

# Patient Understanding Key in Achieving Spectacle-Free Results



To optimize outcomes, physicians should ask patients about their hobbies when selecting an IOL.

by April Ingram

As we know, not all lenses are created equal – and certainly, not all eyes are created equal. That leaves surgeons to balance the qualities, characteristics, and optics of each intraocular lens (IOL) with the ocular findings, expectations and lifestyle of the patient in order to deliver a predictable, spectacle-independent outcome.

Cataract surgeons are excited about the range of options for presbyopia-correcting IOLs, which allow them to be more selective and specific to their patient's needs than ever before. In addition, the developments in the design and technology supporting these lenses are creating more opportunities to deliver optimal outcomes to a broader range of patients.

With more available options, surgeons need to be well-versed in all the factors that may influence the success of each particular lens for every individual patient. In addition, they need to know how to effectively communicate the potential and limitations of each IOL option. Patients, on the other hand, are arriving at their surgeons' office with higher levels of expectation, having done a lot of their own 'research' as to what the outcomes 'should' be.

## Multiple Options with Multifocal Lenses

Dr. Leonard Ang, medical director and senior consultant ophthalmologist at Lang Eye Centre at Mount Elizabeth Novena Hospital in Singapore, knows that he can deliver superior visual performance and a greater range of vision correction with the latest advancements in multifocal lens technology.

According to him, "Multifocal lenses have given patients greater convenience by reducing the need for distance and reading spectacles. Most multifocal lenses are traditionally focused on correcting distance and near vision. Newer trifocal lenses are now able to provide patients with improved unaided distance, intermediate, and near vision to further reduce the need for spectacles."

Some of Dr. Ang's favorite IOLs to consider include the AcrySof IQ PanOptix IOL (Alcon, Fort Worth, Texas, U.S.A.), built on Alcon's proven AcrySof IQ platform. "The ENLIGHTEN Optical Technology provides an exceptionally high light utilization (88%) and less pupil dependence than previous generations of multifocal IOLs," he shared. "It has an intermediate focal

point at 60cm, the distance for common intermediate vision activities, such as using a computer. It also has excellent rotational and axial stability."

For his patients, Dr. Ang has been pleased with the results achieved with the AcrySof IQ PanOptix lens, "It offers a comfortable and continuous range of near-to-intermediate vision without compromising distance vision," he added. "I have been impressed with the visual performance of the lens and the level of patient satisfaction, which is why it is my preferred multifocal lens for patients who desire spectacle independence."

## The Importance of Patient Education

Dr. Chee Soon Phaik of the Singapore National Eye Centre (SNEC) knows how important patient education is to the entire process. "I counsel patients on the different types of IOL, and they choose the type of IOL they want to receive," she shared.

After careful discussion with her patients and weighing all the factors, about half of Dr. Chee's patients receive a trifocal IOL. "A significant number are turned away from a trifocal IOL because of previous refractive surgery, macular issues, glaucoma or severe dry eyes. For those patients who are intolerant to halos and glare, most would prefer to have monovision," she said.

When considering the patients' tolerability to visual effects, monovision can be a great alternative to minimize the need for spectacles, especially for those that don't require finely tuned depth perception for their daily activities. Dr. Chee explained: "Around one in every 20 of my patients chooses either both eyes for distance or combination of near and intermediate vision."

After considering patient history, need and preference, what does Dr.

Chee use most often? According to her, approximately 80% of eyes receive a toric IOL: "I use mostly the Alcon toric lens because of its rotational stability and refractive predictability."

When it comes to a trifocal IOL, Dr. Chee, like Dr. Ang, favors the Acrysof IQ PanOptix trifocal lens. "We note that they achieve a continuous spectrum of clear vision from 40cm to distance," shared Dr. Chee. Some multifocal IOLs have resulted in reduced contrast sensitivity compared with monovision options. But as Dr. Chee has found, "the high light utilization results in a contrast sensitivity, which is within the normal band for photopic conditions and low levels of glare at six months tested binocularly."

## Understanding Patients Beyond Prescription

Dr. Florian Kretz, from Eyeclinics Ahaus-Greven-Raesfeld-Rheine in Germany, acknowledges the importance of getting to know your patient, understanding his specific needs and expectations, and then looking at all the available IOL options that will be best suited for him.

"I work with most IOL companies as I like to choose the right one for the right patient. Patients are very demanding, but also, many of them have their specific needs," Dr. Kretz explained. He added that some patients are more, and some are less accepting of dysphotopsia. "So, in these cases, I like using rotational asymmetric IOLs."

Dr. Kretz shared that the presbyopia-correcting LENTIS Mplus IOL (Berlin, Germany) from Oculentis is effective for those patients that are not accepting of dysphotopsia and added: "It comes with the limitation that they often need spectacles for near or (by German law) for driving, by performing a blended vision approach."

For those patients who really want true spectacle independence, Dr. Kretz often turns to the Zeiss portfolio of IOLs. "Currently my favorite option is to place an EDoF IOL (AT LARA, Carl Zeiss Meditec, Jena, Germany) in the distant dominant eye and a trifocal IOL

(AT LISA tri, Carl Zeiss Meditec) in the near dominant eye. That combination provides a full range of vision from distance to near, and a wide range of vision in different intermediate distances from 50 to 100cm.

Dysphotopsia occurs less than with binocular trifocals, but still, happens a bit more when compared to rotational asymmetric IOLs. "We achieve a high degree of patient satisfaction with that option and a really good outcome," shared Dr. Kretz. He added that the only limitation to this option is, "if patients do binocular near work, it is difficult, as only the AT LISA tri provides near. In those situations, I like using binocular trifocals."

Dr. Kretz advised not to forget to ask your patients all about their hobbies and activities, because it will really make a difference in achieving a satisfactory result. For example, do they spend time on the glistening water? Or

do they like to be in bright sunlight, or skiing on snowy mountains?

As Dr. Kretz has found: "For patients that perform a lot of watersports, like surfing or sailing, etc., I like to provide a trifocal from Belgium-based PhysiOL (trifocal hydrophobic IOL Pod F GF) as it has a blue light filter. And I feel that patients have less difficulties with the light reflections on the water."

## The True Art of Medicine

All our experts agree that doing the detective work and figuring out the right IOL for the right patient takes on the true qualities of the art of medicine. Effectively communicating this knowledge to the patient is key to managing post-op expectations.

"There are a lot of options for our patients and we can individually select a lens for them to get the best possible outcome," concluded Dr. Kretz. 🌊

## About the Contributing Doctors



**Florian Kretz** is the CEO and medical head of the Augentagesklinik Rheine and Augentagesklinik Greten in NRW Germany. His focus is on cataract and refractive surgery, but he is also treating patients for glaucoma and medical retina. He loves watersports, but his favorite hobby is his job, research and seeing his patients happy and satisfied after their treatments. He and his wife regularly go on philanthropy missions to support and offer free eye care where it is needed. As a medical board member of the Khmer Sight Foundation the couple is currently mainly working in Cambodia. Dr. Kretz's greatest passion is living in a patchwork relationship with two children and his wonderful wife. [Email: s.wittenbernds@augenlinik.de]



**Dr. Leonard Ang** is the medical director and senior consultant ophthalmologist at Lang Eye Centre located at Mount Elizabeth Novena Hospital in Singapore. He has won more than 30 international and local scientific awards, including the Singapore National Academy of Science Young Scientist Award and the Singapore Clinician Investigator Award, and has written more than 90 scientific publications and book chapters. Dr. Ang's achievements include pioneering new methods for cornea and stem cell transplantation and bioengineering of eye tissues for eye disease treatment. [Email: leopk12@gmail.com]



**Dr. Chee Soon Phaik** is a senior consultant and head of both the Cataract Subspecialty Service and Ocular Inflammation and Immunology Service at the Singapore National Eye Centre (SNEC). She is also professor at the National University of Singapore and Duke-National University of Singapore Graduate Medical School. She serves as the group lead member of the cataract research team at the Singapore Eye Research Institute. She graduated from the National University of Singapore, obtained her master's degree from the same university. Her research interests in cataract are in managing complicated cataracts such as the dense posterior polar cataract, subluxated cataract & IOL and IOL explantation. She has published over 200 peer reviewed scientific papers and is a member of several editorial boards, including *Journal of Cataract and Refractive Surgery*. [Email: chee.soon.phaik@singhealth.com.sg]