Figure 7A: Irregular astigmatism seen after an RGP lens has been removed. History of lens wear for over 20 years.

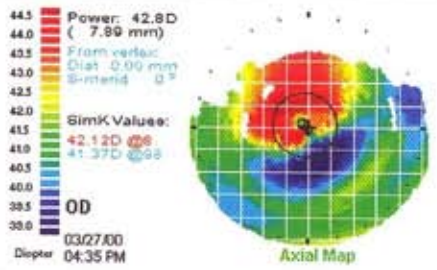
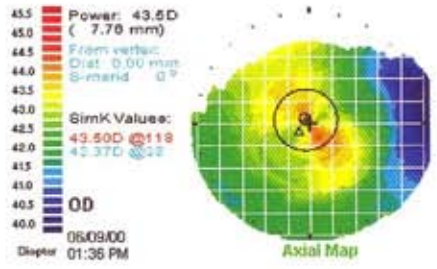


Figure 7B: Irregular astigmatism has resolved after discontinuing contact lens wear for 3 months. The patient is a satisfactory candidate for laser vision correction



following myopic laser vision correction, secondary to corneal thinning.

• Look for any vision-threatening retinal disorders (eg, myopic macular degeneration, age-related macular degeneration, diabetic retinopathy, etc). These patients are at risk for vision loss in the future and are not considered good candidates for refractive surgery.

• Rule-out peripheral retinal disease (increases likelihood of retinal tear and detachment).

• The quality of vision can deteriorate with a postoperative cornea that is either too steep (>50 D) or too flat (<36 D). The postoperative curvature should be predicted. If it is outside an acceptable range, recommend a phakic IOL or refractive lens exchange.

Medico-legal issues

Some patient situations are problematic for medico-legal reasons. For example, if a patient with an underlying disease (eg, diabetic retinopathy, myopic macular degeneration, age-related macular degeneration) suffers vision loss 1-2 years after refractive surgery, he may hold the surgery accountable rather than the disease. One should exercise extreme caution here. Since a patient's vision is almost always correctable with spectacles or contact lenses, avoiding surgery may be wise in these circumstances. Pregnancy can affect refraction and wound healing and any untoward event during pregnancy may be blamed on the procedure or related medications. Hence, it is wise to postpone refractive surgery during pregnancy.

Postoperative care

Postoperative examinations allow the doctor to listen to and counsel the patient. It also permits the evaluation

Table 5: Causes of loss of best-corrected visual acuity in laser vision correction

	LASIK	ASA
Infection	+	+
Decentered ablation	+	+
Irregular ablation	+	+
Central island	+	+
Corneal haze	+	+
Superficial keratitis	+	+
Diffuse lamellar keratitis	+	-
Flap striae	+	-
Flap button-hole	+	-
Epithelial ingrowth	+	-

of uncorrected visual acuity (UCVA), best-corrected visual acuity (BCVA) with a manifest refraction, and detection of any complications. If there is a loss of BCVA, the cause must be identified.

After laser vision correction

Loss of acuity (Table 5) may be secondary to irregular astigmatism from an ablation problem (decentered or irregular ablation, central island), flap complication (eg, striae or button-hole), diffuse lamellar keratitis, superficial keratitis, corneal haze, or an intraocular problem. In the absence of slit lamp evidence of corneal abnormalities or intraocular problems, a computerized videokeratography can rule-out an ablation problem as the cause. Additional laser treatment may be needed if BCVA does not improve or symptoms do not resolve.

BCVA and refractive stability occur earlier with LASIK than with ASA. In the LASIK patient, BCVA is typically achieved in 24 hours and refractive stability occurs between 1 and 3 months. The lower the refractive error, the earlier the refractive stability. With ASA, best-corrected acuity is usually achieved by 1 month and refractive stability in 4-6 months. Fluctuation in vision is uncommon after 3 months with LASIK, and after 6 months with ASA. Most of the early fluctuations in vision are secondary to an induced dry eye condition. If so, lubricating drops, gels, ointments, oral omega-fatty acids, or punctal plugs may be helpful.

For patients with an under- or overcorrection, an enhancement procedure can be considered, but this should wait until at least 4 months following LASIK or 6 months following ASA. These delays are only approximate; the key is to wait until refraction is stable, with <0.5 D change from the previous month's examination. If a patient has residual or consecutive myopia and is presbyopic or early prepresbyopic, a trial should be considered to determine the acceptability of monovision before undertaking surgical enhancement.

A patient who is surgically treated to intentionally create monovision and experiences difficulty, especially with night driving, can be given a prescription for glasses that correct distance vision in both eyes. If there are problems with binocular vision and sporting activities, try fitting a contact lens to the reading eye to improve distance vision. If a patient complains of glare, halos, monocular diplopia, or poor quality of vision that does not resolve after a few months, it is important to identify the cause. Any residual uncorrected refractive error can result in significant visual complaints. Computerized videokeratography can identify an abnormal