

ABSTRACT

INTRODUCTION

Myopia is one of the causes of impaired visual acuity among school going children as well as those in adults. Most commonly retinal degeneration and retinal detachment is seen with the myopic patients. Pathologic myopia is an eccentric group wherein the myopia is likely due to a disease rather than a biologic variation. The myopic eyes show excessive axial length with increased scleral expansion, dehiscence and posterior staphyloma formation. The global expansion of the eye is a slow process that occurs during a person's life resulting in blinding complication. The myopia of -6.0 D to an excess of -40.00 D comes under the criteria of pathologic myopia.

AIM

- 1) To evaluate the presence of fundus changes in patients with degenerative myopia.
- 2) To identify the predisposing factors.
- 3) The need for frequent follow ups.
- 4) Identification of high risk patients and appropriate management.
- 5) To rehabilitate refractory cases of high myopic patients with low visual aids and regular follow up

MATERIALS AND METHODS

STUDY DESIGN

Prospective Study

SAMPLE

During the study period a total of 100 myopic patients were registered and observed.

METHODS

Patient selection for the study was done by analyzing the medical records of patients who came for follow up to our retina clinic with high myopia of at least - - 6.00 diopters. A detailed history of the patient, visual acuity assessment, intraocular pressure measurement, Slit lamp examination, colour vision and Fundus examination and fundus photography will be done. Patients will be screened for the extent of retinal involvement. BCVA (Best corrected visual acuity), Intra-ocular pressure, Slit Lamp Examination and Fundus examination shall be done during follow up visits.

RESULTS

Highest incidence of pathological myopia was noted to be in the age group of 21-30 Years. The majority of the patients had no significant family history. 4% had the unilateral myopia on their presentation. The higher prevalence of myopia in the student population shows that the most common environmental factor like the increasing education and higher amount of near work.

About 55% patients had an UCVA ranging between 6/60 – 4/60. 70 % of the patients with pathological myopia were in the range of -6 to -14 dioptries. Very high degrees of myopia were less frequent. There is a definite correlation between the increase in the axial length and the high degree of myopia. Higher the refractive power, more difficult is to achieve the normal vision. This establishes the fact that pathological changes in posterior pole of eye are responsible for the defective vision.

Lattice degeneration is the most common degeneration which is predominantly found in the supero temporal quadrant. Temporal crescent and the tessellated fundus were found as a common feature in majority of the patients. Posterior staphyloma was found in 5.3% eyes. Lacquer crackles were found in 1.1% and Foster-Fuchs in 2.1% of eyes. Choroidal neovascularisation was seen in 12.8% eyes. Retinitis pigmentosa, retinal detachment, glaucoma, posterior subcapsular cataract were the most common associations.

CONCLUSION

Pathological myopia is a complex disease of the eye in which the patient presents not only the visual morbidity but also have a diseased eye. Therefore they have to be approached according to their needs and presentations. All cases of myopia must be examined meticulously with the indirect ophthalmoscope as they are usually associated with degenerative changes. Indirect ophthalmoscope pick up the complications at the earliest and can be treated effectively thereby aiding in retaining of the useful ocular function.

The awareness should be created among the myopic individuals regarding the safety precautions, visual hygiene, risks and complications involved. Patient should be well informed regarding the warning signs and symptoms for early and better management. Patients with pathological myopia must be monitored periodically. Genetic counselling and low vision aids are advised whenever necessary.