

Session 1-I: Refractive: Surface Ablation

Title: Effects of Mitomycin-C After PRK

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Purpose: To evaluate the use of MMC after Photorefractive Keratectomy (PRK) and the effects in endothelial cell count, corneal paquimetry and patient discomfort.

Methods: 20 eyes of 10 patients who wanted refractive surgery and were not candidates for LASIK surgery were enrolled in this prospective, comparative, randomized study. Patients that due to the amount of correction needed more than 75 microns of ablation depth and were not eligible for LASIK procedure were enrolled. Surface ablation was performed using standard techniques without the use of alcohol for epithelial debridement; MMC was placed in one eye for 30 seconds, covering the contralateral eye with a similar sized sponge with BSS. Pre-operative corneal paquimetry and endothelial cell count was performed and compared with post operative measurements for months 1 and 3; patient discomfort was evaluated at day 1, week 1, months 1 and 3.

Results: Preliminary results show that the eye that was operated with MMC had significant more discomfort regarding pain and dry eye than the fellow eye. Endothelial cell count was slightly reduced and corneal paquimetry increased compared to the contralateral eye where BSS was placed.

Conclusions: The use of MMC may affect the endothelial cell count and increase corneal paquimetry, causing more discomfort after Photorefractive Keratectomy (PRK).