

To Evaluate Effects of Primary Open Angle Glaucoma and Ocular Hypertension on Visual Functions

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Abstract

Background And Aims: To evaluate effect of Primary open angle glaucoma (POAG) and Ocular hypertension (OHT) on visual functions. **Material And Methods:** A prospective cross-sectional study on 116 eyes of 58 patients (20 normal patients, 28 POAG patients and 10 OHT patients) attending the out-patient's department of a tertiary eye care hospital was carried out. All patients underwent a complete ophthalmic examination including visual acuity measurement, visual field examination, contrast sensitivity measurement, colour vision testing and stereopsis. **Results:** 58 patients with a mean age of 44.2 (\pm 9.17) years were enrolled in the study. Mean visual acuity was 0.0181 log unit (\pm 0.027); contrast sensitivity 1.79 log unit (\pm 1.14) and stereopsis 117 secs of an arc (\pm 59.92) in the normal group with normal colour vision and visual fields. The same was 0.09 log unit (\pm 0.07), 1.36 log units (\pm 0.16) and 270 seconds of an arc (\pm 106.45) respectively, colour vision defective in 60.71% and visual field defects in 87.50% amongst the POAG group. Mean visual acuity was 0.0291 log unit (\pm 0.03), contrast sensitivity 1.537 log unit (\pm 0.06), stereopsis 204 seconds of an arc (\pm 57.96), defective colour vision in 25% cases and no patient with visual field defects amongst the patients having OHT. **Conclusion:** Visual functions are affected in patients with POAG and OHT.

Key Words: Primary open angle glaucoma, ocular hypertension, visual functions.