Short term Fellowship program in Retinopathy of Prematurity

Qualifications: MBBS, MS/MD/DNB/DO/DOMS

Observership – One to three months duration.

Introduction

The L V Prasad Eye Institute (LVPEI) is a not for profit charitable organization; with a mission to combat eye disease and reduce the incidence of blindness through a comprehensive approach to eye care. The Institute's charter stipulates that a minimum 50 percent of its services will be rendered free of cost to the economically underprivileged. Over the past 17 years, the institute has served more than 1.5 million persons as outpatients and performed over 1,40,000 surgical procedures successfully. LVPEI has always provided consistent and quality eye-care services, while maintaining the highest standards - whether it is a simple eye examination or a complicated surgery, post operative convalescent care or counseling and rehabilitation of the visually impaired. Located in Hyderabad, India, LVPEI strives to offer equitable, efficient and excellent eye care to the community through its six arms, namely the Hospital, Education Centre, Eye Research Centre, Vision Rehabilitation Centre, Community Eye Care and the Product Development Centre.

Retinopathy of Prematurity

Retinopathy of Prematurity (ROP) is a rapidly progressive condition starting within 2-3 weeks of life in a premature infant. Untreated ROP can result in irreversible low vision or blindness for whole life of the child. Since effective screening and treatment protocols have been defined for ROP, ROP has emerged as an important cause of preventable blindness in children. The VISION 2020, Right to Sight programme has identified ROP as an important PREVENTABLE disease in area of childhood blindness. Current management strategies to prevent visual loss due to ROP.

Early screening within 2-3 weeks of life can detect ROP at a stage where it is amenable to treatment with good visual outcomes. Dilated retinal evaluation with an indirect ophthalmoscope is the present standard for detecting ROP. Laser ablation or cryotherapy is done when ROP progresses to a stage where it can threaten vision if left untreated. ROP needs to be treated as soon as it reaches this critical stage. There is a 15-50% or greater risk of vision loss if left untreated. Time is crucial!

Some eyes that progress to detachment inspite of timely laser, would need referral for early vitreous surgery.

If treated on time, the child is expected to have reasonably good vision. Some children would need spectacles to achieve this. All premature babies need regular eye examinations till they start going to school. In long term follow-up, they may need treatment for amblyopia, anisometropia, squint and, sometimes, for cataract, glaucoma, and retinal detachment.

Objectives of ROP training program

Course Participants will acquire knowledge in the following:

A clear understanding of the disease process in ROP Detail understanding of screening protocols and procedures Setting up of ROP services in their area

Evaluation of ocular and retinal status in preterm newborns.

Make appropriate decisions for treatment and screening/follow-up schedules.

Carry out laser treatment in ROP (if there is past experience in treating adults with retinal lasers)

Post laser follow-up of ROP cases

Training Methodology

Training will include lectures and practical hands-on experiences under supervision of experienced faculty

Rotation Schedule / Evaluation

During the one month fellowship, experienced faculty will guide the candidate to achieve the objectives of the program. The weekly rotation will be as follows:

- 1. Retina OPD including lasers 4 days
- 2. NICU visit 1 day
- 3. Pediatric OPD/ low vision-Rehabilitation centre/ Electrodiagnostics: 1 day Faculty Subhadra Jalali, MS

Padmaja K. Rani, DNB, FNB (Retina)

K. Ramesha, DNB,FRCS Beaula Christy, MRSc, PGDGC, B Ed-(SE-DC) Mahalakshmi, B.A.

Admission Procedure

Duration: 1 month

No. of Candidates : 6 in a year (Alternate odd month).

Qualifications : MD / MS/ DNB/ FRCS

Selection : Preference will be given to sponsored candidates.

The candidates would be selected based on the CV and Presenting skills in Retinal examination and laser.

Suggested Study Material:

- 1. A practical approach to Retinopathy of Prematurity, screening and management. Kumar H, Shapiro MJ, Azad RV. Malhotra Enterprises, New Delhi. 2001
- 2. Pediatric Retina. Hartnett ME (Ed). Lippincott Williams and Wilkins, 2005
- 3. Clinical Trials in ROP: Cryo ROP; ETROP; Light-ROP; STOP-ROP studies
- 4. ROP publications in Indian Journal of Ophthalmology (articles available)
- 5. Video CD on ROP (Audio-visual Unit of LVPEI)

LECTURES

- 1. Normal Retinal vascularization
- 2. Basic Concepts in ROP including Classification
- 3. Pediatricians' viewpoint
- 4. Screening and follow-up Procedures
- 5. Treatment Protocols
- 6. Post –treatment Vision Testing and refraction issues in Infants and pre-schoolers