



Elite School of Optometry Alumni Association

Newsletter-March/April 2009

Hello Elites!!!

Welcome to another interesting issue of our own newsletter...

This issue brings in a new section called "Virtual Clinic" wherein interesting cases will be put up for discussions and Elite opinions.

Along with other scientific contents, we also have sections that keeps the reading to go on...

The response from the Elites for "Jumble Fumble" and "Identify the Personality" was overwhelming. Not only your sustained interests but also your intellectual contributions will help make it better everytime.

Criticisms/Suggestions welcome...

Happy reading!!

-Editors

-Aiswaryah R (BO18)

-Abinaya Priya V (BO 18)

Welcome!!

To the new registered members of ESOAA

Ms Kamala Santanam (BO 7)

Ms Rajni Shanmugam (BO 12)

Ms Padmasri R (BO14)

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Nostalgia



Convocation



Post your views, comments suggestions and intellectual contributions to esoaa.nl@gmail.com



AWARENESS

- ESO conducted awareness about Occupational/Vocational eye care for the employees AUDCO Ltd.
- Article about Optometry in tamil was published in www.tamilsigaram.com
- ESO participated in the career guidance program for about 3000-4000 students and parents including 400 higher secondary.

TASK ANALYSIS

- Occupational/Vocational eye care for their employees and also Computer Vision Syndrome and General eye care

COMMUNITY

- About 500 members were screened during the month of May, by ESO students and Alumni and one third of them were referred for further assessment.
- In the last three years about 8345 were screened for cataract, 5795 underwent general vision screening, 8010 school children were screened, 2200 others, screened for Post cataract evaluation and low vision by the Elites.

RESEARCH

- Research projects were defended by 15 post graduate students. The works can be broadly grouped under the following areas
 - Glaucoma
 - Diagnostics
 - Visual psychophysics
 - Community Optometry
 - Quality of Life
- Four member team from ESO attended workshop on “Qualitative Research Methods and Analysis” and “Instrument Development”. The team included Dr Krishna Kumar (BO 4), Mr Ramesh S Ve (BO 13), Ms Kritica (BO 19) and Dr L Srinivasa Varadharajan, Research Scholar-ESO.



Name: Nilesh Chavan

Elite: BO 6

Date of Birth: 26th May

Hello everybody. My dear fellow ESOites. I am Nilesh Chavan from the BO6 batch. Currently residing and practicing in the city of Mumbai. I owe my career to my college- ESO, my parents and my mentor-Late Mr.Naval Baliwala-Father of Indian optometry. It was on Naval sirs insistence that I went to the Elite school. It was the right decision I took that time. My life in ESO is one of the best years of my life. We as a group and I as an individual had a complete all round life. We studied we had fun equally. I can never forget the volley ball, cricket we played. The dances we had at annual functions. The friendly ragging sessions we had with seniors and juniors. We were all so friendly that Dr. E V. had put on the notice board that no girls and boys to be found sitting together as ESO is not Vrindavan gardens... Ha...ha... I had and still am friends from bo1 to bo10. We had fun in all means. My fellow ESOites will surely agree with that. We had adventures on St.Thomas mount and the army airfield behind and the hills of Tambaram. Though we were non residents we knew more theatres in madras than locals. I still remember Kuncham kuncham Tamil. Those days can never be taken off our minds as long as we live and beyond. After I came back to Mumbai, Naval sir asked me if I could teach at the municipal eye hospital Diploma in Optometry. I along with other

ESOites Prema-Thanuja-BO4, Neena-BO3, Anita-BO9 started teaching there. Our knowledge from ESO was shared. We wanted to form a college like ESO.

That's how the HHK college and now the Lotus college is in existence. We are proud to run a college formed on ideologies of ESO which is on par now. I have been associated in teaching at 6 college of optometry in Maharashtra. I have been the registrar of the lotus college of optometry. A FIACLE. member of ICEE. Had national and international presentations. Spoke on various platforms for contact lenses and dispensing. Member of various eye care organizations. I am proud to be an optometrist and that too from the ELITE SCHOOL. It truly gives u an Elite feeling. If I am given space and if time permits I could write a book on my life in ESO. To sum up. I still remember Dr E V used to call me the playboy of ESO and I used to tell him, "Sir. . . There is a difference being called a playful boy and a playboy".

My best wishes to all esoites in your life. Hope to see you all at the silver jubilee celebrations. Take care. God bless u. See you.

Nilesh Chavan
BO6-Mumbai



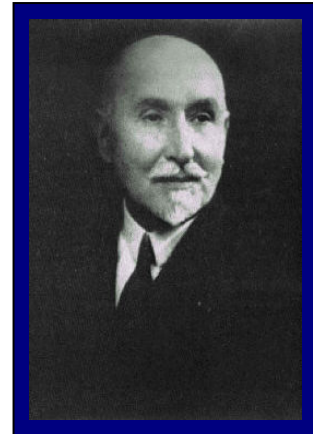
On the lighter side...

Jumble Fumble

Identify the Personality

UNJUMBLE THE FOLLOWING TERMS

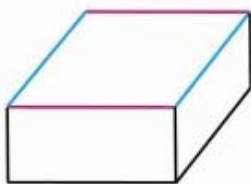
IOFERRU
HISTORSCIENIS
REMISEX
ARMNULUM
LACAISSH
VIISCALESCOT
ELIVIRTUL
EXULPS
SYPHBELONMAR
CCA RDAT



CLUE: Described a hereditary connective tissue disorder

Send your answers to esoaa.nl@gmail.com before 25th JULY. Names of first five correct responders in each segment will be published in the next issue

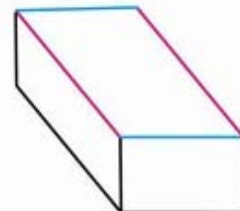
Illusion of the month



A



B



C

SHEPARD TABLE TOP ILLUSION

The three pink- and blue-colored parallelograms are the same. All blue lines are equal in length; all pink lines are also equal. Box B is simply Box C rotated counterclockwise.

But the three parallelograms look different, and boxes B and C look different. Our visual system assumes that the diagonals in A and C are foreshortened and “stretches” them perceptually. The pink lines in B should be foreshortened and stretched, just as they are in C. But our visual system doesn’t stretch a horizontal quite as much as it stretches a diagonal.



On the lighter side...

Get your numbers right!-Special Article

This person was very close to me. He had a peculiar habit of scribbling telephone numbers anywhere and forgetting them. He did not think twice before dialing a telephone number and often dialed wrong numbers. His memory when it came to telephone numbers was like the computers of olden times.

That day the hospital shifts changed and according to the roster he had to work in a department which was of eye exercises. People with weak eye muscles came to get their eyes exercised every day for 15 days. It was okay for first couple of days but later on giving the same type of exercise all through out the day was kind of boring.

His luck changed the 3rd day when she came like a breath of fresh air in that stuffy small room. She is scheduled for eye exercises for her for the next fortnight. Which meant she would be bringing the fresh breath of fresh air every day for the next fifteen days!

First day when the eye exercises began she was explained what she was expected to do. It was a simple but a repetitive exercise just like any other. He was well behaved and she was a true patient listening to the advice of her orthoptician. Third day she enquired if it was okay to speak. He replied it was as long as she concentrated on the exercises. The conversation started like any routine one, what is your name, where are you from, what do you do

By the sixth day of the exercise the conversation drifted to more personal and interesting subjects. During the course of conversation she came to know of his love for chocolates. By now no one was concentrating on the eye exercise! She asked him the dress he prefers girls to wear, the hair-do and few other details.

By the end of the week it was time for him to move on to other posting. She was upset and so was he. But he had to abide by the rules. It was bad, I mean good bye time at the end of the last session with him.

Next day at the exercise time, she came as usual with a gloomy face, somehow the scene was not complete without him. Their faces broke into a smile when he entered and started the exercises. How did he manage?? well the person who was to replace him for eye exercise department was co-operative as she understood.

As all good things come to an end so did the exercise sitting. She was to visit the consultant for the final assessment of recovery due to exercises. God only could save him now and he did. The consultant was happy with the progress. It was indeed time for a final good bye now.

Next day things were not the same at the exercise time and the secretary and our man was chatting, both missing the breath of fresh air. There she was with a box of chocolates, in a dress that he liked with a hair style he preferred. Boy he surely was a lucky guy! Then she took his phone number and promised to call the next day.

The long awaited phone call never came. Till he realized he had made a mistake in writing the phone number.

She was Priya John a name buried in the records of the hospital and his heart and till date he always double checks the phone numbers after writing them!

MORAL: WRITING RIGHT NUMBERS



Winners!!!

Jumble Fumble

RETINITIS
ISHIHARA
HROPTER
POLYOPIA
MADAROSIS
XANTHELESMA
ENTOPICS/NEOPTICS
MADDOX
PRISMS
COHRENCE

Winner s of last month's Jumble Fumble

Ms Kavitha (BO 8)

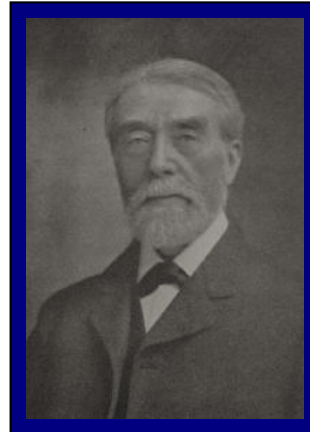
Mr Karthikeyan B (BO 16)

Mr Vijaynath Reddy (BO 21)

Ms Rizwana Hussain(BO 16)

Heartiest congratulations to the winners!!!

Identify the Personality



Ans: Hermann Jacob Knapp

Winner s of last month's picture quiz

Mr Karthikeyan B (BO 16)

Mr Vijaynath Reddy (BO 21)

Mr Viswanathan (BO 5)

Ms Rizwana Hussain(BO 16)

Hall of Fame

HANS GOLDMANN (1899-1991)

🌐 Swiss ophthalmologist in Czechoslovakia

🌐 Studied medicine at the German Charles University (Prague)

🌐 Became professor of ophthalmology in 1935

🌐 His works were on cataract, retrobulbar neuritis, uveitis, retinopathy of prematurity, aqueous humor dynamics, nyctalopia, dark adaptation, glaucoma, accommodation, perimetry, and diabetic retinopathy

🌐 Also interested in Mathematics, Science, Astronomy, Optics, Physics and instrumentation

🌐 Innovated/refined instruments like

🌐 the slit lamp

🌐 Colorimeter

🌐 Bowl perimeter

🌐 Applanation tonometer and gonioprisms

🌐 Dark adaptometer

🌐 Fluorophotometer

Ocular diseases among elderly population: Indian scenario : An epidemiological & evidence based approach

Ramesh S Ve (BO 13)-Lokapavani V -Rashima A (BO 17)

ANGLE CLOSURE DISEASE

The disparities in reported prevalence of angle closure diseases are perhaps most, representative of the influence of the different methodology and diagnostic criteria used by these studies (Table 1). Detailed information regarding the prevalence of angle closure disease (including Primary angle closure glaucoma: PACG) is not available from the Aravind Comprehensive Eye Survey (ACES)¹ and West Bengal Glaucoma Study (WBGS)².

The Vellore Eye Study (VES) was the first to report that PACG comprised a significant proportion of those with glaucoma.³ A number of persons were also reported to have occludable angles (equivalent to Primary angle closure suspects: PACS). While the definition of "Occludability" was relatively lenient - this probably reflects clinical practice at many institutions in the country and is more stringent than the recent recommendations of the World Glaucoma Association. The VES definition of PACG encompassed those now classified as Primary angle closure (PAC) in addition to those with PACG. Five persons (0.51%) were reported to have angle closure disease with disc and field damage. These would correspond to a diagnosis of PACG; this prevalence is similar to other reported rates of PACG by studies in South India.^{3, 4, 5, 6}

Subsequent reports from the APEDS⁴ did report a lower prevalence of angle closure disease. The difference was most marked in the lower prevalence of PACS. This can partly be explained by a stricter criterion for occludability (non visibility of the pigmented trabecular meshwork in 270° or more of the filtering angle).



The prevalence of angle closure disease in the CGS^{5, 6} is again similar to that reported by the VES. The urban area of the CGS had higher rates of PAC, PACS and PACG than the rural Cohort.^{5, 6} The VES and the CGS used similar gonioscopic criteria to diagnose a narrow angle (needing 180° of the angle to be closed as defined) unlike other studies that needed three-fourths of the angle to be narrow before grading as occludable. This difference in grading using 180° or 270° is unlikely to result in such large discrepancies in the prevalence of angle closure disease. Glaucoma specialists are more likely to identify gonioscopic abnormality, gonioscopy in both the CGS and the VES was performed by persons with specialized glaucoma training, and could be one of the reasons contributing to the similarity in results.

In all studies the vast majority of person with PACG were asymptomatic, the disease was silent and chronic. Failure in perform gonioscopy could result in misdiagnosis as angle closure glaucoma. The CGS did report that of those with PACG who were previously diagnosed to have glaucoma 40% were misdiagnosed as primary open angle glaucoma.

Risk factors

Increasing age was a common risk factor for PACG in all studies. Female gender (CGS) was a risk factor for PACG and PAC,^{5, 6} more women in the APEDS had PACG but this difference was not statistically significant.⁴ Hyperopia was also a risk factor in the Chennai glaucoma study (Urban),⁶ a trend of increased risk with hyperopia was noted both in APEDS and CGS (Rural).^{4, 5} Among systemic conditions diabetes mellitus was reported to be a risk factor.⁵ Biometric data at the baseline visit was available only from the Chennai Glaucoma Study. Eyes with angle closure disease had been reported to have shorter axial length and a shallower anterior chamber and thicker lenses than normals by the CGS.⁷



Connainsances

Age groups (in yrs)	APEDS			CGS-Rural				CGS-Urban			
	n=93 4	ACG	PACS	n=392 4	PACG	PAC	PACS	n=38 50	PACG	PAC	PACS
40-49	395	0.00	0.76	1585	0.44	0.38	4.29	1419	0.07	1.27	4.86
50-59	260	1.54	3.08	985	1.02	0.81	7.31	1120	0.63	3.30	7.77
60-69	184	2.17	3.80	892	1.01	1.01	7.96	906	2.21	4.19	9.27
70 +	95	3.16	5.26	462	1.73	1.08	7.58	405	1.48	3.21	9.38
Reported prevalence (95% CI)		1.08 (0.36, 1.80)	2.21 (1.15, 3.27)		0.87 (0.58, 1.16)	0.71 (0.45, 0.98)	6.27 (5.51, 7.03)		0.88 (0.6, 1.16)	2.75 (2.01, 3.49)	7.24 (6.58, 8.02)

References

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2. Raychaudhuri A, Lahiri SK, Bandyopadhyay M et al. A population based survey of the prevalence and types of glaucoma in rural West Bengal: the West Bengal Glaucoma Study. *Br J Ophthalmol* 2005; 89 (12): 1559-1564.
3. Jacob A, Thomas R, Koshi SP, et al. Prevalance of primary glaucoma in an urban south Indian population. *Indian J Ophthalmol* 1998; 46 (2): 81-86.
4. Dandona L, Dandona R, Srinivas M, et al. Angle closure glaucoma in an urban population in southern India: the Andra Pradesh Eye Disease Study. *Ophthalmology* 2000; 107 (9): 1710-1716.
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6. Vijaya L, George R, Arvind H, et al. Prevalence of primary angle closure disease in an urban south Indian population and comparison with a rural population. *The Chennai Glaucoma Study. Ophthalmology* 2008; 115: 655-660.
7. George R, Paul PG, Baskaran M, Ramesh SV, Raju P, Arvind H, McCarty C, Vijaya L. Ocular biometry in occludable angles and angle closure glaucoma: a population based survey. *Br J Ophthalmol.* 2003 Apr;87(4):399-402.

Virtual Clinic

<http://esoaa.org/ESO/UserLinks/Download.php>

The above link is an interesting case with a challenge for optometric management. Read through the case and discuss on the following points:

- Explanation for refraction and fluctuation
- Further management/Justification of previous management

Mail your views to esoaa.nl@gmail.com

























PRESCRIBING ASPECTS

In the last issue we saw the prescribing guidelines given by American optometry association for Myopia. This issue we can go through the Prescribing Guidelines for Hyperopia:

Each patient should be considered in terms of age, degree of symptoms, amount of Hyperopia, state of accommodation, visual acuity and efficiency during performance of visual acuity.

 Goals of Hyperopic management:

-  Reduce accommodative demand
-  Provide clear, comfortable vision
-  Provide normal binocularity

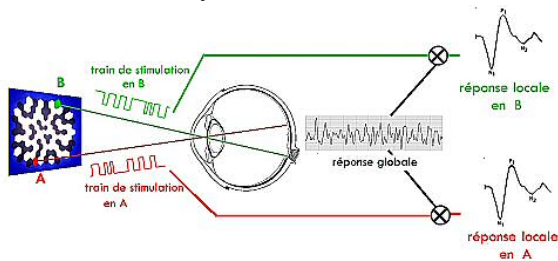
Type of Patient	Management plan	Frequency of follow-up visits
Young child with Mild to moderate hyperopia and no strabismus or Amblyopia	<ul style="list-style-type: none">  No treatment or provide refractive correction  Monitor Vision 	3-12 months
Young child with High hyperopia and no strabismus or amblyopia	<ul style="list-style-type: none">  Provide refractive correction  Treat any accommodative or binocular vision problem  Monitor vision 	2 -6 months
Young child with Mild to high hyperopia and strabismus or Amblyopia	<ul style="list-style-type: none">  Provide refractive correction  Treat strabismus and /or amblyopia  Monitor vision 	2 week – 3 months
Older child with Mild to moderate Hyperopia	<ul style="list-style-type: none">  No treatment or provide refractive correction  Monitor Vision 	6 -18 month
Older child with High hyperopia	<ul style="list-style-type: none">  Provide refractive correction  Treat any accommodative or binocular vision problem  Monitor vision 	6 -12 month
Pre-presbyopic Adult	<ul style="list-style-type: none">  No treatment or provide refractive correction  Treat any accommodative or binocular vision problem  Monitor vision 	1 – 2 years
Presbyopic adult	<ul style="list-style-type: none">  Provide refractive correction  Treat any accommodative or binocular vision problem  Monitor vision 	1 -2 years



MULTIFOAL ERG

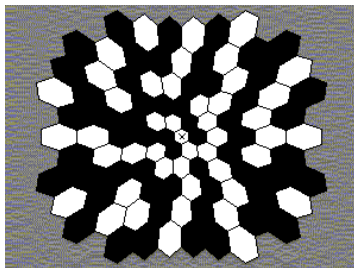
Principle

Electroretinography technique based on changing luminance levels stimulating change in neural activity at retina



Procedure

- 🌐 Pupils- Fully dilated
- 🌐 Patient seated comfortably with , Fixation monitored
- 🌐 Pre-adaptation to ordinary room lighting given
- 🌐 20-30 degree of visual angle on either side of the fixation
- 🌐 Recording time: 8 mins
- 🌐 Amplifiers and filters are used
- 🌐 Spatial averaging is done to smooth wave forms & reduce noise
- 🌐 Artifacts automatically rejected



Advantages

- 🌐 High maximum luminance of 600cd/m²
- 🌐 Field 50° ±25°
- 🌐 Versatile
- 🌐 High quality amplification
- 🌐 Pupil camera with refractive correction/eye monitoring

Disadvantages

- 🌐 Difficult in children/subjects with tremors
- 🌐 More time consuming

Uses:

- 🌐 Unknown visual loss
- 🌐 Distinguishing optic nerve and retinal disease
- 🌐 Determination of hydroxychloroquine toxicity

Interpretation:

- 🌐 High variation in amplitudes even in normals
- 🌐 Abnormalities in topographic / 3D distribution map noted
- 🌐 Reduced latency
- 🌐 Responses highest at the fovea and decrease sharply in the first 5 degrees
- 🌐 Relatively lower in surrounding are

