EVALUATION OF CHANGES IN CORNEAL TOPOGRAPHY AND PACHYMETRY FOLLOWING TRABECULECTOMY USING SLIT SCAN IMAGING
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Purpose: In this study we evaluate corneal topographic and pachymetric changes following trabeculectomy surgeries using slit scan imaging (Orbscan) technology. Methods: Thirteen eyes of ten patients who underwent trabeculectomy with fornix based conjunctival flap included in the study. Mean age of the patients was 54 (min 26-max 72) years. Best corrected visual acuity (BCVA) measurements, intraocular pressure measurement with applanation tonometry and corneal topography and pachymetry measurements using Orbscan were done before and 1. and 3. months after surgery. All measurements and changes were statistically evaluated. Results: BCVA changes between preoperative and postoperative measurements were not statistically significant. IOP was shown statistically significant decreases at the postoperative measurements (p=0.0001). While mean preoperative IOP was 23.15±6.41 (15-35) mmHg, at the postoperative 1. and 3. months measurements were 12.62±5.72 (6-28) mmHg and 13.62±3.38 (9-20) mmHg respectively. Differences between preoperative and postoperative 1. month and 3. months keratometric value at steepest and counter axis were not statistically significant (p˃0.05) (-0.75±2.06 D, -0.17±1.52 D at the steepest, -0.52±1.62 D, 0.13±1.45 D at the counter axis respectively). While differences between preoperative and postoperative 1.months pachymetric results were statistically significant (p=0.032) (16.92±23.88 µ), this difference was not statistically significant at the 3. months (p˃0.05) (2.08±19.70). At the 3. months postoperative corneal topography evaluations; steepening increased in 9 eyes, decreased in 3 eyes and not changed in one eye. Conclusions: Although there were not statistically significant changes in keratometric values following trabeculectomy, corneal topography patterns were effected. Financial Disclosure: NO