P-FS-365

EFFICACY OF MICROPULSE TRANSCLERAL CYCLOPHOTOFOCOAGULATION IN UNCONTROLLED GLAUCOMA AT SRINAGARIND HOSPITAL, THAILAND

Phornrak Sriphon1, Niphon Sayawat1
1Glaucoma Unit, Department of Ophthalmology, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Purpose: This study aimed to evaluate the efficacy and safety of micropulse transcleral cyclophotocoagulation in patients with uncontrolled glaucoma.

Methods: This is a prospective case series study. Twenty-one eyes of 15 patients were included. Studied eyes underwent micropulse transcleral cyclophotocoagulation. Follow-up visits were performed on week 1 and month 1, 2, 3, 6, 12 and 24; patients underwent complete slit-lamp examination, BCVA, Goldmann applanation tonometry, gonioscopy, visual field testing and grading pain score.

Results: This preliminary result comprised 21 eyes. Diagnoses were primary open-angle glaucoma (26.7%), closure angle glaucoma (26.7%) and secondary glaucoma (46.6%). The mean age of the study group was 49.20 ± 19.3 years (12-76 years). Preoperative BCVA were range 6/9 to HM. 73% of patients underwent previous glaucoma surgery. After 1 week of follow-up, mean intraocular pressure decreased from 22.3 ± 5.4 (range 14-35) mmHg at baseline to 10.1 ± 4.1 (range 0-20) mmHg, after 1 month and 2 months of follow-up; the mean (± SD) intraocular pressure dropped from baseline to 16.4 ± 6.2 (range 6-28) mmHg and 17.33 ± 6.45 (range 6-28) mmHg respectively. The mean IOP difference between baseline and 2 months follow up (4.39 mmHg) prove to be statistically significant (p = 0.037). The number of medications dropped from 3.6 ± 0.6 before surgery to 2.9 ± 0.2 after surgery. Mild side effects occurred in all patients were moderate postoperative pain and mild inflammation in anterior chamber but complete resolved after 1 week. No patient had loss of BCVA. 3 in 15 patients needed further surgery for achieved sucess. The overall qualified success after 2 month was 53.6%.

Conclusions: Micropulse transcleral cyclophotocoagulation was effective method for lowering IOP in case of uncontrolled glaucoma with a low rate of complications at 2 month follow up period.

References: