Results of Photorefractive Keratectomy (PRK) at Cedars-Sinai Medical Center

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Abstract

This report summarizes our two year experience with excimer laser photorefractive keratectomy on 160 eyes of 128 patients at Cedars-Sinai Medical Center. All eyes were treated with a VISX Twenty-Twenty Excimer Laser, fluence (160 mJ/cm²) frequency (5 Hz), ablation zone diameter 5.0 to 5.5 mm, and a depth per pulse of 0.21 to 0.27 um. A suction fixation ring was used in all eyes either with nitrogen flow (79 eyes) or without nitrogen flow (81 eyes) across the cornea. Follow-up ranged from 1 month (152 eyes) to 24 months (12 eyes).

Results:

- **3 Months:** (139 eyes) 82% achieved an uncorrected visual acuity of 20/40 or better, 83% were corrected to within +/- 1D of intended correction and 30% lost one line of best corrected visual acuity.
- **6 Months:** (124 eyes) 88% achieved an uncorrected visual acuity of 20/40 or better; 84% were corrected to within +/- 1D of intented correction and 15% lost one line of best corrected visual acuity.
- 12 Months: (71 eyes) 91% achieved an uncorrected visual acuity of 20/40 or better; 84% were corrected to within +/- 1D of intented correction and 17% lost one line of best corrected

visual acuity.

24 Months: (12 eyes) 100% achieved an uncorrected visual acuity of 20/40 or better; 91.6% were within +/- 1D of intended correction and 0% lost one line of best corrected visual acuity.

Conclusions:

In eyes, with a flow-up of 6 months to 24 months, 77% to 100% achieved an uncorrected visual acuity of 20/40 or better and 84% to 92% were corrected to within +/- 1D of the intended correction. The authors conclude that excimer laser PRK appears to be a safe procedure capable of correcting the eyes of patients with low to moderate myopia.