Laser Vision Correction
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Due to physician and patient expectations, the VISX Excimer laser is able to correct very low to moderately high degrees of nearsightedness, farsightedness, and astigmatism.

Wavefront-Guided Treatment

Wavefront technology measures imperfections that are unique to each eye. This creates a one-of-a-kind, personal treatment for your eye that is then entered into the VISX Excimer laser and used as a guide for the laser during treatment. Today’s laser vision correction advances strive to improve vision quality while reducing or eliminating some of the possible effects associated with conventional laser vision correction.
If the cornea is too steep or the eye is too long, the images closest to you are clearer while being out of focus at a distance. To correct this, the laser is programmed to alter the center of the cornea and slightly flatten it. This moves the point of focus on the retina to allow you to see the clearest image at both distances.

Nearsighted

If the cornea is too steep or the eye is too long, the images closest to you are clearer while being out of focus at a distance. To correct this, the laser is programmed to alter the center of the cornea and slightly flatten it. This moves the point of focus on the retina to allow you to see the clearest image at both distances.
**Farsighted**

If the cornea is too flat or the eye is too short, the images closest to you are out of focus while being clearer at a distance. To correct this, the laser is programmed to alter the outer rim of the cornea and make it steepen in the center. This moves the point of focus on the retina to allow you to see the clearest image at both distances.

**Astigmatism**

If the cornea has an irregular surface, the images you see are distorted. The laser is programmed to smooth the irregularities and create a more evenly rounded surface to allow the image to focus on the retina in such a way that the image is not distorted.
Photo Refractive Keratectomy (PRK)

PRK treats the surface of the cornea. It does not require the use of a microkeratome or a femtosecond laser to make a flap, as does LASIK. For this reason, it can be considered the safest form of laser vision correction. We start by using numbing drops for the patient’s comfort. Once they have taken effect, the protective skin (epithelium) that covers the cornea is removed or pushed aside. Then the VISX Excimer laser re-shapes the surface, removing microscopic layers of the cornea with accuracy up to 0.25 microns. The amount of refractive power determines how much will be removed.

You should expect some moderate discomfort for the first 24-48 hours. You will be given instructions on how to manage the discomfort, as well as eye drops to speed healing and prevent infection. Most PRK patients notice an improvement in their vision immediately after surgery. However, vision usually is somewhat blurred while the epithelium is healing. Your functional vision should return in three to seven days. Full visual results may not be recognized for three weeks to three months.

PRK may be performed if the patient’s corneas are too thin for the amount of correction they may need. PRK is also known as LASEK.
LASIK is actually two procedures in one. First, a thin flap is created by a micro-keratome or by a femtosecond laser. The flap is then lifted to expose the treatment area. The Excimer laser reshapes the cornea as programmed by the doctor and technician. Once treatment is completed, the flap is repositioned by the surgeon. This procedure usually takes about 15 minutes for both eyes. Also, LASIK patients recover quickly, and most experience little to no discomfort. Most patients can drive the next day without the use of glasses or contact lenses and return to work in one to two days, depending on the patient’s occupation.
Call for a free consultation
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