



Jyotirmay Eye Clinic

For Children <16 and Squint & Pediatric Low Vision Center

Annual Report – Sept 10,th 2007 – Sept 9,th 2008

Dear Friends and Colleagues,

With the grace of god we have been able to complete third year of existence successfully. This communication is a humble attempt to inform you about this year's activities and notable additions pertinent to the patient care. Our existing facilities and previous years' annual reports are available at www.jyotirmay.com. We hope we have lived up to your expectations. We convey our sincere thanks to you and our patients who gave us an opportunity to serve.

We are looking forward to your continued patronage.

We exist to serve...

Clinical Work:



Amblyopic Child's Vision being checked by Crowding Acuity – LogMAR type vision chart.



An eye surgery in progress at National Eye Center, Thane.

We examined total 1300 patients of whom 210 patients received **Free** consultation and 150 patients received Consultation at **Charitable rates** (Every Friday).

We treated patients referred by nearly **100 Doctors** primarily from and around Thane district and also from different places of India, including Delhi, Chandigarh, Coimbatore etc. We remain thankful for their kind patronage.

14 ROP screenings were performed in NICUs of Kaushalya Medical Foundation's Hospital, Thane; Puja Nursing Home, Mulund and Shree Sai Hospital, Thane.

Patients treated in Pediatric Low Vision Center: 61

Low Vision Aids were Dispensed to: 24

We performed total 101 eye surgeries at Jyotirmay Eye Clinic and more than 100 surgeries at our other centers in Wadala, Kalyan, Ghatkopar, Bhiwandi, Dharampur, Nagpur and Mandala.

40 children received **surgery absolutely free of cost** through *Jyotirmay Charitable Trust*.

Significant additions in surgical facilities:

1. We have purchased **Nasal Endoscope** and routinely use it for all the Naso-lacrimal procedures. This has made the probings anatomically more precise and nasolacrimal intubations more or less *blood-less*
2. **Barkan's Goniotomy Lens** is acquired for performing Gonioscopy in every Pediatric Cataract and Pediatric Glaucoma and perform Goniotomy when indicated
3. Introduction of **Titanium Instrument** and Titanium coated surgical instrument to improve tissue handling and durability of the instrument

4. We designed **Fascia Lata Stripper** for harvesting patient's own fascia lata with the incision size measuring $< 1''$. We use fascia lata stripper with a 1.2mm, 0 degree endoscope to make the harvesting more accurate and reliable. Autologous fascia lata is used for various ophthalmic procedures viz. Ptosis surgery, wrapped orbital implant and orbital transfixation in complicated squint surgeries

Department of Orthoptics:

This department is equipped with computerized software (HTS Incorporated, USA) to detect and treat abnormalities in fusion and accommodation, Hess Chart, Binocular Vision Tests etc.

This year we added,

1. **RAF ruler**- Royal Air Force ruler to assess the anomalies in accommodation and convergence, and
2. **Accommodative Flippers** – to evaluate and treat patients with accommodative insufficiency

There has been a significant improvement in our understanding and management of patients with ocular headache (aesthenopia). A large study is under way to compare the effects of refractive error management, role of aniseikonia, accommodative insufficiency or lag of accommodation and fusional anomalies and its correction in the treatment of patients with aesthenopia.



Child with accommodative insufficiency being taught the Accommodative Exercises using +2D Flippers



Same patient's binocular balance being checked with RAF Ruler

Vision Testing Charts for Preverbal Children:

It is well known that measuring exact vision of preverbal children – infants and toddlers is difficult even for the most well trained ophthalmologists. Nevertheless, it is important in deciding whether a surgery is required in cases with partial developmental cataract, congenital ptosis and other media opacities. It also helps in monitoring of amblyopia therapy and prognosticate visual outcomes in children with cerebral visual impairment.

This year we have introduced two new vision testing charts (**Lea Gratings and Cardiff Acuity Cards**) both based on the principle of Forced Preferential Looking (FPL) behavior of the child to reliably assess the vision of preverbal children.



An Infant's Vision being checked by LEA Gratings at Jyotirmay Eye Clinic



An Infant's Vision being checked by Cardiff Acuity Cards at Jyotirmay Eye Clinic

Vision testing chart for the Amblyopic Patients:

This year we added one more vision assessment chart called **LogMAR crowding visual acuity assessment chart**. This chart is useful to prognosticate visual outcome in patients with amblyopia and hence decide whether amblyopia therapy should be instituted. It is also useful to decide the end point for amblyopia therapy.

Free Eye Surgeries and Eye Care Camp:

This year we conducted two free eye camps and two free eye surgery camps through Jyotirmay Charitable Trust in the month of March and May, 2008. We examined more than 100 patients and performed 40 free eye surgeries (squint surgeries, YAG laser capsulotomies, cataract surgeries, ptosis surgeries and optical iridectomies) We also dispensed free spectacles and low vision aids. All the surgeries were performed under the **Sarva Shikshan Abhiyan** in collaboration with the Zilla Parishad, Thane. We have also performed large number of free eye surgeries in our other centers in Nagpur, Dharampur and Bhiwandi.



Children and teachers at a SSA camp at Jyotirmay Eye Clinic

Children waiting for the surgery performed at state of the art surgical facility at Thane

We are pleased to announce that we are attached to Shree Bhairav Hospital, Bhiwandi and entire treatment would be offered absolutely free of cost for deserving patients.

We are thankful to our partner hospitals and their directors who have provided us with an opportunity to add variety and quality to our work, add academic training and research opportunities and allowed us to provide state of the art Pediatric Eye Care at subsidized or free of cost whenever required.

1. Aditya Jyot Eye Hospital, Wadala. Director: Dr S Natarajan
2. Mehta Eye Clinic, Ghatkopar. Director: Dr Vinod Mehta
3. Dr. Smitesh Shah's LASER surgery Center, Kalyan. Director: Dr Smitesh Shah
4. Shree Bhairav Eye Hospital, Bhiwandi. Director: Mr. Anil Jain
5. Shrimad Rajchandra Hospital, Dharampur. Director: Mr Abhay Jasani
6. Mahatme Eye Bank and Eye Hospital, Nagpur: Director: Dr Vikas Mahatme

We are also thankful to our other partners where we provide honorary services:

1. Kaushalya Medical Foundation's Trust Hospital, Thane
2. Jupiter Hospital, Thane

Academic Work:

Publications:

1. Spontaneous late-onset comitant acute nonaccommodative esotropia in children. **Indian J Ophthalmol. 2008 Mar-Apr;56(2):168.**
2. Squint in children. **Pediatric Clinics of India. 2008;43(2);124-36.**
3. Reliability of binocular fixation preference in the diagnosis of strabismic amblyopia **(Under Review: Indian Journal of Ophthalmology)**
4. Supranuclear paralysis of near vision complex. **(Under Review: J AAPOS)**
5. Psychosocial and emotional consequences of childhood strabismus in Rural and Urban India. **(Under Review: Indian Journal of Ophthalmology)**

Ongoing Research:

1. Is Cycloplegic Refraction Necessary in Children with Compound Myopic Astigmatism?
2. Comparison of Lea Grating and Cardiff Acuity Cards for the assessment of vision

- in preverbal children.
3. Predicting a postoperative outcome by analyzing ocular deviation under general anesthesia during strabismus surgery.
 4. Comparison of the predictive value of assessing the disparity in the near acuity vs. distance visual acuity, crowding acuity vs single letter acuity and therapeutic trial of SyndopaPlus in amblyopia.
 5. Clinical Agreement and Intra observer variations in the Bruckner test, used to screen for the presence of the significant refractive errors.
 6. Role of uncorrected or inappropriately corrected refractive errors, accommodative dysfunction and anomalies in motor fusion in the causation of aesthenopia and the effect of its treatment.

Presentations:

1. Recessions and Resections. Conference of the Bombay Ophthalmic Association, ITC Maratha Sheraton, 28th September, 2007 Mumbai, India.
2. Convener, Free Paper Session, Conference of the Bombay Ophthalmic Association, ITC Maratha Sheraton, 28th September, 2007 Mumbai, India.
3. I – Eye Care for Children. Thane Association of Pediatricians, Branch of Indian Academy of Pediatricians 10th October, 2007.
4. A 3D Power Point Presentation comparing Adjustable suture technique with non adjustable suture technique in comitant, horizontal strabismus. MOSCON 27, Solapur, 26th October, 2007 to 29th October, 2007.
5. Bruckner test: A rapid low cost test to detect low vision in children. MOSCON 27, Solapur, 26th October, 2007 to 29th October, 2007. **Winner of the YKC Pandit Best Research Paper Award for the Year 2007.**
6. Bruckner test: A rapid low cost test to detect low vision in children. Presented at New Orleans, **American Academy of Ophthalmology meeting, USA.**
7. Pediatric Ophthalmology for Primary Care Physicians, Srimad Rajchandra Hospital, Dharampur 23rd Nov, 2007.
8. Pediatric Ophthalmology for Parents, Shahanai Hall, Thane. 24th Nov, 2007.

9. A 3D Power Point Presentation comparing Adjustable suture technique with non adjustable suture technique in comitant, horizontal strabismus. 2nd Dec, 2007. LVPEI, Hyderabad.
10. Predicting the ocular deviation by measuring ocular deviation under general anesthesia. 9th Dec, 2007. Synergy 07, Silver Jubilee Conference of the Strabismological Society of India, Hotel Le Meridian, Chennai, India.
11. Bruckner test: A rapid low cost test to detect low vision in children. 66th Annual conference of the AIOS, Bangalore, Jan, 2008.
12. A 3D Power Point Presentation comparing Adjustable suture technique with non adjustable suture technique in comitant, horizontal strabismus. 66th Annual conference of the AIOS, Bangalore, Jan, 2008.
13. Pediatric Ophthalmology for Children, Parents and Teachers. The Little Company School. Bandra. Feb. 2008
14. Pediatric Ophthalmology for Children, Parents and Teachers. Sri Ma Vidyalaya. Thane. Feb 2008.
15. Pediatric Ophthalmology – state of the art. 1st May, 2008. Coimbatore Ophthalmic Association, Coimbatore.
16. ICON. Panel Discussion on Strabismus. July, 2008. Laxmi Eye Institute, Panvel.
17. Measuring Ocular Deviation Under General Anesthesia for Predicting Post-Operative Alignment after Squint Surgery. Eyeadvance 2008. Conference of the International Association on Advances in Ophthalmology (IAAO), World Trade Center, Mumbai, August, 2008.
18. Comparison of Lea Gratings (LG) with Cardiff Acuity Cards (CAC) for vision testing of preverbal children. Eyeadvance 2008. Conference of the International Association on Advances in Ophthalmology (IAAO), World Trade Center, Mumbai, August, 2008.

Observers who Visited the Jyotirmay Eye Clinic:

1. Ms Priti Doshi, B Optom (Bharti Vidya Peeth, Pune)
2. Ms. Aparna Sail, D Optom (Lotus School of Optometry, Juhu, Mumbai)
3. Dr. Madhusudan Rao (Apollo Hospital, Mysore)

Our Team:

1. Mr. Ram Bahadur: Sweeper and Watchman
2. Mr. Dilip Singh: Driver
3. Mr. Sushant Kalambate: Manager
4. Ms. Rakhi Khatate: Asst. Manager
5. Mr. Samir Ganu (Modern Optician, Thane): Optician
6. Sr. Sanjana: OT coordinator and OT assistant
7. Ms. Hiral Dholakia: Low Vision Specialist
8. Dr. Reena Gautam: Anesthetist
9. Dr. Bhavesh Mithiya: Pediatrician
10. Dr. Mihir Kothari: Consultant and Director

