

Laser Refractive Surgery

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Laser refractive surgery involves using a laser to changing the refractive status of the eye by changing the shape or curvature of cornea. Almost all procedures involve the use of an excimer laser with about 25 million procedures performed worldwide per annum. About 80% of surgeries are done with the LASIK (laser in situ keratomileusis) technique where a corneal flap is created, then lifted up, the excimer laser treatment done on the corneal bed and the flap repositioned. The remainder are surface procedures with no flap with techniques including PRK (photorefractive keratectomy), LASEK (laser epithelial keratomileusis) and Epi-LASIK. I will discuss the indications, treatment range and complications of LASIK and PRK.

I will briefly discuss new laser refractive surgical techniques using femtosecond lasers including the IntraCor procedure for presbyopia and hyperopia.