

VISION CORRECTION SURGERY

At the Tiffin Eye Center we offer a variety of surgical procedures that can correct vision. Most people think of LASIK (laser in situ keratomileusis) which is most commonly performed vision correction procedure in the United States, but there are other ways to improve the way the eye focuses light rays onto the retina in the back of the eye. We want to perform the surgery that is best for you and explain to you why we recommend that particular surgery.

EXCIMER LASER PROCEDURES

The most common way of correcting vision is using an excimer laser to reshape the cornea-the clear surface in the front of the eye. This can be done on the surface of the eye with no flap, which is known as PRK (photorefractive keratectomy) or under a thin flap that is made with a blade or another laser (LASIK). Recovery is quicker following LASIK, but both PRK and LASIK patients achieve excellent outcomes (over 90 percent having between 20/20 and 20/40 vision without glasses or contacts). Both procedures can correct nearsightedness, farsightedness, and astigmatism. There is a possibility that a second surgery will be necessary with either procedure (5-10%). Glasses may be necessary for certain activities, such as reading or driving at night. Full visual recovery from both procedures can take up to three to six months after the actual operation, but most patients have good enough vision to function normally by either the next day (LASIK) or one week (PRK). The procedure that is best for a patient usually depends on the thickness and shape of the cornea (determined by preoperative testing-topography) and/or their occupation.

CATARACT PROCEDURES

You may not think of cataract surgery as a vision correction surgery, but with modern cataract surgery many patients can achieve freedom from glasses. A cataract is a clouding of the lens inside the eye right behind the pupil. Surgery is done to remove the cloudiness and replace the natural lens with an artificial man-made lens (made of silicone or acrylic-a type of plastic). The vision does not have to be severely impaired to qualify for cataract removal. If daily activities are being affected by the cataract, the procedure is usually covered by medical insurance. Measurements of the eye are done about a week before surgery, as well as discussing what vision is most important to the patient- near, far, or intermediate. The surgeon can then choose what intraocular lens implant will best achieve the desired outcome. Sometimes patients choose to have one eye set for distance and one set for near (known as monovision) to be more independent of glasses. Others choose to have good near or far vision in both eyes for better binocularity and wear glasses for driving or reading only. Patients can also choose to

have specialized lenses implanted after cataract removal that may give them more freedom from glasses (known as toric, multifocal, or accommodating lenses), but these lenses are not covered by Medicare or medical insurance. They cost from \$ 800-2000 per eye.

PHAKIC IMPLANTS

For patients who have corneas that are too thin or corrections that are too high for laser vision correction, we can implant a lens into the eye (behind the iris, but in front of the lens). These are known as phakic implants. This procedure is done at the outpatient surgery center of the hospital. There is a risk of cataract formation with these lenses. They are more costly than laser vision correction, because they are done in a hospital setting (\$3000-3500 per eye).

ASTIGMATIC AND RADIAL KERATOTOMY

Many people think that incisional (cutting) procedures of the cornea (like RK & AK) are no longer done, but that is not the case. Astigmatic keratotomy (AK) can be used to correct astigmatism during cataract surgery. It can also be used as a primary or secondary procedure to 'touch up' astigmatism (oblong curvature of the corneal surface). Radial keratotomy was developed in the 1970s to correct nearsightedness. It has largely been replaced by laser vision correction. Deep cuts are made in the cornea that cause the cornea to flatten it. Radial keratotomy is mostly used at the Tiffin Eye Center to 'fine tune' small refractive errors following cataract surgery.

CONSIDERING VISION CORRECTION SURGERY?

Before choosing to have a vision correcting surgery, it is important that you make sure you are a good candidate, understand the potential risks and benefits of each procedure, and have realistic expectations about the visual outcome. We offer free consultations and testing that will help us to recommend the best operation for your visual needs. Following the free consultation a complete visual examination will be scheduled with one of our doctors who will be ready to advise which vision correction procedure is best for you.