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Effect of psychological implications on life style for different amount of deviation for alternate exotropia

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Abstract

Purpose: The aim of the present study is to compare the effect of Psychological Implications in different amount of deviations in Alternate Exotropia.

Methods: Prospective, Cross sectional and observational study was performed at tertiary eye care centers. Subjects with Ocular deviation between 10 to 40 prism diopters, Corrected distance Visual Acuity should be greater than 6/18 and Age should be between 10 to 40 years of age were included in the study. Questionnaire was prepared on the effect of Psychological Implications on the Life style in presence of Ocular deviation. Response score of the subjects were noted and Mean score of the responses were compared in different amounts of deviation. Data was analyzed using SPSS software version 20.

Results: 50 subjects were included in the study. Out of that, 28 subjects were included in 11-20 age group, 18 subjects in 21-30 and 4 subjects were in the age group of 31-40 years. 54% subjects were Females and 46% were Males. Comparison of mean score of Questions on Psychological Implications for different amount of deviation for Alternate Exotropia was analyzed and it shows that with increasing amount of Ocular deviation, Psychological Implications hampers more.

Conclusions: In the ocular deviation of Alternate Exotropia, as the amount of ocular deviation increases, Psychological Implications hampers proportionately.

Keywords: Alternate exotropia; amount of deviation; psychological implications

Introduction

In case of Alternate Exotropia, the images of an object are falling on the temporal parafoveal region alternately. In the macular region, anatomical deformity is present due to presence of number and density of cone cells variation. So, when object is placed at the parafoveal region then whatever the stimulation is needed for the brain that is insufficient compared to normal Ocular deviation. So, here there may be chances to hamper the lifestyle of a patient in cases of Alternate Exotropia. With increase in ocular deviation, deterioration is more.

Methodology

50 subjects were included in the study. Prospective, Cross sectional and observational study was performed at tertiary eye care centers. Subjects with Ocular deviation between 10 to 40 prism diopters, Corrected distance Visual Acuity should be greater than 6/18 and Age should be between 10 to 40 years of age were included in the study. Individuals with any other systemic disease (specially which can affect study), Individuals with any other Ocular Pathology, with any active ocular infection, any ocular anomalies like Corneal Scar etc, ocular deviation if less than 10 degree and Significant amount of amblyopic patient were excluded from the study. Full refractive correction along with detailed fundus evaluation was performed in each and every patient. All visual parameters were taken with full Refractive correction. Questionnaire was prepared on the effect of Psychological Implications on the Life style in presence of Ocular deviation. Options in the Questionnaire was kept using Likert 5 point scale system. Test-Re Test Reliability was performed and its score is 0.8. Response score of the subjects were noted and Mean score of the responses were compared in different amounts of deviation. Data was analyzed using SPSS software version 20.

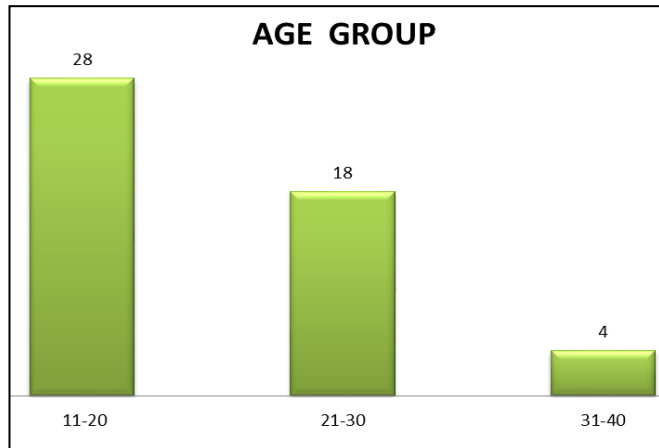
Results

50 subjects were included in the study. Graph 1 shows age wise distribution of the subjects. It shows that 28 subjects were included in 11-20 age group, 18 subjects in 21-30 and 4

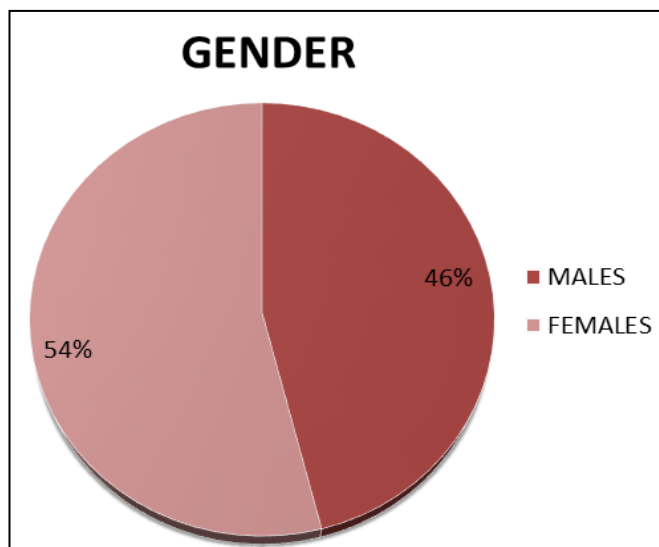
subjects were in the age group of 31-40 years. Graph 2 shows Gender wise distribution of the subjects. 54% subjects were Females and 46% were Males. Graph 3 shows comparison of mean score of Questions on Psychological Implications for different amount of deviation for Alternate Exotropia. Mean score of Questionnaire in the ocular deviation of 11-20, 21-30 and 31-40 is 7.5, 8.75 and 12.4 respectively. It shows that with increasing amount of Ocular deviation, Psychological Implications hamper more.

Table 1: Shows that Ocular deviation and Mean score

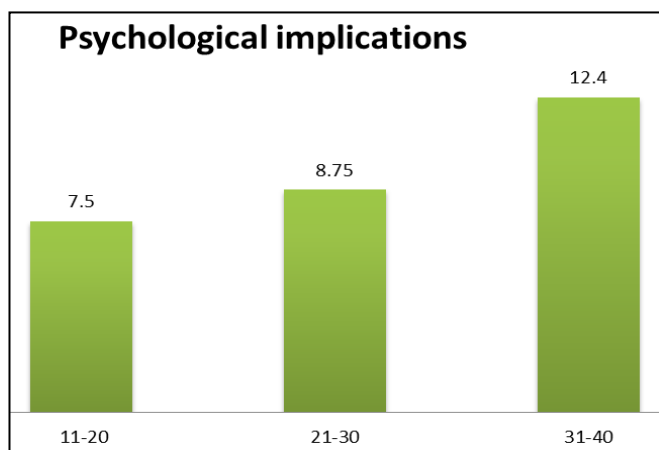
Ocular deviation	Mean score
11-20	7.5
21-30	8.75
31-40	12.4



Graph 1: Shows Age Wise Distribution of the Subjects



Graph 2: Shows gender wise distribution of the subjects.



Graph 3: shows comparison of mean scores of questionnaire in different amounts of deviation in alternate exotropia

Discussion

In the Ocular deviation of Alternate Exotropia, mean score of Questions (Effect of Psychological Implications on Ocular deviation) for 11-20, 21-30 and 31-40 Prism Diopters are 7.5, 8.75 and 12.4 respectively which shows that Maximum deterioration of mean score of questions is in 31-40 Prism Diopters of Alternate Exotropia. With increasing Ocular deviation proportionately image is shifted from the foveal region and thus deterioration is present. The present study shows that as amount of deviation increases, Psychological Implications will also hamper more.

Conclusion

In the ocular deviation of Alternate Exotropia, as the amount of ocular deviation increases, Psychological Implications hampers proportionately.

Consent

Oral/ written consent was obtained from patient as well as from tertiary eye care centers.

Ethical Approval

It is not applicable.

Competing Interests

Authors have declared that no competing interests exist.

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