The Importance of Routine Eye Examination in Asymptomatic Patients in Tertiary Eye Care Centers in Northern India

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Abstract

Purpose: To evaluate the visual and ocular conditions in asymptomatic patients.

Methods: In our study, data of 150 asymptomatic patients who came for routine eye examination from July 15 2018 to November 15 2018 were collected at the end of each day for 4 months from the Medical Record Department of the Hospital. The data consisted of Medical Record Department Number of patient, Age, Gender, Complaints of Patients, any ocular and systemic diseases history, Previous Glass prescription(spectacle wearer), its duration, Visual Acuity with PGP, Unaided Visual Acuity, Pinhole Visual Acuity, New Prescription values, Diagnosis and managements. The Microsoft excel sheets of above mentioned informations were formed.

Results: 22 were emmetropes. 110 patients out of 150 were found to have different types of refractive errors. 26 patients were found to have presbyopia. 12 patients were diagnosed with senile cataract. Non Proliferative Diabetic Retinopathy (NPDR), Dry eye, Lagophthalmos, nanophthalmos and Pseudophakia were diagnosed in 1, 2, 2, 1 and 10 patients respectively. The Phacoemulsification surgery was done in 1 patient. Lubricants eyedrops were prescribed in 2 patients 80 patients were prescribed new glasses. 20 patients were advised for same treatment.

Conclusion: It is important for each asymptomatic individual to have routine eye examinations.

Background

There is a trend of having ophthalmic eye examinations only when the individuals perceive some disturbances in their sight. The ways to ophthalmic centres are almost neglected by them until they feel that their weak or decreased vision has started to interfere with their tasks. This trend is more common in developing nations [1]. The quality of life is greatly affected by the visual and ophthalmic conditions. The existence of some silent killer diseases which do not show any symptoms but considerably decrease the vision and in some cases if remain untreated will irreversibly damage the eye resulting in permanent loss of vision. In such circumstances, the comprehensive eye examination can play preventive role in vision loss thereby screening such silent diseases [2,3]. Diagnosis of some diseases at advanced stage will just be an informative confirmation. In such cases, there is no alternative except to accept the conditions. So, routine eye examinations is equally important for both symptomatic and asymptomatic patients [4].

Methodology

A Prospective Study was conducted. In our Study, data of 150 patients (300 eyes) from July 15 2018 to November 15 2018 were collected at the end of each day from Medical Record Department. The data consisted of Demographic variables, MRD no, Age, Gender, Chief complaints, any ocular or systemic or both history, previous glass prescription, its duration, visual acuity with PGP (Spectacle wearer), unaided visual acuity, Pinhole Visual acuity, New Refraction values, diagnosis and management. All asymptomatic patients of all age groups were included in the study. All symptomatic patients and patients for follow up examinations were excluded from the study [5-7]. All the patients underwent comprehensive eye examinations and further referred to the concerned units depending upon the findings of comprehensive eye examinations and at concerned unit the patients were either managed their or referred to other units.

Results

In our study, out of 150 patients, 73(48.66%) were males and 77 (51.33%) were females. The mean ages of males and females were 52.5 years and 57.5 years respectively. The mean age of patients was 55 years. Out of 150 patients, 93 (62%) were using the spectacles. Out of them, 17 (29.82%) were found to have refractive errors and were prescribed the spectacles. 22 were emmetropes with no pathological changes. 18 were referred to various units for further examinations [8]. 57 (38%) were not using spectacles. Out of them, 17 (29.82%) were found to have refractive errors and were prescribed the spectacles. 22 were emmetropes with no pathological changes. 18 were referred to various units for further examinations [9]. The patients were found to be associated with the following systemic diseases (Table 1 & 2).
Table 1: Number and percentage of patients with various systemic diseases.

| S. No | Diseases                    | Number of patients | Percentage % |
|-------|-----------------------------|--------------------|--------------|
| 1     | Diabetes Mellitus           | 7                  | 4.66         |
| 2     | Hypertension                | 25                 | 16.66        |
| 3     | Hyperthyroidism             | 3                  | 2.00         |
| 4     | Benign Prostatic Hyperplasia| 4                  | 2.66         |
| 5     | Jaundice                    | 1                  | 0.66         |
| 6     | Not Aware Of                | 110                | 73.33        |
| 7     | Total                       | 150                | 100          |

Table 2: Number and percentage of patients diagnosed with various conditions.

| S. No | Diagnosis                                      | Number | Percentage |
|-------|-----------------------------------------------|--------|------------|
| 1     | Compound Myopic Astigmatism                   | 48     | 32         |
| 2     | Compound Hypermetropic Astigmatism            | 3      | 2          |
| 3     | Emmetropes                                    | 22     | 14.66      |
| 4     | Compound Myopic Astigmatism with Presbyopia   | 24     | 16         |
| 5     | Mixed Astigmatism                             | 1      | 0.66       |
| 6     | Exotropia                                     | 1      | 0.66       |
| 7     | Simple Myopia                                 | 11     | 7.33       |
| 8     | Simple Hypermetropia                          | 4      | 2.66       |
| 9     | Presbyopia                                    | 4      | 2.66       |
| 10    | Simple Myopic Astigmatism                     | 2      | 1.33       |
| 11    | Simple Hypermetropic Astigmatism              | 2      | 1.33       |
| 12    | Senile matured Cataract                        | 1      | 0.66       |
| 13    | Senile Immature Cataract                       | 11     | 7.33       |
| 14    | Non-Proliferative Diabetic Retinopathy         | 1      | 0.66       |
| 15    | Dry Eye Syndrome                              | 2      | 1.33       |
| 16    | Lagophthalmos                                 | 2      | 1.33       |
| 17    | Nanophthalmos                                 | 1      | 0.66       |
| 18    | Pseudophakia                                   | 10     | 6.66       |
| 19    | Total                                         | 150    | 100        |

Managements

One of the patients underwent the phacoemulsification Cataract Surgery at the same Hospital. 2 patients were prescribed to use lubricants (Refresh Tears) [10]. 1 Patient with exotropia underwent squint surgery. 80 patients were prescribed new spectacle power whereas 20 patients as they were comfortable with their previous glass were advised to continue the same glass.

Conclusion

Though an individual has no symptom of pathological changes, he/she can be associated with various visual, ocular and neuro-ophthalmic disorders. Comprehensive eye examinations can rule out such possible conditions which slowly but adversely affect the visual and ocular conditions of such asymptomatic individuals. Therefore, it is important for asymptomatic individuals to have their vision and eye check up regularly.

References

1. NEHEP, National Eye Institute, Lions Club International Foundation (2008) 2005 Survey of public knowledge, attitudes, and practices related to eye health and disease. pp. 1-10.
2. Wittenborn JS, Zhang X, Feagan CW (2013) Vision cost-effectiveness study group the economic burden of vision loss and eye disorders among the United States population younger than 40 years. Ophthalmology 120(9):1728-1735.
3. Elam AR, Lee PP (2013) High-risk populations for vision loss and eye care underutilization: a review of the literature and ideas on moving forward. Surv Ophthal 58(4):348-358.
4. Hugh RT, Hien TVV, Catherine A, Jill EK (2004) Clinical and epidemiologic research: The need for routine eye examinations. Investigative Ophthalmology & Visual Science 45:2539-2542, doi:10.1167/iovs.03-1198.
5. Michaud L, Forcier P (2013) Prevalence of asymptomatic ocular conditions in subjects with refractive-based symptoms. Journal of optometry 7(3):153-160.
6. Plant J (2000) Prevention of rhegmatogenous retinal detachment: Prevalence of risk factors in an asymptomatic population. University of Montreal, Montreal, Canada.
7. Hubley J, Gilbert C (2006) Eye health promotion and the prevention of blindness in developing countries: critical issues. The British journal of ophthalmology 90(3):279-284.
8. Virtual Mentor (2010) 12(12): 934-937.
9. Hugh RT, Hien TVV, Catherine A, Jill EK (2004) The need for routine eye examinations. Invest Ophthalmol Vis Sci 45(8): 2539-2542.
10. Barbara R (2001) Prevalence of asymptomatic eye disease in an optometric patient population. American Academy of Optometry.