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The Asia-Pacific Association of Cataract and Refractive Surgeons

India

## Theories of Selection

*Chronicling the evolution of IOL choices for cataract patients*

**Cover Feature:**  
**IOL selection**

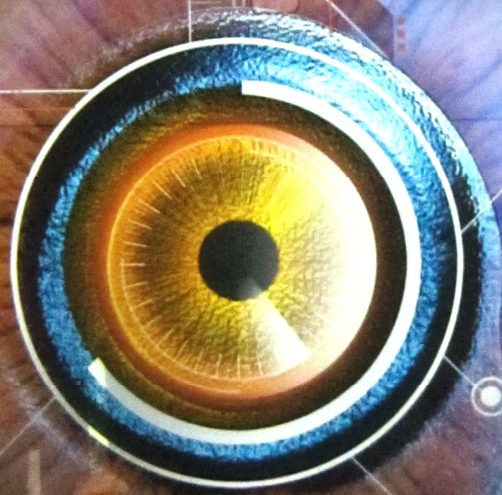
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## Letters from the Editors



Dear Friends

**T**here are several options available to correct presbyopia, which are presented in this issue of *EyeWorld Asia-Pacific*.

Our contributors to this issue emphasize that there is a balance between the potential and pitfalls for each technique. Multifocal IOLs offer a predictable result, but there is an inherent risk of reduced contrast sensitivity and occasionally troublesome glare and halos. Accommodative IOLs potentially provide better optical quality, but with presently available IOLs the near vision is less predictable. Presby-LASIK is a potential solution for phakic patients, but one wonders whether corneal remodelling will affect the outcome. Finally, with corneal inlays there is the additional issue of long-term biocompatibility that needs to be addressed.

The marketplace is therefore quite crowded, but the reality is that so-called premium IOLs and solutions in total comprise only approximately 10% of lenses implanted in patients undergoing cataract surgery; monofocal IOLs comprise the remaining 90%.

Monovision is quite widely practiced and a recent prospective study comparing multifocals and monovision was published earlier this year in the *Journal of Cataract & Refractive Surgery*. Although the outcome in both groups was similar, the monovision group experienced better intermediate vision and scored higher in terms of satisfaction with fewer patient complaints. One of our feature articles profiles this paper and several surgeons (including your editor) provide their thoughts on this intriguing "Great Debate".

In addition to the debate of multifocal IOLs versus monovision is the issue of correcting astigmatism. Although limbal incisions still have a role, toric lenses increasingly appear to be a more effective and predictable method of managing pre-existing astigmatism. A recent study published in the September 2010 issue of the *Journal of Refractive Surgery* provides important data supporting the use of toric lenses and is discussed in this issue.

One interesting aspect that should be taken into account when selecting toric lens power is the natural progression of against-the-rule astigmatism that occurs with age and after cataract surgery. I would suggest that it may be appropriate to aim for a small amount of residual with-the-rule astigmatism rather than neutral or against-the-rule astigmatism to accommodate this progressive change, especially in younger patients. In the current issue there is an article discussing this topic and I am pleased to see that other surgeons are increasingly aware of this factor and have taken this into account in their toric lens selection.

There are advocates for the different types of lenses and presbyopic solutions and it can be quite confusing for surgeons to select which technique or lens is most appropriate for their patients. Hopefully, the articles and opinions expressed in this issue will be helpful for surgeons in selecting the most appropriate lens or presbyopic solution for their patients.

Warmest regards

Graham Barrett, MD  
President, APACRS  
Chief Medical Editor, *EyeWorld Asia-Pacific*



Dear Friends

**I**t is with great pleasure that I welcome you all to this edition of *EyeWorld Asia-Pacific*.

The desire to overcome presbyopia in patients has been stronger than ever and has led to the search for the ideal procedure to correct it by either corneal or lens procedures. There has been an emerging trend of using premium accommodating IOLs to correct presbyopia post-cataract surgery in the market. The benefits as well as the downsides of these premium accommodating IOLs are discussed in this issue.

The great debate between pseudoaccommodative multifocal IOLs and monovision using monofocal IOLs continues, with experts opining on the same. The discussion of creating a multifocal cornea with presbyLASIK versus monovision LASIK is similar to that between the multifocal IOL and monovision with the monofocal IOL.

The role of combined phaco and toric intraocular lenses to correct astigmatism versus using limbal relaxing incisions (LRI) is also addressed.

Femtosecond has emerged as the new accepted standard of care in refractive surgery; however, experimental studies using the femtolasers to soften the lens to treat presbyopia are ongoing. The application of these studies to clinical practice remains to be seen.

DSEK has become the procedure of choice for Fuchs' dystrophy; however, DMEK now looks like the next big thing in endothelial keratoplasty. Various experts on endothelial keratoplasty share their views on DMEK and its future in endothelial keratoplasty.

An update on corneal collagen crosslinking, its role in refractive surgery as a combined technique to prevent ectasia in high risk cases is discussed in this issue.

Karka Kacatarak Karpavai Kurrapin  
Nirka atarkut taka

Whatever is to be learnt should be learnt flawlessly so that  
The learning imbibed shapes one's conduct

- Thirukkural No. 391

I hope these excellent newer advances and discussions make for great reading for all.

Warmest Regards

S. Natarajan, MD  
Regional Managing Editor  
*EyeWorld Asia-Pacific*