

Phorefractive Keratectomy in the Management of Hyperopic Esotropia

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Investigative Ophthalmology & Visual Science May 2006, Vol.47, 551. doi:

Abstract

Purpose: : To evaluate the efficacy of photorefractive keratectomy (PRK) in the treatment of hyperopic esotropia in young adults.

Methods: : We studied thirty patients with a mean age of 30.8 years. Subjective and objective methods were used to evaluate hyperopia. Uncorrected and corrected esotropia for far and near vision was quantified by cover tests and prismatic lens correction. All patients were subjected to PRK treatment.

Results: : Pre-operative best spectacle corrected visual acuity (BSCVA) was 20/30. There was a decrease in BSCVA in the first month after treatment. However, BSCVA returned to preoperative values at two months. One year after PRK treatment the uncorrected visual acuity (UCVA) was improved in 22 patients and stationary in 4 patients. In 4 patients there was a myopic shift in the first month. At the end of the follow up period all patients were orthophoric with no correction.

Conclusions: : Our results demonstrate that photorefractive keratectomy (PRK) reduces accommodative stress and excess of convergence with consequent ocular deviation. It can be a valid approach to the management of hyperopic esotropia by relieving spectacle dependence and reducing accommodation.

Keywords: esotropia and exotropia • hyperopia • laser