

INTRODUCTION

Retinopathy of Prematurity (ROP) occurs due to abnormal growth of blood vessels in an infant's eye. During development, blood vessels grow from the central part of the retina outwards. This process is completed few weeks before the normal time of delivery. However in premature babies, it is incomplete. If blood vessels grow normally, ROP does not occur. On the contrary, if the vessels grow and branch abnormally the baby develops ROP.

The incidence of ROP in India is between 38-51.9% and it is as high as 80 - 100% in infants weighing < 900 gms at birth or with a gestational age of < 25 weeks. With the improved NICU care the incidence has increased. Unfortunately there is no proportionate increase in awareness among the medical fraternity. In absence of an effective screening strategy an increasing number of children who could have been successfully managed are going irreversibly blind. The socioeconomic burden of such childhood blindness is immense.

SCREENING

Whom?

- Birth weight 2300gm
OR
- Gestational Age at < 35 weeks
OR
- Any premature baby with severe illness in perinatal period (RDS, sepsis, blood transfusion, IVH, apnoeic episodes, etc) need a retinal examination.

When?

- Follow the '30 day' strategy (i.e. the retinal examination should be completed at or before 'day-30' of life).
- Should preferably be done earlier (at 2 - 3 weeks of birth) in very low weight babies (<1200gm) or in babies with very low gestational age (< 28 weeks).

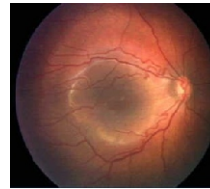
How?

- An ophthalmologist (Retina Specialist) can detect ROP by dilated fundus examination.
- Indirect ophthalmoscopy is done to scan the entire retina and gauge the state of retinal maturity.

MANAGEMENT

Treatment : When & How?

- Stages 1 & 2 usually do not need any treatment. These stages may resolve on their own without further progression.
- Stage 3 may require laser treatment to stop the progression of the abnormal vessels. With laser the avascular retina at the ends of these vessels is made non functional to prevent further abnormal growth of the blood vessels. This helps prevent the retina from being detached.



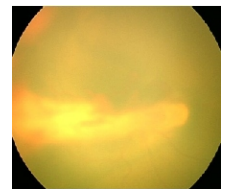
Normal Retina



Stage 3



Post laser



Stage 4

- Stages 4 & 5 occur once the retina detaches. Surgery (Vitrectomy) at these stages have very poor visual outcome.

Follow up

- Once treated, lifelong followup (yearly) is mandatory.
- All other premature infants irrespective of having ROP yearly followup till the age of 5 years is advisable to rule out sequelae.

Sequelae

- Refractive errors (most common)
- Squint
- Amblyopia (Lazy eye)
- Retinal Detachment
- Glaucoma

What you need to do?

It is of utmost importance to refer premature babies to an ophthalmologist (Retina Specialist) on time. Follow the "30 day" strategy. These examinations could save your patient's sight. Hence, prompt and timely referral is warranted.



***Don't deprive children of
their natural
birthright - SIGHT***

***For information about ROP
please visit: www.ropard.org***

For further information contact:

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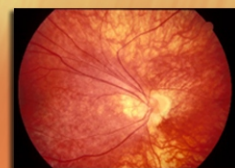
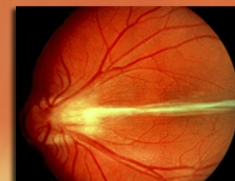
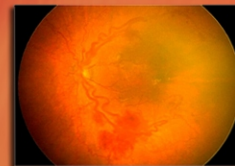
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Retinopathy of Prematurity -ROP-



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