



A STUDY ON OCULAR FINDINGS IN PATIENTS WITH INTELLECTUAL DISABILITY

Ophthalmology

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ABSTRACT

Introduction: A serious incapacitating condition in Intellectual Disability (ID) Patients is impaired vision. Normal people's cognitive and academic abilities will deteriorate if visual problems are not fixed. **Aims:** Aim of the study is to observe Ocular findings in intellectual disability patients and to plan preventive and curative measures for ophthalmic manifestation at an early stage. **Methods:** An observational cross-sectional study of total 100 Patients (female 52, male 48), age between 7 to 40 years with mild to moderate intellectual disability are observed for Ocular findings. **Result:** Mean age of our study population was 20.52 ± 8.30 years. In our study most common Ocular Finding in Patient is Refractive Error(52%) and Fundus Anomaly(28%).Least common finding is Coloboma(4%). **Conclusion:** Most common Ocular Finding in Intellectual disability Patient is Refractive Error and least common finding is Coloboma.

KEYWORDS

Intellectual Disability (ID), Coloboma, Squint, Nystagmus

INTRODUCTION

All societies around the world are impacted by the complex condition known as intellectual disability (ID). Due to the higher likelihood of living in difficult economic circumstances, having a lower level of education, and being subjected to social exclusion, People with ID are frequently viewed as a group within the population needing increased support.^[1,2,3]

A serious incapacitating condition in ID Patients is impaired vision. Normal people's cognitive and academic abilities will deteriorate if visual problems are not fixed.^[4]

According to earlier research, people with intellectual disabilities (ID) experience more ophthalmic issues than people without ID. Over the past few decades, this group's life expectancy and quality of life have significantly increased, and better visual function is a crucial condition for the best quality of life for children with ID.^[5,6,7]

AIMS

Our aim of the study is to observe Ocular findings in intellectual disability and to plan preventive and curative measures ophthalmic manifestation at an early stage to stop or decrease the rate of progression.

MATERIAL AND METHODS

An observational cross-sectional study of total 100 Patients (female 52, male 48), age between 7 to 40 years with mild to moderate intellectual disability are observed for Ocular findings. Patients are examine for Intellectual disability grading in Psychiatric department and then observed for Ocular findings in Department of Ophthalmology.

Inclusion Criteria

1. Patients between age group of 7 to 40 years.
2. Patients who has taken psychiatric opinion for intellectual disability.
3. Patients with mild to moderate intellectual disability.

Exclusion Criteria

1. Patients with age less than 7 years and more than 40 years of age.
2. Patients with severe to profound intellectual disability.

RESULTS

We enrolled 100 patients whom having intellectual disability in our study, 48% were males and 52% were females. Among 100 patients, we categorised into three age groups: (A) ≤ 15 years, (B) 16-25 years and (C) >26 years group. In our study population, most common age group was 16-25 years. Mean age of our study population was 20.52 ± 8.30 years.

Table.1 : Frequency Of Ocular Finding In Patient With Intellectual Disability

OCULAR FINDINGS PRESENT	MILD ID	MODERATE ID	TOTAL
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52

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Refractive Error	20	32	52
Fundus Anomaly	11	17	28
Squint	5	11	16
Nystagmus	3	5	8
Coloboma	1	3	4

In our study, most common Ocular Finding in Patient is Refractive Error and Fundus Anomaly. Least common finding is Coloboma.

DISCUSSION

In our study we want to observed ocular findings in children (more than 7 years) to younger adults patients whom having mild to moderate intellectual disabilities visiting at o.p.d of our tertiary care centre. Few studies have shown that ocular disorders are frequently associated in people with intellectual disabilities.^[8,9] This present study has found ocular disorders are common in youth with intellectual impairment. Refractive error and fundus anomaly were the most common ocular problems seen in the study.

There have been many studies reporting the frequency of refractive errors among ID individuals in the literature. Woodhouse et al.^[10] Van Splunder et al.,^[11] McCulloch et al.,^[12] and Aitchison et al.^[13] reported these prevalences as 67.7%, 60.6%, 49%, and 30%, respectively. In our study, the most common ocular problem was also Refractive error 52% in ID individuals, and our prevalence ratio is similar with the studies mentioned.

In our study, 28% had fundus anomalies among intellectual disability patients. Our study results comparable with Hegde V. et al, study^[14]. She found 16% fundus anomalies among intellectual disability patients

In our study, 16% had squint among intellectual disability patients. Our study results observed slightly higher than another study result of Hazarika H.N. et al.^[15] and Ghising R et al.^[16] In Hazarika H.N. et al. study, 8.68% had squint in intellectual disability patients whereas 10.01% had squint observed in Ghising R et al. study.

In our study, 4% had coloboma among intellectual disability patients. Our study results observed higher than another study result of Hegde V. et al.^[14], Hazarika H.N. et al.^[15] and Splunder J.V. et al.,^[17]

In our study, 8% had Nystagmus among intellectual disability patients. Our study results was comparable with study of HanManK. et al.^[18] and Mishra V. Etal^[19]. Study. However, we were observed that our study results lower than another study result of Kumar A.D. et al.^[20] and Joshi M.S. et al.^[21]

CONCLUSION

Individuals with an intellectual disability have a higher prevalence of visual impairment, sight-threatening disease and ocular pathology

than those from the otherwise normal population. There is also considerable evidence to suggest that both the overall prevalence and magnitude of conditions increases with the degree of intellectual disability. In our study most common Ocular Finding in Intellectual disability Patient is Refractive Error and least common finding is Coloboma.

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