

OUTCOMES OF LASIK ENHANCEMENT AFTER PRIMARY PRK REGRESSION

Mohammed Taha, MD; Eser Adiguzel, PhD¹; Avi Wallerstein, MD¹;

Mark Cohen, MD¹

PURPOSE

To determine the accuracy, efficacy, and safety of keratome and femto flap LASIK enhancements (enh) after primary PRK regression.

METHODS

Retrospective chart review. All eyes underwent either microkeratome (MK) or femto flap creation after an initial PRK that regressed. Post-enh manifest refraction, UDVA and CDVA were compared to preop measurements and a Quality of Vision (QoV) questionnaire was administered at final post-op.

RESULTS

52 eyes, pre-op sphere -6.15 ± 3.07 D (-12.00 to $+0.75$ D) and cyl -1.14 ± 0.88 D (-0.25 to -4.50 D). Avg time to enh, 52 ± 52 mths post-PRK (7-249 mths). 85% MK, 15% femto. Avg pre-enh pachymetry 461 ± 47 . Avg flap thickness 100 ± 22 um. One eye had a buttonhole. Avg F/U time 6 ± 9 mths. Post-enh sphere $+0.03 \pm 0.33$ D (-0.75 to $+0.75$ D), cyl -0.40 ± 0.24 D (0 to -0.75 D), MRSE -0.06 ± 0.31 D (-0.75 to $+0.75$ D). 76, 92, 100% within ± 0.25 , ± 0.50 , ± 1.00 D. Cumulative UDVA 20/20, 20/25, 20/40 in 67, 96, 100%, pre-op CDVA in 76, 96, 100%; efficacy index 1.0 ± 0.1 . CDVA loss: 1 line in 4% (2 eyes), no change 79%, no loss >1 lines, gain of ≥ 1 lines 17%. safety index 1.0 ± 0.1 . Subjective QoV questionnaire results to follow.

CONCLUSIONS

¹ LASIK MD

LASIK keratome or femto flap enhancement for regression after initial PRK demonstrates excellent accuracy, efficacy, safety, and quick recovery.