

Laser in situ keratomileusis versus laser assisted sub epithelial keratectomy for the correction of low to moderate myopia using NIDEK Ec-sooo excimer laser – NIDEK Refractive Surgery Symposium/ Dubai 2005

Author Seyed Javad Hashemian

Institution Fajr Hospital and Negah Eye Center, Tehran, Iran.

Co-authors Mohammed Ebrahim Jafari

Purpose; To compare the visual and refractive outcome of Laser in situ keratomileusis(LASEK)and laser assisted sub epithelial keratectomy(LASEK) in the treatment of low to moderate myopia.

Setting; Ophthalmology department of Fajr Hospital and Negah Eye Center, Tehran, Iran

Methods; Three hundred sixty four of 199 patients with manifest refraction spherical component lower than -4.00 diopters (D) and cylinder components lower than -1 .00 diopters were assigned to 2 groups: 218 eyes (1 1 Tpatients) were treated with LASIK and 146 eyes (S2patients)with LASEK .all refractive surgery was performed by same surgeon. Uncorrected visual acuity (UCVA) besi spectacle corrected visual acuity (BSCVA), remaining refractive errol corneal haze and complications were followed in both groups for 12 months.

Results; At 12 month, the mean spherical equivalent (SE) was within 10.50 D of emmetropia in '199 eyes (91.3%) in the LASIK group and 144 eyes (98.6%) in the LASEK group and within +1 .00 D in 217 eyes (99.54%) and 146 eyes (100%) respectively. The UCVA was20/25 or better in 212 LASIK eyes (97.36%) and 144 LASEK eyes (98.6%). There was more than a one line loss of BCVA in one LASIK eyes (0.46%) and no in LASEK eyes (0.0%). Diffuse lamellar keratitis occurred in 11 LASIK eyes (5.04%) corneal haze appeared in 14 LASEK eyes (9.39%). The between-group differences in SE, magnitude of cylinder were statistically significant ($P<0.05$).

Conclusions; Both LASIK and LASEK were safe and effectively treated eyes with low to moderate myopia. Laser assisted sub epithelial keratectomy provided superior results in visual outcomes.