehensive Ophthalmology Department, and Dr. Wei Yan Ng, Consultant in the Pediatric Ophthalmology & Adult Strabismus Department, both from Singapore National Eye Centre, discussed the international framework for contact lens myopia management and the role of digitalization.

Dr. Hae-Jung Paik, President of KAPOS and Korean Myopia Society, Gachon University Gil Medical Center, Korea, remarked, "The 4th APMMS has been a landmark moment in shaping the future of myopia management in Korea. By facilitating an invaluable exchange of knowledge between Korean and global experts, we are setting new standards in myopia care and paving the way for a brighter future in children's eye health. I am also pleased to announce that KAPOS has established a new arm, the Korea Myopia Society (KMS), specifically focused on myopia management. KMS aims to enhance myopia awareness, advance clinical understanding, and support eye care professionals in managing myopia more effectively."

Ian Flitcroft, Paediatric ophthalmologist at the Centre for Eye Research in Dublin, Ireland underscored that "Myopia associated vision impairment is one of the primary motivations for myopia control and reflected on the early anatomical changes in myopia development that are linked with future visual impairment and their clinical implications" while addressing the forum.

"Myopia is the strongest modifiable risk factor in a range of eye diseases. The impact of myopia on cataract, glaucoma, retinal detachment, myopic macular degeneration and visual impairment is not limited to high myopia. Due to the greatest number of low myopes, they account for the majority of the myopia associated complications. Myopes are affected by such complications at a younger age than non-myopes. Younger onset leads to a greater burden and impact of visual impairment" explains *Ian Flitcroft.*

Substantiating the global voices, CooperVision presented findings from its seven-year clinical study on MiSight® 1 day, the only U.S. FDA-approved soft contact lens to slow the progression of myopia in children aged 8-12 at the initiation of treatment.

MiSight® 1 day is the only myopia control treatment that has been shown to maintain its effectiveness after treatment ends. Atropine is one of the modalities that has been shown to produce a rebound effect. With 9 out of 10 children preferring MiSight® 1 day contact lenses over glasses, MiSight® 1 day contact lenses are the most preferred and compatible pediatric solution available.

Furthermore, ***Professor Nicola Logan's ten-year investigator study at Aston University, UK*** validated the safety of long-term usage of daily disposable hydrogel soft contact lens wear, MiSight® 1 day. A MiSight® 1 day clinical study demonstrated that children who wore contact lenses full-time for 10 years had equivalent corneal endothelial function to those who didn't wear contact lenses.

Shila Gupta, Myopia Management General Manager at CooperVision Asia-Pacific, reflected on the symposium's impact: “APMMS 2024 has been a pivotal event in advancing myopia management across the APAC region. By highlighting advancements, including our seven-year clinical study and ten-year investigator-initiated study on MiSight® 1 day, we are reaffirming our commitment to setting new benchmarks in eye care. We are honored to host APMMS for the 4th consecutive year and to partner with KAPOS, furthering our commitment to driving progress in myopia management and fostering collaboration within the eye care community.”

Event featured many intriguing sesssions and pannel discussions.

Professor Kyoko Ohno-Matsui, the Chairperson of the Department of Ophthalmology and Visual Science at Tokyo Medical and Dental University (TMDU), and the Chief of the Advanced Clinical Center for Myopia at TMDU discussed the most serious form of Myopia, "Pathologic Myopia" and advancements in ophthalmic imaging technologies for diagnosis, treatment, and the evolving landscape of medical interventions in pathologic myopia.

Dr. Maria Liu, Associate professor at UC Berkeley School of Optometry, at UC Berkeley Eye Center, USA briefed the latest trends, technologies, and strategies that are transforming myopia management, from early breakthrough research to today's game-changing practices.

Understanding the etiology of myopia is crucial for developing effective management strategies. ***Nicola Logan, Professor of Optometry and Director of Research for the Optometry and Vision Science Research Group, School of Optometry, UK*** delved into the genetic, environmental, and behavioral factors that contribute to myopia development.

Professor Pei-Chang Wu, Director of Myopia Treatment and Prevention Center (Department of Ophthalmology) evaluated high prevalence of myopia in Taiwan and assessed risk factor for rhegmatogenous retinal detachment (RRD) along with prevention and treatment regimens.

***Kate Gifford,* Clinician-Scientist and Co-Founder, Myopia Profile, Australia** provided a comprehensive overview of various myopia interventions, including orthokeratology, pharmaceutical options, and lifestyle modifications.

Orthokeratology is a widely accepted method for controlling myopia in young children. ***Dr Tzu-Hsun Tsai, Associate Professor of Ophthalmology and Chief of Department of Ophthalmology at National Taiwan University Hospital*** discussed the role of orthokeratology practice and ocular biometric data to identify factors influencing myopia progression.

Discussing the current and future landscape of the Childhood Myopia Epidemic in China ***Dr Chen-Wei Pan, Biostatistician, Aier Eye Hospital Group, China*** provided insights into potential myopia problems in the region.

Dr Ng Wei Yan, Consultant Ophthalmologist at Singapore National Eye Centre evaluated the potential prospects of integrating digitalization into Myopia Control Strategies. Alongside, ***Dr. Foo Li Lian, Clinical Director, Myopia Service, Myopia Centre of Excellence, Singapore National Eye Centre*** proposed having an standardized International Framework for Contact Lens Myopia Management based on unified clinical protocol for treatment initiation, monitoring, and termination.

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