

# PAKISTAN Retinopathy of Prematurity Educational & Research Alliance Newsletter

PROPERA

Issue No: 29/11/16

Volume No: 2/Propera/16

## Participants

### -USA

Dr. Umar K Mian  
Dr G Quinn

### -KARACHI

Sites: NICH, AKU, JPMC

Dr Alyscia Cheema  
Dr Naseer Mahmood  
Dr S Salaat,

Dr Idrees Adhi, Dr T Chaudhry,  
Dr Irfan Jeeva, Dr S Ariff,  
Dr J Raza, Dr Parkash

### -LAHORE

Sites: LGH, Hameed Latif

Prof M Moin,  
Dr Sajid Maqbool

Dr. KhurranMirza  
Dr S Qayyum, Dr A Shabbir,  
Dr Irfan, Dr Ayesha. Dr Zafar

### -ISLAMABAD

Sites: PIMS, Al Shifa eye, AFIO  
Al Shifa int.

Dr Sorath Noorani,  
Dr M Ishaq, Dr. AMukhtar,  
Dr. Talal, Dr S Gul, Dr A Awan  
Dr Ejaz Khan.

### Contact Address:

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## Message

Dr Umar K Mian  
Director Retina Service,  
Montefiore Med Center, Albert Einstein Coll of Med, New York

Salaam O Alikum

I would like to take this opportunity to introduce and update you on the purpose and activities of the PROPERA Network.

It is heartening to see the increasing interest in PROPERA across the country. We started this network 3 years ago with an aim to increase the awareness of ROP among Ophthalmologists, Neonatologist and general public to help decrease life-long blindness in our premature children.

PROPERA has been fortunate to have **Dr Graham Quinn** (Children's Hospital of Philadelphia) **Dr Sajid Maqbool** and **Prof Daud Khan** as our Mentors. We have more than 50 active participants (neonatologists and ophthalmologist) and 5 sites currently running the screening programs. National Institute of Child Health, Lahore General Hospital, PIMS, Shifa International and AFIO, JPMC and Al Shifa Trust Eye Hospital have been key collaborators. Future site are Liaquat National Hospital, Punjab Childrens, Fatima Memorial, Ganga Ram and Services.

We have established initial screening guidelines (Children with Birth weight less than 2 kg or Gestational age of 35 weeks or less) and have a created a comprehensive system for ROP screening. This system can be implemented in NICUs across the country to help decrease blindness in our premature infant population.

Our Key Ophthalmologists are in Karachi Dr Alyscia Cheema, Lahore Prof M Moin, Islamabad Dr Sorath Noorani and AFIO Dr Ahsan Mukhtar If you would like to get more information or need help in starting a program in your NICU please contact them.

We are running education modules and sessions on 'how to establish ROP screening centers' in different hospitals across the country.

The upcoming event is an ROP symposium on Dec 4 during OSP annual meeting in Lahore. I invite you to join us at the meeting. We plan a panel discussion to discuss difficulties faced by departments running an ROP screening program in Pakistan.

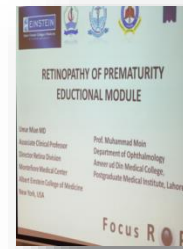
We will be planning a similar course in Karachi and Islamabad next year.

Warmest regards

## Lahore Ophthalmology, 6<sup>th</sup> December, 2015



## ROP Training Program LGH, 12 April, 2016



## Grand Rounds, Montefiore Medical Center, New York. 11 July, 16



## SAARC Conference Karachi 18 August, 16



# Publications:

Pakistan Journal of  
**OPHTHALMOLOGY**

Original Article

## Awareness of Retinopathy of Prematurity (ROP) amongst Pediatricians in Pakistan

Muhammad Moin, Nasira Inayat, Umar K. Mian, Ayesha Khalid, Agha Shabbir Ali

Pak J Ophthalmol 2016, Vol. 32 No. 1

Editorial

## Retinopathy of Prematurity and Pakistan; an Epidemic Coming



**PAKISTAN  
PEDIATRIC JOURNAL**

Retinopathy of Prematurity; Sight is Right of Every Child

American Academy of Ophthalmology

### Treatment of Retinopathy of Prematurity (ROP)

Screening Criteria:

Oxygen Protocol: 91-94% SiO<sub>2</sub>

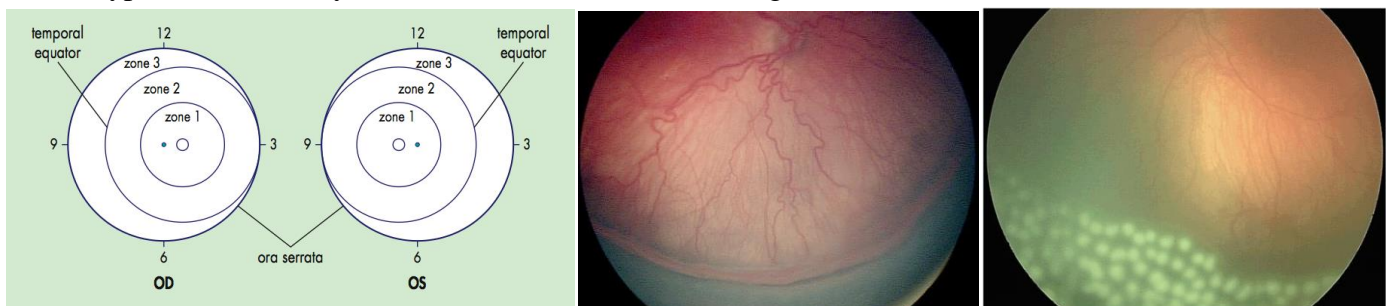
Birth weight 2 kg or less

OR

Gestational age 35 weeks or less

Screening Protocol:

First screening at 4 weeks post gestation or 35 weeks (what ever comes first). Using of dilating drops, lid speculum and indirect ophthalmoscopy with 20/28 D lens with indentation. Record findings pertaining to Zone, Stage and presence or absence of plus disease. Follow up according to level of severity more severe 1 week and less severe 2 weeks. Special care needs to be taken to educate the parents so they do not miss the post discharge visit as type 1 ROP usually occurs between 36-38 weeks of gestation.



Treatment of ROP:

**Timely treatment (with 24-48 hours) can reduce poor visual outcome from nearly 40% to less than 10 %.**

Treatment is done for **Type 1 ROP**; Zone 1 and plus disease, Zone 1 and stage 3, Zone 2 stage 3 and plus. It consists of 360 degree ablation of the avascular retina anterior to the region of the active disease to arrest the progression of ROP. The ridge and extravascular fibroproliferation at the junction between the avascular and vascularized retina should be avoided. Both cryo and laser treatment may be painful procedures, thus, both should be performed under either sedation or full anesthesia, ensuring a good analgesia. When an anesthetist

is not available, an experienced neonatologist should give support. If the treatment is not being performed at the neonatal unit, facilities for artificial ventilation, resuscitation equipment and intravenous line must be available. Mydriasis should be achieved prior to cryotherapy or laser. Laser is the preferred treatment than Cryopexy.

### Laser Photo-coagulation:

- Diode Laser (used extensively preferably red).

1. Laser Indirect delivery system. Aiming for greyish white spots.
2. 200-500 milliwatts, and 0.2-0.5 seconds.

The avascular retina should be treated with a distance between laser spots of no more than half of spot

### Complications:

Systemic: Apnea, bradycardia, oxygen desaturation are common. These complications can occur during the first 3 days after treatment and require mechanical ventilation.

Eye: Subconjunctival haematoma, swollen of the eyelids, conjunctival laceration, vitreous haemorrhage, cataract may develop in 1-2%.

Treatment of very posterior ROP is generally easier with Anti-VEGF therapy. ): Vitreoretinal surgery may be indicated for Stage IVa or b.



## PROPERA Sessions at the Lahore Ophthalmology 16

W07		Workshop on ROP 1 "Educational Module"			
<b>Chairman</b>	Umar K Mian	Emerald A			
<b>Co-Chair</b>	Khalid Waheed	04-Dec-16	Start	9:30 AM	
<b>Moderator</b>	Khurram Azam Mirza	Sunday	End	11:00 AM	
	Soorath Noorani	Pathogenesis is of ROP		9:30 AM	9:42 AM
	Alycia Cheema	ROP Classification		9:42 AM	9:54 AM
	Umar K Mian	Clinical Trials in ROP		9:54 AM	10:06 AM
	Tanveer Chaudhary	Laser Treatment ROP		10:06 AM	10:18 AM
	Muhammad Moin	Anti-VEGF Treatment in ROP		10:18 AM	10:30 AM
	Umar K Mian	Discussion		10:30 AM	10:42 AM

W08		Workshop on ROP 2 "Educational and Research Alliance"			
<b>Chairman</b>	Alycia Cheema	Emerald A			
<b>Co-Chair</b>	Irfan Jeeva	04-Dec-16	Start	11:30 AM	
<b>Moderator</b>	Muhammad Moin	Sunday	End	1:00 PM	
	Muhammad Moin	Introduction		11:30 AM	11:37 AM
	Irfan Jeeva	Oxygen Protocol for ROP		11:37 AM	11:44 AM
	Shabina Arif	Neonatologist Responsibilities		11:44 AM	11:51 AM
	Irfan Jeeva	Screening Criterion for ROP / ROP-Coordinator		11:51 AM	11:58 AM
	Ehsan Mukhtar	Ophthalmologists Responsibilities		11:58 AM	12:05 PM
	Umar K Mian	PROPERA, Universal System		12:05 PM	12:12 PM
	Sajid Maqbool	Combined Neonatology Dat for ROP ROP		12:12 PM	12:19 PM
	Umar K Mian	Combined Ophthalmology Data foROP		12:19 PM	12:26 PM
	Shabina Arif	Problems in ROP: Neonatologists View		12:26 PM	12:33 PM
	Agha Shabbir	Solutions for ROP: Neonatologists View		12:33 PM	12:40 PM
	Soorath Noorani	Problems in ROP: Ophthalmologists		12:40 PM	12:47 PM
	Alycia Cheema	Solutions for ROP: Ophthalmologists		12:47 PM	12:54 PM



Al-Shifa Trust Eye Hospital

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MONTEFIORE



We invite all participants to join the network. Please give us your information at the end of the session