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Letter to Editor

Ophthalmology Section

Anxiety and Depression in Persons with Primary Adult Onset Glaucoma in Southern India

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Sir,

Primary adult onset glaucoma can lead to visual impairment and blindness. Studies have reported on the prevalence of anxiety and depression in persons with primary adult onset glaucoma worldwide [1-4]. However, to the best of our knowledge, there are no reports on the prevalence of anxiety and depression in patients with glaucoma from India.

A cross-sectional study was done between January 2017 and March 2017 on 151 consecutive cases of primary adult onset glaucoma in a tertiary eye care hospital in southern India to determine the need to screen for anxiety or depression. The sample size was determined based on an anticipated prevalence of 15% and 95% confidence intervals around the point estimates. The study protocol was approved by the scientific committee of the hospital and adhered to the tenets of Declaration of Helsinki. Anxiety and depression were screened, in an outpatient setting, using the Hamilton Anxiety Rating Scale (HAM-A) and the Hamilton Depression Rating Scale (HAM-D) that was administered after the diagnosis of primary adult onset glaucoma was confirmed. The mean age of subjects in the study was 64.26±12.50 years (range 18 to 93 years). Ninety one (60.26%) subjects were male and 6 (3.97%) subjects had a best corrected visual acuity <6/60. The mean duration of disease was 3.07±3.74 years (range < 1 to 20 years) and mean number of anti-glaucoma medications was 1.09±0.95 (range 0 to 4). Screening did not identify any subjects with clinical anxiety (mean score 0.91±2.34, range 0 to 12) or clinical depression (mean score 3.2±2.4, range 0 to 6) limiting further exploration of any association with glaucoma in this population. Studies from other populations have reported prevalence rates from 13.05 to 66% and 5.7% to 60.0% for anxiety and depression respectively [1-4]. Age and severity of visual field defects are identified as the most common risk factors [1-4] although a population based study reported no evidence for an association of anxiety or depression with self-reported glaucoma [3]. It is possible that absence of clinical anxiety and depression in this study maybe a true population response, however, the smaller sample size (based on a repeat post-hoc estimation) and the study limited to a single hospital do not allow generalization of these results to a larger population.

Although globally accepted scales (HAM-A and HAM-D) were chosen for this study, it is possible that the scales may not retain optimal psychometric properties when administered to this population. A recent study from southern India reported on the poor psychometric properties of the Patient Health Questionnaire (PHQ-9) to screen for anxiety and depression in a population with glaucoma although they did not report on prevalence or potential associations of anxiety and depression with glaucoma [5].

In conclusion, screening protocols for anxiety and depression in this population with glaucoma are not currently necessary. However, a study on a larger, at risk population maybe identified using known risk factors including older ages, severity of glaucoma and moderate to severe visual impairment and blindness may help to generate more evidence on the need to screen for anxiety and depression in persons with adult onset glaucoma.

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