

The 22nd APACRS Annual Meeting  
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# ASIA-PACIFIC EyeWorld

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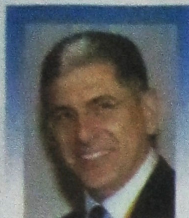
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Asia-Pacific Association of Cataract  
and Refractive Surgeons (APACRS)



## Letters from the Editors



Dear Friends

**W**hen LASIK was first introduced in the early nineties it was thought that this technique would be suitable for correcting high levels of myopia and hyperopia. For those of us performing the procedure in those early years, however, it soon became apparent that there was an upper limit to the levels of myopia that could be corrected and it was not suitable for even moderate levels of hyperopia due to regression and progression of hyperopia.

LASIK for patients with myopia greater than -10 diopters was often unpredictable with an increased likelihood of loss of best corrected acuity. Furthermore, with time, cases with post-LASIK ectasia were encountered and the recommended residual stromal bed which began at 200 microns soon increased to 250 microns. Today, most surgeons prefer a residual stromal bed of 300 microns.

The upper limit of LASIK for the correction of myopia has been lowered and -8 is often quoted as the upper limit by most surgeons. Post-LASIK ectasia, however, is not restricted to thin corneas and in fact a predisposition to keratoconus is probably even more relevant when the syndrome occurs. The roundtable considers this topic in detail and I am sure the reader will find their insight useful in obtaining a better understanding of this condition.

Other articles in this issue discuss alternatives for patients in whom LASIK is deemed unsuitable. Lens replacement where a stable refractive outcome is more likely is increasingly felt to be more suitable than keratorefractive surgery for correcting low to moderate hyperopia in the fifth and sixth decades of life. Similarly, high levels of myopia can be corrected with phakic IOLs or even clear lens extraction.

Although the exact incidence of retinal detachment following clear lens extraction remains uncertain, many surgeons remain reluctant to recommend the procedure and phakic IOLs are often the preferred approach. Phakic IOLs have been around for decades but it is still not certain whether the preferable lens by location is an iris-supported, posterior chamber or anterior chamber phakic implant. The experience in France with anterior chamber lenses has been disappointing but newer designs do hold promise.

Although cataract development occurs more frequently with phakic implants, modification of the original posterior chamber lenses has reduced the incidence of secondary cataract.

It is fascinating to reflect on the different options that are now available to correct moderate as well as high refractive errors in patients electing to undergo refractive surgery. Nevertheless it is very important to understand the limits of these procedures so that patients can be advised appropriately whether or not refractive surgery is suitable for their condition and what the preferred approach for their individual circumstances might be.

I hope this issue which addresses the limits of LASIK, the issue of ectasia and alternative procedures when LASIK is not deemed suitable for patients is helpful for surgeons in the region who are active in the field of refractive surgery.

Warmest regards

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



Dear Friends

**I**t is always a pleasure to welcome everyone to the latest edition of *EyeWorld Asia-Pacific*. The cover feature for this issue is "challenging cases in the field of refractive surgery", comprising dreaded complications like post-LASIK ectasia and enhancement-related dilemmas, explored in-depth by experts. This issue also highlights advancements in the fields of phakic IOLs, femtosecond laser surgery, glaucoma and ever-evolving phacoemulsification. Concluding this issue is an account of ophthalmologists' efforts in reaching out to the underprivileged in the slums of India.

Post-LASIK ectasia is rightly feared as one of the most troublesome complications of refractive surgery. It can rarely occur in patients without previously identified risk factors like high myopia, low residual stromal bed thickness from excessive ablation or thick flap creation, and with defined topographic abnormalities such as forme fruste keratoconus and pellucid marginal corneal degeneration. Complex corneal biomechanical processes influence the integrity of the normal and postoperative cornea. Developing an understanding of these processes is essential to the prevention, early recognition and proper management of the condition.

The femtosecond laser is steadily gaining more acceptance with its better visual outcomes and ability to create customized flaps in patients with complicated profiles. Meanwhile, in patients for whom laser-based refractive surgeries are unsuitable, phakic IOLs have proved to be a predictable and safe option.

The diversity of procedures that characterize modern, advanced refractive surgery makes it mandatory for both beginning and experienced surgeons to have a better understanding of challenging cases like enhancements and patients with marginal safety profiles. Today, with patients' increasing expectations, even cataract surgery involves refractive correction.

Intraocular injections whether for endophthalmitis or for retinal disorders need to be practiced with complete precision and sterile care to avoid greater catastrophes. Over the last decade we have seen one major development in the management of wet AMD in the form of intravitreal anti-VEGF drugs (Vascular Endothelial Growth Factor). These drugs are used widely, and yet we have no controlled trials and class one evidence comparing and evaluating these drugs in terms of efficacy and safety. This has led to considerable debate over the right intravitreal injection for AMD. In this issue, the article "Retinal Injections" analyzes various aspects of these agents. While we await the results of the National Eye Institute trial comparing Lucentis and Avastin, to be concluded in 2010, this discussion will be quite useful in selecting an anti-VEGF agent for wet AMD.

Apart from dealing with these numerous challenging conditions in ophthalmic refractive surgery, we would also like to bring to your attention the challenging search for the hope of light and sight in the dark world of Asian slums. It will not be out of place to mention that British Director Danny Boyle has portrayed life in Dharavi, Asia's largest slum, very well in his Oscar-winning film *Slumdog Millionaire*.

I believe the discussions of diverse ophthalmic challenges in this issue will enlighten everyone and I hope the present issue is both an informative and intriguing read for all.

With warm regards,

Dr. S. Natarajan  
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