

Sankara Nethralaya Eye Care Professionals Receive Accolades in International Conference

Introduction

'Eye health in a changing world', an international virtual conference and trade fair was conducted by the India Vision Institute (IVI) between the 2nd and 4th October 2020. It covered a wide array of areas in Optometry and Vision science. The main agenda of the conference was to explore the future of eye care and eye health in these uncertain and rapidly changing times, especially after the impact of COVID-19 pandemic globally, which is the need of the hour for every eye care professional. This included discussions on recent developments, innovations, practice trends and way forward in eye care for community, clinic and private practice services and more so, hearing it all from the stalwarts themselves from the comfort of our home. The conference hosted participants from 37 countries around the world. There were 1,330 registered delegates comprising eye care professionals and students. The plenary and parallel sessions saw 199 speakers.

The conference featured several keynote addresses, talks, parallel sessions and panel discussions, simultaneously by prominent speakers in different fields of optometry. Workshops and talks were based on areas of clinical Optometry, community optometry, public eye health, binocular vision and pediatric optometry, contact lens, ocular diagnostics, vision science and topics related to eye care during and post COVID-19. It, above all, gave the students and practitioners, from all over the world the opportunity, to discover, exhibit and purchase the latest and recent advances in the optical and manufacturing industry through an exclusive online trade fair, which was first of its kind.

Every eye care professional across the globe were given the platform to network and interact with each other based on their areas of interests in optometry and the organization of the conference website and social media made the networking much easier and simpler for everyone. Also, this was a huge opportunity for optometrists and optometry students to submit their abstracts in the categories of oral presentation (case report/case series/ paper), poster presentation and quiz contests which helped in sharing knowledge in a common platform in a seamless and fun manner. The 'Student soapbox' was one another session allocated for optometry students to voice their thoughts and opinions from their perspective, the role of optometrists in global eye health.

SN Wins Accolades

From Sankara Nethralaya, Dr. Rizwana represented the scientific committee of the conference involving in planning and reviewing abstracts, and also served as a panel member for the Public health – children section. Dr. Anuradha Narayanan served as a panel member for the Public health – General section and also was part of the IAPB- Panel discussion on world report on vision. Dr. Viswanathan moderated the session on refractive error management. Dr. Kalpa Negiloni served as the reviewer for abstract selection. From SN, 18 individuals including optometrists and graduate optometry students submitted abstracts, and presented in the conference.

The list of participants who presented their work in the conference and a display of the submitted posters are given below:

Oral presentations

S.NO	NAME	CATEGORY	AREA	TOPIC
1	S. Robin (M.Optom student, ESO)	Case report	Pediatric optometry and binocular vision	Improving spectacle adaptation in hyperopic accommodative insufficiency by vision therapy
2	Nandini Ravi (BV fellow, SN)	Case report	Pediatric optometry and binocular vision	PROSOPAGNOSIA – What else to look for? – A CASE REPORT
3	Sushmitha AD (M.Optom student, TSNA)	Paper	Pediatric optometry and binocular vision	Validation of HEARTS (Hand-Eye Attention Reaction Time Software) to assess Anti-saccades and Visual reaction time
4	Arnab Banerjee (BV optometrist, SN Kolkata)	Paper	Pediatric optometry and binocular vision	Efficacy of Vision Therapy in Non-responder Amblyopic Children
5	Aparna. G (PhD Scholar, Myopia clinic)	Paper	Pediatric optometry and binocular vision	Agreement between Cycloplegic and Noncycloplegic Open field refraction Among Children in South India
6	Pritam Dutta (M.optom Graduate, TSNA)	Case report	Pediatric optometry and binocular vision	Visual snow syndrome: A case series
7	Jannet Philip (M.Optom student, ESO)	Case report	Pediatric optometry and binocular vision	Role of early intervention in habilitating children with cerebral visual impairment - A case report
8	Mehal Rathore (M.Optom student, ESO)	Paper	Ocular diagnostics	Effect of IOP fluctuations in ocular blood flow parameters using OCT Angiography - A Pilot Study
9	Hadiya Farhath.P (Research Optometrist, SN)	Paper	Ocular diagnostics	Comparison of Aqueous Flare by Photometry with That of Sun Grade in Normals And Uveitis Patients
10	Soumen Sadhu (M.Optom student, TSNA)	Paper	Ocular diagnostics	Evaluation of Meibomian Glands and Tear Film Parameters in Dry Eye Disease caused by Various Etiologies- A Pilot Study
11	Gnanapoonkodi.B (M. Optom student, TSNA)	Paper	Vision science	Analysis of visual function in individuals with low vision using Samsung Gear-Pilot study
12	Alisha Regmi (M.Optom student, TSNA)	Paper	Public health	Changes in work pattern during COVID-19 lockdown and its impact on the Eyes and Body.

Poster presentations




Visual profile of children with special needs assessed in special children vision screening camps

Ms. Aishwarya Ravi, (M.Optom student, ESO)



Low vision rehabilitation- A case series

Ms. Maanasi Mahalingam (M.Optom student, ESO)



PROFILE IN FUNCTIONAL VISION IN PATIENTS WITH SPECIAL NEEDS

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EHCWO

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Introduction

- Leuck AH et al defined cerebral visual impairment (CVI) as *deficiency in the function of vision due to damage to or malfunction of visual pathways and visual centers in the brain (specifically those posterior to lateral geniculate body), which may be accentuated by associated disorders of the control of eye movements* [1].
- The most common causes are prematurity, periventricular leukomalacia (PVL) and hypoxic-ischemic encephalopathy (HIE) [2].
- Ocular manifestations of CVI include poor visual response, nystagmus, strabismus, ocular motility defects, visual field defects, refractive error, dorsal and ventral stream dysfunctions and associated optic atrophy [3-4].

Aim

To evaluate the functional vision in patients reporting to the special children clinic of a tertiary eye care center.

Methodology

Study details

- A retrospective review of medical records was carried out on patients reporting to the special children clinic of Sankara Nethralaya, Chennai between August 2018 and May 2019.

Outcomes measures

- Records of comprehensive eye examination and functional vision assessment were extracted. Functional vision assessment protocol includes contrast sensitivity, visual alertness and attention, Lea puzzle and Mail box.

Classification of refractive error

- Emmetropia: < +0.50DS to > -0.50DS, Hyperopia: ≥ +0.50DS, hyperopia astigmatism ≥ +0.50DS and ≥ 0.75DC, Myopia: > -0.50DS, myopia astigmatism ≥ -0.50DS and ≥ 0.75DC, Astigmatism ≥ -0.75 DC [5].

Study analysis

- Data was entered and analysed in Microsoft Excel (2016 version).

Results

A total of 100 patients were analyzed among which 75 were males. The mean (SD) age of the sample was 4.6(4) years.

The gestation period was full term (>37 weeks) in 68 patients (68%) and 29 (29%) were born before 37 weeks. The type of delivery was caesarean in 60 patients, forceps delivery in 6 patients and normal delivery in 34 patients. The mean (SD) birth weight was 2.41kg (0.63).

Ninety five (95%) patients had delayed milestones and 3 patients had global delay.

The previous medical history was birth asphyxia (n=26), neonatal seizure (n=49), cerebral palsy (n=13) and neonatal hypoxemia (n=13). Few patients had co-occurring medical conditions.

The presenting complaints include poor vision (n=37), poor eye contact (n=22), abnormal head posture (n=49) (n=3), eye deviation (n=24), white reflex (n=1), and shaking of the eyeball (n=5).

Table 1 Defects identified in functional vision assessment

Defect	Count
Poor visual alertness	45 of 100
Poor visual attention	75 of 100
Poor spatial recognition	16 of 34
Poor orientation	14 of 34

Fig 1 Distribution of the refractive error (n,%)

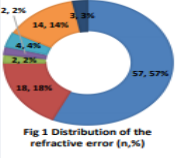
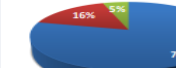


Table 2 Clinical diagnosis of patients (n=100)

Diagnosis	Count
Nystagmus	33
Alphakia	9
Exo deviation	23
Evo deviation	27
Optic atrophy	4
Disc pallor	52
Pseudophakia	2
Abduction limitation	2

Fig 2 Causes of CVI (n=60)



Discussion

Refractive error was identified in half of the children with CVI [6] in the current studies 97 patients required spectacles. Pehera NK et al reported that HIE is the most common cause of CVI (40%) [4] results comparable to current study (47%). Giliyar S K et al reported that 60% of sample in their study had delayed development [7], while the current study had 95%. A study reported that 49% had strabismus, 7.3% had nystagmus and 32% with optic atrophy [4]. The current study found ocular deviation in 50%, nystagmus in 33% and optic atrophy in 4% of patients. Differences could be attributed to varying sample size and severity of the condition.

Conclusion

This study points out to the increased frequency of functional vision deficits in children with special needs. The commonest findings of this profile of patients with special needs is hypoxic ischemic encephalopathy (HIE) and in ocular diagnosis are hyperopic astigmatism, strabismus, disc pallor, poor visual alertness and attention. Functional vision assessment and rehabilitation is an important component of eye care in children with special needs.

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Profile in functional vision in children with special needs

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Inter Observer Variability Of The Rapid Entire Body Assessment (REBA) Scoring Tool For Ergonomics Assessment

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EHCWO10

INTRODUCTION

- Work related musculoskeletal disorders (WRMSDs) are caused due to ergonomic risk factors such as awkward and prolonged static working postures at the workplace [1].
- Observational method (OM) of ergonomic assessment is the most commonly used [2].
- Rapid Entire Body Assessment (REBA) ergonomic assessment tool is the observational method used in this study to analyse the body posture of the optometrists while working [3].
- Diego-mas et al reported that at least 30% of the reviewed ergonomic assessments done by OM had errors of diverse severity [2].
- Therefore, Inter Observer Variability of REBA has to be determined in order to show REBA as a reliable OM.

AIM

To assess the inter observer variability of the REBA (Rapid Entire Body Assessment) tool for ergonomics assessment in optometric practice.

METHODOLOGY

- The study was conducted among the optometrists of three branches of Sankara Nethralaya Hospital, Chennai.
- Fifty two optometrists were included in the study. REBA scoring was done for four basic optometry work up procedures namely computer usage, vision check, objective refraction using retinoscope and slitlamp evaluation.
- It revealed the risks of developing musculoskeletal disorders of the optometrists.
- Two observers used the REBA tool to sequentially evaluate the tasks performed by the same individual for the four procedures.
- The intra-class correlation of the REBA scores were obtained using MedCalc statistical tool.
- A Bland-Altman plot was done for the same using MedCalc.

ERGONOMICS



RESULTS

Fifty two optometrists participated in the study and for each examination 4 images were obtained.

Thus 208 images were scored by the optometrists and masked on the results.

Table A. Intraclass correlation coefficient (ICC) for the REBA scores between the two observers.

Optometric Work-up procedures	Intraclass correlation coefficient (ICC) of REBA scores
Computer usage	0.829
Vision check	0.969
Slitlamp	0.701
Retinoscope	0.68

Bland-Altman plot

Figure	Optometric workup procedure	Limits of agreement	Mean difference
A	Computer usage	+1.37 and -1.64	-0.13
B	Vision checking	+1.81 and -1.70	0.06
C	Slitlamp	+1.59 and -1.09	-0.25
D	Retinoscope	+1.45 and -0.53	0.46



CONCLUSION

This study reports a good reliability of REBA as an assessment tool for ergonomics in optometric practice.

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Inter observer variability of the Rapid Entire Body Assessment (REBA) scoring tool for ergonomics assessment

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October 3rd & 4th, Eye health in A Changing World – An International Virtual Conference and Trade Fair

India Vision Institute.



**SCREENING FOR CEREBRAL VISUAL IMPAIRMENT IN CHILDREN
REPORTING TO THE PEDIATRIC OPHTHALMOLOGY CLINIC**

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EHCWO
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INTRODUCTION

- Childhood cerebral visual impairment (CVI) is a verifiable visual dysfunction which cannot be attributed to disorders of the anterior visual pathway or any potentially co-occurring ocular impairment¹
- CVI is one of the leading causes for childhood visual impairment²
- The prevalence of CVI in children attending mainstream schools was 33% in their cohort where the diagnosis was based on the CVI questionnaire²
- Gorrie et al reported that five questions and CVI Questionnaire have good validity, internal consistency and reliability as a screening tool³

AIM

To screen for cerebral visual impairment (CVI) in children aged between 5 and 15 years visiting a tertiary eye-care center using the modified five questions.

METHODOLOGY

Study details

Prospective hospital based study was conducted between Dec 2019 and Jan 2020 at Pediatric Ophthalmology Services, Sankara Nethralaya

Inclusion criteria

Age: 5 to 15 years; Gestation period: Full term/Preterm with or without birth related complications

Exclusion criteria

All ocular co-morbidities resulting in poor vision other than refractive error, strabismus and retinopathy of prematurity

Study protocol

After procuring consent from parents, the screening questionnaire was administered to parents

Questionnaire

Consists of questions on gestation period, pregnancy related complications and questions on dorsal and ventral streams

Statistical analysis

Descriptive statistics and proportions of responses were estimated using Microsoft Excel (2016 Version)

RESULTS

- The sample size was 132 (79 males). The mean (SD) age of the sample was 9.1 (2.7) years. The mean visual acuity was 0.1 (0.2) and only 13 children had vision less than 0.2 (6/9) due to squint, amblyopia and disc pallor
- According to the questionnaire, 3 children were suspected to have dorsal stream dysfunction (>3), one child suspected with ventral stream dysfunction (>2) and 2 children were suspected to have both (>3 and >2 in dorsal and ventral questions)

RESULTS



Fig 1: Distribution of the gestation period (WHO)

<28 weeks: 1 Dorsal stream suspect
29-32 weeks: 1 Dorsal stream suspect and one both
33-37 weeks: 1 Dorsal stream suspect, 1 Ventral stream suspect and one both

Questions	No of positive responses (n=132)
Difficulty walking down the stairs	6
Not see things that are moving quickly such as small animals	8
Not see something that is pointed out in the distance	17
Have difficulty locating an item of clothing in a pile	9
Have difficulty in copying words or picture	15
Have difficulty recognizing faces, shapes or colours	2
Have difficulty to identify facial expression	2
Find it hard to find their way around well known places	5
Have any reading difficulty	7

Dorsal stream dysfunction

Neonatal Jaundice (1 of 6 children)

Down Syndrome (n=1)

Delayed development (n=1)

Ventral stream dysfunction

Autism (n=1)

Both

Birth asphyxia (1 of 6 children)

Forceps delivery (1 of 4 children)

Fig 2: Identified risk factors of CVI from the questionnaire

DISCUSSION/CONCLUSION

Based on the modified five questions, CVI was suspected in 6 children (4.6 %). This emphasizes the need to screen for CVI in children with complications in and around birth presenting with normal visual acuity and no associated ocular comorbidities. This simple screening questionnaire will assist a primary eye care practitioners or pediatricians to identify the children at risk for CVI and refer them for detailed functional vision assessment.

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Screening for Cerebral visual impairment in children reporting to pediatric ophthalmology clinic

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IMPACT AND DISABILITY OF HEADACHE IN NON-STRABISMIC BINOCULAR VISION ANOMALIES

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INTRODUCTION

Headache is one of the most common symptoms in the nervous system disorder and Non-Strabismic Binocular Vision Anomalies (NSBVA)

Headache occurs across all age groups, all races and socio-economic status. Some types of headache are known to be debilitating and can impact the quality of life (QOL), demanding immediate attention^{2,3}.

Headache disability index (HDI) and Headache Impact test (HIT) questionnaires are simple self-assessment scales that are both valid and reliable to quantify headache disability^{4,5}.

HDI and HIT measure the impact of headache on the visual function demands required for jobs, school, home and in social situations^{4,5}.

AIM

To determine headache-related quality of life (QOL) in patients with Non-Strabismic Binocular Vision Anomalies.

METHODOLOGY

Study Details

A prospective study was carried out between November 2019 to March 2020 in Binocular Vision Clinic, Sankara Nethralaya, Chennai.

Inclusion & exclusion criteria

Patients who had eyestrain, eye pain, blurred vision, squint, general headache and headache with other ocular comorbidities were included.

Patients aged between 10 to 50 years

Visual Acuity >6/18 or better

Patients who had trauma, Squint surgery and other ocular comorbidities were excluded

Data Collection

All subjects underwent a comprehensive binocular vision assessment including sensory and motor assessment, vergence and accommodation testing.

HDI-consisted 25 questions under 3 components of physical, emotional and psychological factors

HIT – Consisted 6 questions to evaluate the level of impact on QOL

Data entry was done using Microsoft Excel and analyzed using SPSS statistical software.

RESULT

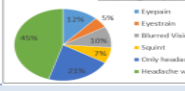


Fig 1: Presenting complaints

Severity score	Phoria Status (median & IQR)	Near PFV (median & IQR)	MAF – OD (median & IQR)	HDI score (median & IQR)
Mild (n=16)	0 (-12-0)	4 (-12-0)	20 (12-27.5)	2 (0-5)
Moderate & Severe (n=22)	0 (-3-0)	-4 (-8-0.5)	32.5 (25-35)	2.5 (1.5-6.5)

PFV – Positive Fusional vergence, MAF – Monocular Accommodative Facility, IQR – interquartile range.

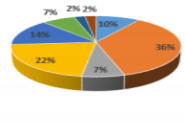


Fig 2: Prevalence of Non-Strabismic binocular vision anomalies

Based on the HIT score, 32 patients (76 %) had a score of 50 or higher indicating a higher impact of headache on the QOL.

Based on the HDI score, 35 patients (83%) had some disability due to the headache ranging between mild to severe.

DISCUSSION

Vision-related quality of life in binocular vision anomalies can be improved with timely diagnosis and appropriate management⁶

Present study shows nil significance between the severity of NSBVA and HDI score.

CONCLUSION

This study brings out the impact and disability of headache due to non-strabismic binocular vision anomalies.

Most subjects with NSBVA have comorbid headache related symptoms that are of high impact and disability.

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Impact and disability of headache in non-strabismic binocular vision anomalies

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Measurement of Lipid Layer Thickness and Meibomian Gland Dropout in patients with Stevens Johnson Syndrome
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Abstract No: EHCW029

Introduction

- Stevens Johnson Syndrome (SJS) and its more severe form Toxic Epidermal Necrolysis (TEN) are rare but life threatening diseases affecting skin and at least two mucous membrane sites including ocular surface, oral cavity and genitals due to drug reactions¹
- SJS is defined when the detached cutaneous surface covers less than 10% of the Body Surface Area (BSA). TEN involves more than 30% of BSA²
- The overall, reported incidence rate of SJS ranges between 1.4 to 6 cases per million person per year. Almost 79% of patients of SJS will have severe chronic ocular sequelae of SJS³
- The lipid layer produced by meibomian gland helps to protect the tear film from the evaporation of the aqueous phase and to stabilize the tear film. Therefore, Meibomian lipid are necessary in maintaining the ocular surface health and integrity⁴

Aim

- To measure the lipid layer thickness and Meibomian gland dropout and to correlate lipid layer thickness with subjective and objective measurements of dry eye in patients with Stevens Johnson Syndrome (SJS)

Methodology

- A cross-sectional observational study was carried out on Sixty patients (120 eyes) who were diagnosed as SJS. Oral and written consent form was obtained from all the patients. All the patients had to undergo comprehensive eye examination along with subjective and objective measurement of dry eye.

Parameters

Parameters	Measurement Tool and cut-off value
Dry eye symptoms	SPEED questionnaire-SPEED score was graded as no symptoms (SPEED=0), mild-moderate (SPEED=1-7) and severe (SPEED=8) for analysis.
Lipid Layer Thickness	Lipiview interferometry- < 75nm detected as thinner
Meibomian gland dropout	Non-contrast Meibography-Grade the (no loss of MG), grade 1 (loss of MG < 3%), grade 2 (loss of MG between 3% to 67%) and grade 3 (loss of MG more than 67%)
Tear film stability	Tear Break Up Time (TBUT) < 10 seconds decreased
Tear production	Schirmer's test: 1 < 10 seconds decreased
Meibom Expressibility score (MES)	Graded from 0 to 3 where the (all glands are expressible), 1= (glands between 1-4 are expressible), 2= (only 1-2 glands are expressible) and 3= (no Meibomian glands are expressible)
Meibom Quality score (MQS)	0 = clear fluid 1 = cloudy fluid 2 = cloudy Meibum and particulate fluid 3 = opaque or waxy-like

Results

- A total number of 120 eyes of 60 patients with the mean age of 31.1 ± 12.9 years
- Male: 25(41.7%) and Female: 35(58.3%)
- The duration of condition was between 1 month to 16 years
- The mean lipid layer thickness was noted to be 53.07 ± 27.0 with lowest 15nm and highest 100nm.

Causes of SJS

Visual Acuity in SJS

Discussion

- Sotomura et al evaluated the Tear Film Lipid Layer (TFLL) using video interferometry. They reported that TFLL was found significantly thinner in patients with SJS⁵
- Lipid layer thickness measured objectively with non-contrast interferometry was also noted to be thinner than healthy eye in patients with SJS.
- In our study, we found that meibomian gland either in upper or lower eyelid had partial or complete dropout in all patients with SJS. The severe meibomian gland dropout was found in 65.83% of SJS patients. The similar result was reported in Shewtha et al study⁶
- If the lipid layer thickness is low but gland structure shows less dropout with thicker meibum quality, then treatment options like Lipiflow might be useful in SJS patients.

Conclusion

- Lipid layer thickness was noted to be thinner than the healthy eyes in patients with SJS.
- There was a significant relationship found between lipid layer thickness and other objective as well as subjective measurement of dry eye
- Meibomian glands are significantly affected in SJS indicated by their reduced structural and functional parameters. Not only the aqueous component but also the meibum is reduced in eyes with SJS.

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Mr. Manish Panjiyar (M.Optom student, TSNA)

Measurement of Lipid layer thickness and meibomian gland dropout in patients with Steven Johnsons syndrome

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A Comprehensive Ocular Profile Using Multimodal Imaging Systems in a Patient with Alport Syndrome
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Abstract No: EHCW035

Introduction

- Alport syndrome is a rare hereditary (X-linked in 85% cases, mutations in COL4A3 and COL4A4 genes) multi-system disorder effects the structural integrity of the thin basement membranes of the body due to abnormal synthesis in the type IV collagen¹
- The systemic manifestations involves glomerulonephritis leading to end stage renal disease and sensorial deafness¹
- >92% of the patients will have ocular involvement¹⁻³
- Lens: Most common findings are lenticonus (92%) The basement membranes of the lens epithelium involved
- Corneal: Epithelial basement membrane, Bowman's and Descemet's membrane involved
- Retinal: Dot and fleck retinopathy (87%) and the inner limiting membrane and the Bruch's membrane of the retina

Aim: To report a comprehensive ocular profile using various imaging systems and surgical outcome in a young adult patient having alport syndrome with bilateral anterior lenticonus

Case Presentation

- A 22 year old male complains of progressive painless diminution of vision for both distance and near in both eyes since 8 years
- H/O Hearing problems and uremia since 8 years
- F/U/O younger brother have similar clinical complaints and associated with hearing and kidney problems
- No history of consanguineous marriage
- Slit-lamp examination showed bilateral anterior protrusion of the lens without any cataractous changes
- Other Findings were unremarkable, except the dull foveal reflex in both retinas. However, Electroretinogram was normal for both eyes
- Clear lens extraction and mono-focal IOL implantation was performed

Parameters

Parameter	Right Eye	Left Eye
UCVA (distance & near Snellen's visual acuity)	3/60, N10 @ 10cm	3/60, N10 @ 10cm
Pinhole	No improvement	No improvement
Retinoscopy	-30.00 D SpH / -1.50 D Cyl X180 (full glow, central opacity & oil drop red reflex)	-30.00 D SpH / -1.75 D Cyl X180 (full glow, central opacity & oil drop red reflex)
Acceptance	No improvement with refraction VA: 3/60	No improvement with refraction VA: 3/60
Potential acuity meter (PAM) (Hirschman's)	6/15	6/12
Visual Evoked Response (VER) (Pavlovsky)	VA: 6/12 (BC: 6.90 mm, 34.00 DS, Dia: 30.00 mm, Central clearance & vertical (dumbbell))	VA: 6/9 (BC: 6.90, 31.25 DS, Dia: 30.00 mm, Central clearance & vertical (dumbbell))
Perimetry (Pericam)	42.48.32 X 90 / 42.36.30 X 180	41.47.30 X 100 / 42.50.78 X 10
Axial Length	23.79 mm	23.99 mm
IOL Power	+21.50 D	+20.00 D
Post-Op BCVA	6/9; N6	6/9; N6

Discussion

- This and regular anterior or posterior lens capsule, multiple fibrillar debris and thinning at the area of protrusion causes high lenticular myopia and progressively cause lens capsule rupture and cataracts⁴
- The DU in the Trace wave-front aberrometer is an indicator of aberrations caused by the crystalline lens and is extremely high in this case
- Pre-operatively the DU, coma, a negative spherical aberrations along with the clarity of the simulated Snellen's letter clearly identified the extensive aberrations suffered by the eye resulting in decreased optical quality which eventually leads to visual deterioration
- Due to profound visual impairment and extensive HO aberrations in a case of lenticonus the patient fails to locate the pinhole and thus ancillary tests such as PAM, RDP lens trial can provide the visual potential of the eye

Conclusion

- Anterior lenticonus causes high myopic shift along with high lenticular higher-order aberrations which is one of the major cause for decreased vision in Alport syndrome
- Both anterior and posterior segment OCT along with aberrometry and pericam are effective tools in evaluating a patient with Alport syndrome
- Clear lens extraction and IOL implantation remains the main stay of management

References

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4. Alport H. Nephritis. 1908. London: H. K. Lewis.

Mr. Soumen Sadhu (M.Optom student, TSNA)

A comprehensive ocular profile using multimodal imaging systems in a patient with Alport syndrome

Mr. Soumen Sadhu (M.Optom student, TSNA)

Winners of the conference

Team Sankara Nethralaya as usual gave a rocking performance at the conference and won laurels. Ms. Mehal Rathore, Ms. Aparna G and Ms. Alisha Regmi won the award for best paper presentation in the oral category in ocular diagnostics, pediatric optometry and binocular vision and public health respectively. Ms. Jannet Philip won the award for best case report in the oral category.

The SN management extends its congratulations to all the participants and the winners for their active participation and top-notch performance at the conference. This conference on the whole was indeed an interactive, crucial and worthwhile, virtual learning experience and a much needed one at this time to share with the world the future of eye care and what next.

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