

# ASLA

ADVANCED SURFACE LASER ABLATION

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### Laser Vision Correction

When most people think of laser vision correction to correct their eyesight, they will most likely think of LASIK (Laser in situ keratomileusis). However, there are other options available such as ASLA, especially for those that may have thinner corneas and often told they are not eligible for LASIK. If this is you, ASLA could be the best option for you. **To learn more about ASLA, schedule an appointment with Dr Kumar today and enjoy the freedom of seeing a world without glasses or contact lenses.**

### Am I a suitable candidate for ASLA?

Most patients over the age of 21 with a stable prescription and looking for an option to eliminate the use of glasses or contact lenses are usually suitable. ASLA is generally able to correct refractive errors from - 8.00 to + 2.00 and astigmatism, although an assessment will determine whether ASLA is the best option for you, or if there is another refractive option more suitable for your eyes.

Nik has a specific interest in conventional and laser assisted cataract surgery, laser vision correction, alternatives to laser surgery, cornea transplantation, pterygium surgery and the management of keratoconus.

Nik graduated in Medicine from the University of Newcastle in 1998, then completed an ophthalmology residency at the Sydney Eye Hospital and undertook subspecialty fellowship training in Cataract, Cornea and Refractive Surgery at the University of Toronto in 2009.

Nik is a Clinical Senior Lecturer in Cataract, Refractive and Cornea Surgery at the Australian School of Advanced Medicine, Macquarie University. He is a member of the Australian, American and European Societies of Cataract and Refractive Surgery and Cornea Societies. He has published numerous peer-reviewed papers and book chapters involving his specialty interests.



## How does ASLA work? What are the benefits? How does it differ from LASIK?

ASLA aims to eliminate the use of glasses/contact lenses by changing the shape of the cornea, thus allowing light rays to come to a point of focus on the macula resulting in clear unaided vision. By using advanced laser technology, your pre-existing refractive error is corrected by changing the way the eye bends light. To do so, the front surface of the cornea (epithelium) is delicately removed using a touch-free laser method, which means no alcohol or blade is involved. An excimer laser is then used to reshape the cornea. Patients who have had ASLA achieve similar visual results as LASIK. However, there is no flap or interface in the cornea. This has structural cornea advantages and avoids postoperative flap or interface related complications entirely.

During LASIK however, the epithelium is not actually removed completely, but rather peeled back so a flap is created. The excimer laser is then used to reshape the inner layers of the cornea. The flap is then placed back onto the eye. This is designed to promote a faster recovery as opposed to ASLA but may result in flap related complications post-operatively.

## What can I expect on the day and will there be any pain during ASLA?

ASLA is a safe, effective and efficient type of laser vision correction, as it will only take 5-10 minutes per eye. Most patients will spend about 1-2 hours at the facility and are discharged several hours later. This includes pre-admission, in theatre and post-operative care prior to being discharged. Ensure that you have arranged for someone to escort you home as you will not be able to drive. You will be comfortable during the procedure as the eyes are anaesthetised using topical eye drops. There are no injections involved. You may only feel a slight pressure sensation, lasting seconds.

## Recovery from ASLA

Initially after the procedure, it is normal to feel some discomfort. The eyes may feel dry, gritty, scratchy and may also be sensitive to light. A bandage contact lens will also be placed over the eye to promote healing and will be removed after one week. Your eyes will also be covered with a clear plastic eye shield upon discharge. You will be provided with post-operative eye drops and medications to help relieve this slight discomfort. The vision will also fluctuate for a couple of weeks and this is normal as the eye requires time to heal. Since ASLA requires complete removal of the epithelium, as opposed to LASIK, the recovery time is slightly longer as it will need time to regenerate itself. It is recommended to have at least 5-7 days off work whilst your vision settles down and the discomfort passes. The vision will continue to improve for up to three months. For the first two weeks after the procedure, avoid rubbing your eyes, swimming, eye make-up, contact sports and getting shampoo/soap into the eye. It is expected that you may experience mild dry eyes for up to three months after the procedure. This commonly occurs due to reduced tear production as the cornea is still healing. This phase will pass and you will be advised to use lubricants to promote comfort. Most people can drive within 7 days and resume most daily activities, but the recovery process can vary between individuals.

## Will I still need glasses after ASLA?

Patients will notice an improvement in vision within a few days, but this tends to fluctuate for several weeks. Glasses may need to be worn during the initial period whilst your vision adjusts. Very few patients may still require glasses or contact lenses after surgery and their prescription is significantly reduced. Most patients achieve 20/20 vision or better. In the long term, the visual outcomes from ASLA in comparison to LASIK are similar.

