RETINOPATHY OF PREMATURITY (ROP)



sight is the natural birthright of every child.





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.



Advanced stage in 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 the 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 ≤2000gm

OR

Gestational Age at ≤36 weeks

OR

Any premature baby with severe illness in perinatal period (RDS, sepsis, blood transfusion, IVH, apnoiec 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).

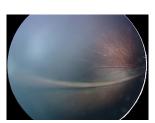
How?

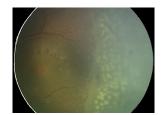
An ophthalmologist (Retina Specialist) can detect ROP by dilated fundus examination.

Indirect ophthalmoscopy is done to scan the entire retina and gauge the state of retinal maturity.

Management

The treatment in the form of lasers, intravitreal anti-VEGF injections or surgery is planned to reduce the Chances of unfavourable disease outcomes. mild forms of ROP may resolve on their own without any active intervention. Severe forms of the disease on the other hand may need medical treatment as long as it is limited to stage 3. Surgical intervention is necessary once the disease reaches stage 4 or 5.





Stage 4

Post laser

Follow up

Once treated, lifelong followup is mandatory. All other premature infants irrespective of having ROP six monthly 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.

For further information contact

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