



Prevalence of Glaucoma in stress conditions

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Abstract

600 people screened for glaucoma. Divided in 2 groups. First with strenuous work of 12-14hrs / day 2nd grp with sedentary work for 7-8hrs /day. Parameters used were IOT, gonioscopy, perimeter, oct where ever required

Result: Out of the 300 people with strenuous working group 13 people were positive for glaucoma as compared to non strenuous group which showed only 6 people had glaucoma.

Introduction

Glaucoma is a condition which is a preventable cause of blindness. It is a progressive optic neuropathy with characteristic optic nerve head changes which may be associated with raised intraocular pressure and visual field defects. In our study 600 patients were screened for glaucoma. The parameters used to test glaucoma were intraocular pressure, perimetry, gonioscopy and ocular computed tomography whenever required.

Method

600 patients were divided into 2 groups of 300 patients each. In one group all patients had strenuous⁽¹⁾ working hours of 12-14 hrs per day, while the other group had working hours of 4-6 hrs per day. All the patients were screened for glaucoma by recording best corrected visual acuity, intraocular pressure and perimetry.

Gonioscopy and OCT were done to confirm the diagnosis.

Observation

The two groups showed the following observations.

In the first group that had patients with longer working hours of 12-14hrs, findings were as follows-

Out of the 300 patients

- 25 had optic disc changes suggestive of glaucoma
- 14 had raised intraocular tension
- 20 had changes on perimetry
- 10 showed thinning of nerve fibre layer in optic disc
- All 25 patients with optic disc changes had reduced visual acuity ranging from 6/24 to 6/9

In the second group that had patients with shorter working hours of 4-6hrs, findings were as follows-

Out of the 300 patients

- 12 had optic disc changes
- 8 had high intraocular tension
- 6 had visual field restriction defects on perimetry
- 4 had changes in OCT

Result

10-12 % people exposed to stress in the form of longer working hours had glaucoma while only 6-7 % of people exposed to shorter working hours had glaucoma.

Conclusion

It was concluded that stress was a definitive risk factor⁽²⁾ for development of glaucoma

References

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