

EYEFLIGHTS

July 1998

Sankara Nethralaya

Number 19

Pammal Annexe - The First Year



Sankara Nethralaya's free service facility at Sankara Health Centre completed one year of service to the community recently. Over the past year the hospital has performed over 3,500 free cataract surgeries for the deserving poor. Pammal Annexe, as it commonly known, hopes to perform 10,000 eye surgeries during the year 1998-99.

The number of eye operations performed up to May this year was 4578, according to Dr. Sheila John, Head, Sankara Nethralaya, Pammal.

The outpatient clinic of the eye care centre had offered care to about 8000 patients during the corresponding period.

Speaking at the anniversary of the eye care centre, Dr. T. S. Surendran, Medical Director, Medical Research Foundation, said that the centre proposed to station its van everyday at Rettaipillayar Koil from 9.30 a.m. to 10.30 a.m. to pick up patients, who were otherwise finding it difficult to reach the hospital.

Mr. G. V. Raman, past district Governor, Lions Club, said the discipline and dedication imparted by the hospital staff were exemplary.

Dr. S. S. Badrinath, Chairman, Medical Research Foundation, Mr. M. Saravanan, film producer, Mr. Vairamuthu, lyrist, and Mr. Subbu Arumugam, folk singer were among those who participated.

Sankara Nethralaya's New Horizon

In what can be considered another important milestone in the hospitals' 20 year history, Sankara Nethralaya is in the process of acquiring the neighbouring Willingdon Hospital.

Sankara Nethralaya is planning to utilise Willingdon as a centre exclusively dedicated to eye care.

The reasons for expansion were two fold.

With ever increasing number of patients seeking treatment at Sankara Nethralaya and the long waiting list for operations, Willingdon comes as heaven sent opportunity to Sankara Nethralaya to expand its services to meet the demands of its patients.

Sankara Nethralaya is also committed to providing free care to the needy. As an extension of its philosophy, the hospital plans to perform 50% of the surgeries free of cost to deserving patients at its Willingdon extension.

Nethralaya Highlights . . .

- Nethralaya acquires ISO 9002 certification
- Dr. J. Biswas wins award from Medical Council of India
- Our new Assistant Medical Directors are Dr. Prema Padmanabhan, Dr. K. Ravishankar and Dr. Lingam Gopal



Nethralaya News

Selection for candidates for the Diploma in Ophthalmology (DO) and the Diplomate of the National Board (DNB) courses was held in March this year.

Dr. V. G. Appukutty (Board member, Vision Research Foundation) was the Chairman of the Selection Committee. The other members were Dr. Chakravarty (FRCS coordinator, Apollo Hospitals), Dr. S. B. Mani (physician, Sankara Nethralaya), Dr. N. Jagannathan and Dr. K Ravishankar (Assistant Medical Director, Sankara Nethralaya).

81 candidates from all over the country appeared for the entrance examination which was followed by an interview. 4 DO and 5 DNB candidates were selected.

Interviews were also conducted for the fellowship programmes and 2 General Ophthalmology, 5 Vitreo-retinal and 5 Research fellows were selected.

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Mr. Sriram Srinivasan joined Sankara Nethralaya on 11.4.98 as Senior Manager – Personnel and HRD. He graduated in Science from the Madras University in 1980 and subsequently did a post graduate Diploma course in Business Management from the Calcutta University in 1986. He additionally obtained a post-graduate diploma in Personnel Management and Industrial Relations from the Bombay University in 1996. Mr. Srinivasan brings over 18 years of experience to his new assignment.

Mr. Paul Raj joined Sankara Nethralaya on 4.5.98 as Financial Controller. He graduated in Commerce from St. Xavier's College, Madurai in 1975 and followed this with a Chartered Accountancy degree in 1978, securing the 28th rank in India. He brings nearly 20 years of experience to his new job.

Eyelights welcomes the new members of the Nethralaya family.

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Dr. Rajesh Fogla, one of our post graduate students, recently passed his FRCS Edinburgh examination. Dr. Fogla also obtained an additional degree M. Med. from Singapore National University. **Dr. Fogla's trip was sponsored by Mr. P. R. Bakshi, a philanthropist from Calcutta.** As Chairman of the Babi Bakshi Foundation, he had set up a Travel Fellowship for the C. U. Shah Ophthalmic Post Graduate Training Centre at Sankara Nethralaya which was availed of by Dr. Fogla. Dr. Fogla has since joined the faculty of Sankara Nethralaya in the Cornea Department.

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Meet Our New Assistant Medical Directors



Dr. Prema Padmanabhan, MS

Dr. Prema Padmanabhan has been with the institution since 1981. She became a Consultant in 1982 following a one year fellowship. She is the Head of the Department of Cornea and External Diseases as well as the Department of Cataract and Intraocular Lens Implantation.



Dr. K. Ravishankar, FRCS

Dr. Ravishankar did his senior residency in 1983 and became a Consultant in Sankara Nethralaya in 1984. He became the Head of the Medical Retina Department in 1993. He is also the Registrar of the Elite School of Optometry and Secretary of the Academic Council of Medical Research Foundation.



Dr. Lingam Gopal MS

Dr. Lingam Gopal did his Vitreoretinal Fellowship at Sankara Nethralaya in 1983 and became a Consultant the next year. In 1991, he became the Head of the Department of Vitreo-retinal Surgery and the Department of Neuro-ophthalmology.

Know Your Nethralaya

In a normal eye, light passes through a clear lens which helps to focus the images onto the retina (the light sensitive screen at the back of the eye). Any clouding or loss of clarity of the lens is called a cataract. Light is blocked from entering the eye and vision is progressively impaired.

There is no medicine that can prevent a cataract from forming or cause a cataract to clear. Surgery to restore vision consists of removing the cloudy natural lens (the cataract) from the eye and replacing it with a clear plastic lens called a lens implant or intraocular lens (IOL).

The Cataract and Intraocular Lens department at Sankara Nethralaya routinely performs state of the art phacoemulsification surgery with foldable IOLs (commonly known as “no pad, no injection, no stitch surgery”). This procedure provides the best possible quality of sight soon after the surgery. The department performs over 15,000 cataract surgeries a year, a significant proportion of these being done completely free of cost for poor patients.

FACILITIES

A Scan Ultrasonography and Keratometry

Calculates the power of the IOL to be implanted.

Alcon series 20,000 Legacy Phacoemulsification machines

To perform “phaco” surgery with least trauma to the eye.

Foldable IOLS

Can be placed inside the eye through a very small opening

Paediatric Cataract surgery with IOL implants

To restore best possible vision to children with cataracts

Secondary IOL implantation

To introduce IOLs in patients who have had cataract surgery without a lens implant.

YAG laser capsulotomy

To restore clear vision (without surgery) when cloudiness recurs following surgery in some patients.

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For availing the services of the Cataract and Intraocular Department at Sankara Nethralaya, please contact :

The Surgery Fixing Centre

Sankara Nethralaya

18 College Road, Chennai 600 006

Phone: 826 1265, 827 1616

Fax: (044) 825 4180

INTERNET e-mail : MDSAAA35@giasmd01.vsnl.net.in

AN APPEAL

A lot of things in this world depend on money - security, shelter, education and even health. But at Nethralaya, money has ceased to be a pre-requisite for sight.

Day after day, year after year, Nethralaya treats hundreds of patients absolutely free of cost and gives them back their sight. Treatment is provided free of cost to all patients with a monthly income below Rs.1,750/-.

Yet there is no discrimination between the free patient and the one who pays. Apart from the treatment, food, medicines and travel expenses are absolutely free.

Those free patients depend on Nethralaya, and Nethralaya depends on you.

So, come and join the **OPHTHALMIC MISSION TRUST**.

For questions about tax exempt status and contributions, please contact:

Mr S V Acharya,

Secretary and Treasurer

Ophthalmic Mission Trust Inc. (OM Trust)

14613, Pommel Drive, Rockville,

MD 20850, U.S.A.

Phone: (301)251 0378

Fax: (202) 293 0448

For those of you in India and elsewhere, please contact:

Dr S S Badrinath,

Chairman

Sankara Nethralaya

(UNIT OF MEDICAL RESEARCH FOUNDATION)

18 College Road, Chennai 600 006

Phone: 826 1265, 827 1616

Fax: (044) 825 4180

INTERNET e-mail :

MDSAAA35@giasmd01.vsnl.net.in

LOOK US UP ON THE WEB at

<http://www.dynacs.com/~sankaranethralaya/>

Quality Care for

Why do people visit Sankara Nethralaya for treatment of their eyes? Distance does not seem to matter for people who visit Sankara Nethralaya. The hospital offers its services to patients from all over the country as well as from neighbouring countries like Bangladesh and Sri Lanka. Every day, the hospital sees about 750 patients in the outpatient department. Nearly 80 surgeries are performed daily in the 16 operation theatres at the main hospital and its branches.

To undertake long journeys and spend considerable money on board and lodging is a burden many are willing to take, a small price to pay in return for good vision. When people visit any hospital they look for three basic things: a high degree professional expertise, a clean hospital and a patient friendly environment. This is why patients come to Sankara Nethralaya from far and near. It is the first ophthalmic hospital in this part of the world to be awarded the ISO 9002 certification for quality assurance. This article focuses on how we ensure quality of service at every stage from the moment you step into the hospital till you leave...and provide the same degree of care to every other patient every day of the year.

All patients wishing to have their eyes examined will first have to register at the Main Reception. The registration and billing process is completely computerized thus avoiding undue delay. The hospital's Electronic Data Processing (EDP) department ensures smooth running of all operations.



Daily back ups make sure that data is not lost. Files of former patients of Sankara Nethralaya are not discarded after the examination. All files are carefully stored in the hospital's Medical Records department. The department also computer codes the disease and treatment offered for all patients so that data collection for demographics and research studies is but a few mouse clicks away. The

department also houses state of the art equipment for optical disk storage of patient records. This not only increases precious storage space but will form an integral part of a future "paperless office".



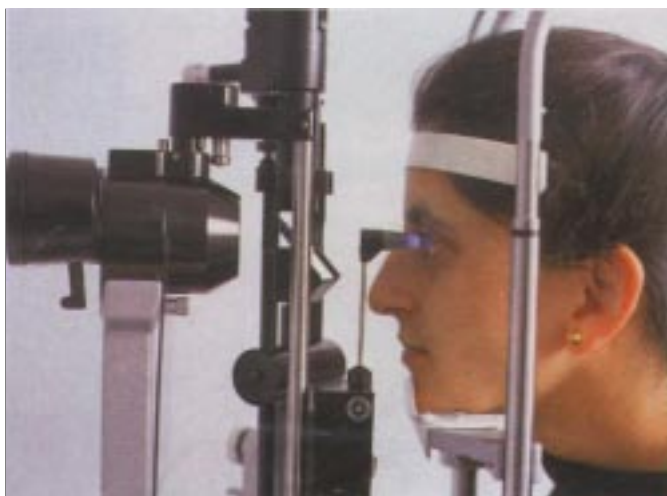
Be it for a simple case of prescribing reading glasses for a 42 year old man or an extremely complex retinal detachment in a young child, all patients visiting Sankara Nethralaya undergo a standard uniform preliminary examination. Patients often wonder, "I came here just to get my glasses checked and it took nearly 2 hours for the examination." The reason for this is that a routine evaluation takes that much time. The important thing is that whatever your problem may be we make sure that your eyes have been completely examined from eyelids to optic nerve (or "head to toe" if you like). This is because several eye diseases start silently without the patient being aware of them. Reports of vision threatening or even life threatening disorders that have been overlooked in a cursory examination are not uncommon.

Sankara Nethralaya's relentless attention to detail saves sight for many unsuspecting patients.

There are 34 eye specialists at Sankara Nethralaya. The eye is such a complex organ that each part of the eye has a separate department to look after it! Thus there are departments of cataract, cornea and external diseases, refractive corneal surgery, glaucoma, uvea, retina and vitreo-retinal diseases, squint and contact lens, orbit and oculoplasty, neuro-ophthalmology, ocular tumours and paediatric ophthalmology. Each of the consultants is specially trained in various super-specialities of ophthalmology. Many of them have received specialized training abroad with world leaders in that field. Our doctors keep themselves abreast of new developments in their area of specialization by participating in national and international conferences besides attending continuing medical

Everyone, Anytime

education programmes. The presence of specialists ensures that you get the best of ophthalmic advice and treatment.



Sankara Nethralaya's eagle eyes attention to maintenance of sterile conditions in the operation theatres is responsible for its extremely low infection rate of 1 in over 4000 patients. The theatres are completely washed and cleaned twice a week and fumigated with formaldehyde twice a week. All instruments are cleaned and sterilized by autoclaving or gas sterilization after completion of the surgery.



The Microbiology department regularly exposes bacterial culture plates within the operation theatre environment. It also conducts random checks on sterilization equipment to ensure their efficiency.

Your stay in the hospital is made as comfortable as possible. Sankara Nethralaya's main complex is a 100 bedded hospital. The job of keeping each and every room clean falls on the housekeeping department. The housekeeping department makes sure that your room is spotless and equipped with fresh linen.



Every ward has a nursing station where nursing staff is at your service 24 hours a day. Room service is available with hygienic vegetarian food available from the hospital's canteen run by the well-known Annalakshmi group.



Sankara Nethralaya is noted for its state of the art facilities. Several world-class investigative, diagnostic and surgical equipment is available for the best of care for your eyes. Being machines, they are prone to an occasional breakdown. Poor maintenance can worsen the situation. The hospital's Bioengineering department undertakes periodic maintenance checks on all the equipment in the hospital. The well trained staff also handle breakdown calls with remarkable speed thus reducing down-time to a minimum.

Generators and uninterrupted power supply units for operating microscopes and surgical machines ensure that surgery does not stop midway due to a sudden power failure.

Building Bridges with Hong Kong

Sankara Nethralaya's association with the Department of Ophthalmology and Visual Sciences at the Chinese University of Hong Kong continues to blossom.

Consultants of our Vitreoretinal Department have been travelling to Hong Kong as Visiting Scholars since November 1996 when Dr. Lingam Gopal, head of the Vitreoretinal Department at Sankara Nethralaya made the maiden voyage to the Department of Ophthalmology and Visual Sciences. He had an excellent interaction with the doctors there.

His impressive work there prompted Professor Mark Tso, the Chairman of the Department of Ophthalmology and Visual Sciences to invite Dr. Tarun Sharma, vitreoretinal consultant as a Visiting Scholar. Dr. Sharma's six month stint concluded recently.

On his return Dr. Sharma observed that the standard of ophthalmic care in Hong Kong was high.

He was also appreciative of the positive work ethic of the people of Hong Kong and their unquenching thirst for knowledge.

Dr. Sharma also remembered with affection, the warmth of his reception and how he was always made to feel at home by the doctors and staff of the hospital there.

Coupled with his professional engagements, Dr. Sharma also had opportunities to meet many Indians living in Hong Kong. He gave public education talks on common eye ailments and also spoke about the work being done at Sankara Nethralaya.

Dr. Tarun Sharma's enviable track record prompted Dr. Tso to write to Dr. Badrinath (letter reproduced here) inviting yet another consultant from Sankara Nethralaya, Dr. Mahesh Shanmugam for another six month visit to Hong Kong.



May 6, 1998

Dear Dr. Badrinath

Dr. Tarun Sharma will be completing his six months of visiting scholarship with us. We have found him an outstanding clinician with excellent surgical skill. He is very knowledgeable with vitreoretinal diseases. Even more, we have appreciated his gentle personality, an excellent sense of values of life and his kindness to patients. He is really a gem!

I admire you with all the gifted talents at your institute. I wish to thank you for allowing him to visit with us for six months.

Dr. Sharma has talked about Dr. Shanmugam, who is an associate consultant in your institute. With our experience with Dr. Gopal and Dr. Sharma, we would also like to invite Dr. Shanmugam with us for six months visiting scholarship.

With warmest personal regards

Yours sincerely,

Professor Mark O. M. Tso

Chairman

The Chinese University of Hong Kong

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Dr. Biswas Conferred Research Award

Dr. Jyotirmay Biswas, Head of the Ocular Pathology laboratory and Uveitis expert was recently conferred the Hari Om Ashram Alembic Research Award in the category of Clinical Research conferred by the Medical Council of India for the year 1997.



Dr. Jyotirmay Biswas is one of a rare breed of clinicians who have specialized in both clinical and basic sciences. After postgraduation in ophthalmology from Postgraduate Institute of Ophthalmology, Chandigarh and a fellowship in vitreoretinal surgery at Sankara Nethralaya he decided to probe into the pathogenesis of ocular diseases particularly prevalent in India. Ophthalmic pathology, which has emerged as a distinct subspecialty in recent years, has become the cornerstone for the better understanding of ophthalmic diseases. Dr. Biswas took up this new branch as his areas of specialization.

A Fruitful Visit to USA

Dr. H. N. Madhavan attended the annual meeting of the Association for Research in Vision and Ophthalmology at Fort Lauderdale, USA from May 10 – 15, 1998. He presented a paper titled **Nested Polymerase Chain Reaction (PCR) in the detection of adenoviral conjunctivitis** in the session on **Ocular Infections: Molecular Diagnosis**. In this paper he showed that the nested PCR is a rapid and reliable technique in detection of adenovirus in conjunctivitis.

Dr. Madhavan also visited the National Eye Institute, Bethesda. He met Dr. Fielding Hejtmancik and Dr. Kumaramanickavel, our genetic scientist (who is currently working as a fellow at NEI) and discussed the ongoing research project on the Genetic Study of Adult Onset Cataract. The techniques involved in this study are extraordinarily complicated and robotic instruments are used for the analysis of the genes of the human chromosomes

In 1985 he started working on the pathobiology of many eye diseases, especially Eales' disease which is a potentially blinding disorder seen more in India than in the West.. Two years later Dr Biswas received a prestigious 2 year fellowship in ophthalmic pathology in 1987 the Doheny Eye Institute, University of Southern California, USA where he learnt histopathology, electron microscopy, and molecular biologic techniques under the guidance of his mentor Dr. Narsing A. Rao. His research work in modulation of experimental uveitis got the award of travel fellowship by Association of Research in Vision Ophthalmology (ARVO), the leading international eye research body. He subsequently made 10 presentations at the annual meeting of ARVO and 2 presentations at the prestigious Hogan Society of Ophthalmic Pathology in USA.

After returning to India in 1989 he established the ophthalmic pathology laboratory, in Sankara Nethralaya which has now become one of the leading centers of ophthalmic pathology in the country, on par with international centres. His main areas of contribution are Eales' disease, the pattern of uveitis in India, intraocular tuberculosis, ocular malaria, viral retinitis and AIDS.

Dr. Biswas has authored 54 articles in peer reviewed national and international journals besides writing chapters for ophthalmic textbooks, chairing conferences and conducting courses. He received 2 international awards, one from Association for Research in Vision USA and another from Singapore National Eye Centre, Singapore. He was elected as prestigious membership of International Uveitis Group in 1994 being the first person in India to be selected for this membership. He is also a member of the editorial board of the Indian Journal Ophthalmology.

to detect any defect. Dr. Kumaramanickavel is presently working on the instrumentation and is gaining considerable experience in these techniques.

Dr. Madhavan also visited Alcon Laboratories Inc., Texas. He had discussions with several groups of scientists on new products developed by them. They were highly appreciative of the work on rimexalone and uveitis which is being carried out by Dr. J. Biswas. He also discussed a new project concerning treatment for bacterial corneal ulcers.

Finally Dr. Madhavan visited the Edward Harkness Eye Institute, Columbia University, New York. He met Dr. Forbes and his group of the Glaucoma department. He discussed a project on the genetics of primary angle closure glaucoma. Dr. Forbes was very appreciative of the quality of scientific work being done at Sankara Nethralaya and agreed to collaborate with us on the project.

New in the Country

Sankara Nethralaya introduces Ultrasound Biomicroscopy and the GDx Glaucoma Diagnosis Nerve Fibre Analyzer for the first time in India.

Over the years Sankara Nethralaya has installed several sophisticated instruments to evaluate eye diseases. Some instruments either help to detect a disease early. Others help to monitor disease progression while others assist in planning surgery and predicting the visual outcome following surgery. Two such instruments are **Ultrasound Biomicroscope** and the **GDx Glaucoma Diagnosis Nerve Fibre Analyzer**.

Ultrasonography is a very useful, safe and non-invasive method of investigation which gives information regarding the structural details of the interior of the eye. It is used especially when the eye specialist cannot see the inner details of the eye. Although it provides invaluable information regarding the back structures of the eye, especially the retina and vitreous, conventional ultrasonography does not provide high resolution images of the front parts of the eye. This need is met by Ultrasound Biomicroscopy.



The ultrasound biomicroscope is a new sophisticated, non-invasive diagnostic tool which gives high resolution magnified images of the front parts of the eye. This is the first instrument of its kind in India.

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Glaucoma is a potentially blinding disease that is often not diagnosed early because it starts with loss of peripheral vision which may not be noticed by patients. Examination of the eye and the optic nerve head, measurement of the intraocular pressure and charting of the visual fields of the patient all help in the early diagnosis of this condition.

The evaluation of the optic nerve head (ONH) and also the retinal nerve fibre layer (RNFL) is of great importance in the diagnosis of glaucoma. The RNFL evaluation is important as clinically detectable structural changes occur very early in the course of the disease and precede the onset of visual field loss by a few years.

Accurate evaluation of structural changes in the RNFL may allow earlier detection of nerve fibre damage in glaucoma. Another important fact is that 50% of optic nerve fibres may be lost in glaucoma before an abnormality in visual field can be detected.



The latest method for measuring structural changes to the ONH and the RNFL is the GDx Nerve Fibre Analyser (NFA). The NFA is a scanning laser ophthalmoscope. It consists of a scan head and a personal computer that digitizes and stores the data. The light source is a polarised diode laser of wavelength 780 nm, that passes through the scanning unit. The light penetrates the RNFL and is partially reflected from the deeper layers. The test is quick and within 15 seconds a colour coded image is displayed on the screen. The nerve fibre analyser at Sankara Nethralaya can thus detect very early damage to the optic nerve by glaucoma and earlier diagnosis of glaucoma means earlier and effective preservation of vision.