eyes even though topical steroids were administered postoperatively. Corneal haze was more severe in patients treated with 9 to 12 diopters of attempted refractive change.[4]

There has been renewed interest in modifying an older refractive surgical procedure, keratomileusis, in an effort to find an effective treatment that minimizes the incidence of postoperative visual events and visual acuity changes that have recently been reported with radial keratotomy and photorefractive keratectomy. Laser in situ keratomileusis (LASIK), as described by Slade[9], involves using a microkeratome to create a corneal flap. The corneal flap is laid back and the laser ablation is applied to the corneal stroma rather than the corneal surface. Ablation with the excimer laser preserves Bowman's membrane and reduces surgical trauma to the corneal tissue, providing more consistent wound healing and more predictable dioptric correction. The ablation is accurate for the amount of corneal tissue removed and the treatment site and its surrounding area (optical zone) can be varied to provide optimal dioptric correction with minimal tissue ablation.

LASIK can effectively treat both low and high degrees of myopia, hyperopia, and astigmatism. Since LASIK does not disrupt the epithelial structure, postoperative healing occurs rapidly and refractive stability occurs as early as one month in many patients. Anecdotal reports of visual adverse events appear to be much lower than those reported with PRK and RK. For these reasons, ophthalmic surgeons are turning their attention to LASIK as an alternative to RK and PRK.

B. PRIOR CLINICAL STUDIES

The investigators (Dr. Herbert J. Nevyas and Dr. Anita Nevyas-Wallace) began treating patients with Laser Intrastromal Keratomileusis (LASIK) in January 1996. As of February 27, 1997, they have performed 147 LASIK myopia procedures in 70 patients. Seventeen of the patients were treated by Dr. Anita Nevyas-Wallace and 53 patients were treated by Dr. Herbert Nevyas.

Informed consent was obtained from all patients prior to the surgical procedure. Patients were considered eligible for LASIK treatment if they were at least 18 years of age and not more than 64 years of age; generally had a preoperative best spectacle corrected visual acuity (BSCVA) of 20/40 in the operated eye; had a stable refraction with a refractive error consisting of myopia between -0.0 and -25.00 diopters with or without astigmatism. Patients