ABSTRACT

Excimer laser photorefractive keratectomy for 6.25 to 20.00 diopters of myopia – A six months follow up

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Objective: To assess the efficacy and safety of excimer laser photorefractive keratectomy (PRK) for high myopia in Pakistani population.

Study Design: A prospective study

Patients & Methods: Forty nine (49) laser-operated eyes were enrolled in this study with a refractive error ranged from -6.25 to -20.00 diopters. Range of the astigmatism was from -0.50 to -4.0 diopters giving an average of 0.93. Only 06 eyes (12.24%) did not turn up for final visit and 43 eyes (87.76%) eyes were followed till last visit at six months after photorefractive keratectomy.

Results: At one month, three months, and six months after PRK, 14.28%, 20.40%, and 20.78% eyes achieved 6/6 visual acuity without glasses. It was found that 10 eyes (23.20%) were hypermetropic and another 10 eyes (23.20%) were myopic between 1 to 4 diopters spherical equivalent at six months postoperatively. Four eyes (09.28%) had spherical equivalent refraction between -6.00 to -8.25 diopters six months after PRK. Again 10 eyes (23.20%) presented with astigmatism more than +1.0 DC, whereas 11 eyes (25.52 %) with more than -1.0 DC at the end of six months. All the eyes presented with various degrees of corneal haze at six months follow up visit. No serious complication was reported.

Conclusion: The short term follow up revealed PRK to be less effective for the correction of high myopia mainly due to corneal haze and regression of effect. Al-Shifa Journal of Ophthalmology 2006; 2(2): 73-81 © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.