A Comparative Study of Intraocular Pressure Measurements Using Goldmann Applanation Tonometer, I-care pro and Corvis ST after DSAEK

Purpose: To compare the intraocular pressure (IOP) measurements using different devices and evaluate the influence of central corneal thickness (CCT) on IOP measurements following DSAEK surgery. Methods: In this cross-sectional study 42 eyes from 91 patients (mean age: 54.09 years) after DSAEK with clear and compact graft were enrolled. Mean follow-up after the surgery was 219.1±185.2 years. IOP was measured with GAT, I-care pro and Corvis ST (as non-corrected and biomechanical IOP) in post-DSAEK patients and agreement between measurements of three devises were assessed. Corvis ST was used to measure the CCT value. The influence of CCT on IOP measurements were evaluated using spearman test. -Results: The mean IOP measured by GAT, I-care pro and Corvis ST the non corrected and biomechanical IOP were 12.5±2.44, 11.09±2.45, 12.48±2.46 and 9.74±2.43 respectively. GAT measurement was considered as a gold standard and the only significant difference was observed between GAT and Corvis biomechanical IOP (P<0.05). CCT did not correlate with any of the IOP measurements except Corvis biomechanical IOP (r=−0.518).Conclusion: There was a good agreement between GAT, I care and Corvis non-corrected IOP measurements while the Corvis biomechanical IOP measurement was less than the GAT.
این صفحه به معنای تاییدیه نمایه سازی مقاله در یاگاه استنادی سیویلیکا می‌باشد. در هر لحظه به منظور تایید اصل این گواهی می‌توانید وضعیت ثبت مقاله را از طریق لینک فوق به صورت آنلاین کنترل نمایید.