

SMILE

SMALL INCISION LENTICULE EXTRACTION

DR NIKHIL KUMAR

CATARACT AND REFRACTIVE SURGEON BMED,
GRAD DIP (REFRACT SURG), MPH, FRANZCO,
CORNEA/REFRACTIVE FELLOWSHIP
(UNIVERSITY OF TORONTO)



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 SMILE, especially for those that may have higher prescriptions – and often told they are not eligible for LASIK. If this is you, SMILE could be the best option for you.

To learn more about SMILE, schedule an appointment with Dr Kumar and enjoy the freedom of seeing a world without glasses or contact lenses.

Am I a suitable candidate?

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. SMILE is generally able to correct refractive errors up to -8.00, although an assessment will determine whether SMILE 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 SMILE work? What are the benefits? How does it differ from LASIK?

SMILE 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 focus on the macula - resulting in clear unaided vision. By using advanced femtosecond lasers, we are able to create a pocket or “lenticule” within the cornea with precise dimensions. Dr Kumar will then carefully remove this lenticule from the cornea through a small access which is pain free, quick and minimally invasive. The results in the reshaping of the cornea which will then correctly focus light onto the macula.

During LASIK however, the epithelium is peeled back – creating a flap. 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 speedier recovery. SMILE on the other hand does not need any flaps to be created to correctly shape the cornea. No flap! No blades! As a result, there is minimal disturbance to the outer layers of the cornea which makes SMILE a safer procedure for people with dry eyes.

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

SMILE is a safe, effective and efficient type of laser vision correction, as it will only take 10-15 minutes per eye. Most patients will spend about 1-2 hours at the clinic 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 SMILE

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. 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 SMILE does not remove the outer layer of the cornea, healing time is much faster than other methods. 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. 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 SMILE?

Patients will notice an improvement in vision within a few days, but this tends to fluctuate for several weeks as the cornea heals. 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 SMILE in comparison to LASIK are similar.

