Searching for new effective and safe procedures for combined glaucoma and cataract surgery is still a crucial question.

**Methods.** 52 patients (53 eyes) with cataract and glaucoma were observed. Mean IOP was 23.6±1.8 mm Hg with maximum medication.

Complete ophthalmic examinations, including gonioscopy, tonometry and tonography were done before and after surgery. Follow-up period was up to 12 months.

Criteria of effectiveness were time of the surgery, number of intra- and postoperative complications, compensation of IOP, necessity of repeated surgery.

All of the patients underwent combined surgery: endotrabeculoectomy and phaco with IOL implantation.

**Surgical technique.** After epibulbar anesthesia two corneal paracenteses were made. Intracameral 1% lidocain anesthesia. Anterior chamber was filled and deep with viscoelastic. Through one of paracentesis special designed forceps was inserted and under gonioscopic control trabecula was removed in the border of one or two quadrants. Then clear corneal incision and phacoemulsification with intracapsular IOL implantation was performed. Viscoelastic was removed by irrigation-aspiration.

**Results.** Surgery time for endotrabeculoectomy prolonged procedure for 5.1±1.2 minutes. In 7 cases from 53 little hemorrhage was observed at the time of trabecula capture which stopped and after viscoelastic aspiration and corneal incisions hydroadaptation didn’t repeat.

On second day in two cases observed hyphema 1 and 2 mm. Hyphema dissolved during three days without any treatment. In one case iridocyclitis was observed in early postoperative period.

7 days after surgery IOP significantly (p=0.001) decreased for 8.4±1.2 mm Hg and was 15.2±1.3 mm Hg. After 1 month IOP was 15.8±1.2 mm Hg except of 1 patient whom repeated surgery (trabeculoectomy) was performed. After 6 months mean IOP was 15.9±1.3 mm Hg and was stable with using prostaglandin drops 1 time daily for two patients.

**Conclusion.** Combined endotrabeculoectomy and phacoemulsification is effective and safe procedure. It is easy to perform, takes short time and leads to significant and stable decreasing of IOP.