

## **Assessment of intraocular pressure using ocular response analyzer and Goldman applanation tonometry before and after penetrating keratoplasty (PKP)**

**Purpose:**To compare the obtainability and values of IOP measurements by Goldmann Applanation Tonometry (GAT) and Ocular Response Analyzer (ORA) before and after Penetrating Keratoplasty (PKP) testing the degree of their agreement and the impact of corneal biomechanical factors on IOP measurement.

**Patients & Methods:** The study is a comparative prospective study in which patients scheduled for PKP undergo intraocular pressure measurement (IOP) using the ORA then the GAT one day before surgery to be repeated one month after their surgery.

**Results:** Forty patients undergoing PKP were enrolled. Mean IOP before surgery was 16.5 mmHg (range 10-23) and after surgery was 15.2 mmHg (range 10-23). The difference was not statistically significant (p=0.12). The agreement between ORA and GAT was 70%.